UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2018

OR

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

For the transition period from __________ to __________

Commission file number 001-07436

HSBC USA Inc.
(Exact name of registrant as specified in its charter)

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

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

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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 ☒ (Do not check if a smaller reporting company)	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 August 3, 2018, 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

PART I

Item 1. Financial Statements

CONSOLIDATED STATEMENT OF INCOME (UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	**2018**	2017
	(in millions)			
Interest income:				
Loans	**$ 637**	$ 548	**$ 1,235**	$ 1,121
Securities	**278**	242	**531**	484
Trading securities	**53**	58	**102**	116
Short-term investments	**157**	181	**315**	312
Other	**22**	13	**38**	24
Total interest income	**1,147**	1,042	**2,221**	2,057
Interest expense:				
Deposits	**258**	169	**480**	319
Short-term borrowings	**43**	32	**76**	55
Long-term debt	**283**	251	**540**	493
Other	**8**	8	**18**	11
Total interest expense	**592**	460	**1,114**	878
Net interest income	**555**	582	**1,107**	1,179
Provision for credit losses	**(45)**	(21)	**(116)**	(98)
Net interest income after provision for credit losses	**600**	603	**1,223**	1,277
Other revenues:				
Credit card fees	**15**	14	**26**	25
Trust and investment management fees	**34**	39	**72**	77
Other fees and commissions	**184**	163	**344**	325
Trading revenue	**192**	71	**355**	141
Other securities gains, net	**10**	19	**15**	24
Servicing and other fees from HSBC affiliates	**87**	81	**186**	195
Residential mortgage banking expense	**(2)**	(2)	**(2)**	(4)
Gain (loss) on instruments designated at fair value and related derivatives	**4**	(1)	**34**	33
Other income	**13**	174	**20**	335
Total other revenues	**537**	558	**1,050**	1,151
Operating expenses:				
Salaries and employee benefits	**212**	256	**419**	521
Support services from HSBC affiliates	**405**	399	**816**	783
Occupancy expense, net	**45**	61	**88**	102
Other expenses	**124**	133	**745**	262
Total operating expenses	**786**	849	**2,068**	1,668
Income before income tax	**351**	312	**205**	760
Income tax expense	**82**	108	**174**	260
Net income	**$ 269**	$ 204	**$ 31**	$ 500

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	**2018**	2017
	(in millions)			
Net income	**$ 269**	$ 204	**$ 31**	$ 500
Net change in unrealized gains (losses), net of tax:				
Investment securities	**(76)**	110	**(271)**	217
Fair value option liabilities attributable to our own credit spread	**129**	(9)	**141**	(88)
Derivatives designated as cash flow hedges	**10**	(3)	**12**	(2)
Pension and post-retirement benefit plans	**(1)**	—	**—**	—
Total other comprehensive income (loss)	**62**	98	**(118)**	127
Comprehensive income (loss)	**$ 331**	$ 302	**$ (87)**	$ 627

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

CONSOLIDATED BALANCE SHEET (UNAUDITED)

	June 30, 2018	December 31, 2017
	(in millions, except share data)	
Assets[(1)]		
Cash and due from banks	**$ 1,340**	$ 1,115
Interest bearing deposits with banks	**22,078**	11,157
Federal funds sold and securities purchased under agreements to resell (includes $395 million and $80 million designated under fair value option at June 30, 2018 and December 31, 2017, respectively)	**10,176**	32,618
Trading assets	**25,559**	16,150
Securities available-for-sale	**31,028**	30,700
Securities held-to-maturity (fair value of $14.8 billion and $13.9 billion at June 30, 2018 and December 31, 2017, respectively)	**15,152**	13,977
Loans	**66,399**	72,563
Less – allowance for credit losses	**531**	681
Loans, net	**65,868**	71,882
Loans held for sale (includes $90 million and $471 million designated under fair value option at June 30, 2018 and December 31, 2017, respectively)	**213**	715
Properties and equipment, net	**164**	185
Goodwill	**1,607**	1,607
Other assets	**7,502**	7,129
Total assets	**$ 180,687**	$ 187,235
Liabilities[(1)]		
Debt:		
Domestic deposits:		
Noninterest bearing	**$ 26,190**	$ 28,153
Interest bearing (includes $7.7 billion designated under fair value option at both June 30, 2018 and December 31, 2017, respectively)	**81,336**	84,223
Foreign deposits:		
Noninterest bearing	**278**	322
Interest bearing	**6,421**	5,331
Deposits held for sale	**130**	673
Total deposits	**114,355**	118,702
Short-term borrowings (includes $1.3 billion and $2.0 billion designated under fair value option at June 30, 2018 and December 31, 2017, respectively)	**6,391**	4,650
Long-term debt (includes $12.4 billion and $12.9 billion designated under fair value option at June 30, 2018 and December 31, 2017, respectively)	**31,749**	34,966
Total debt	**152,495**	158,318
Trading liabilities	**3,277**	4,879
Interest, taxes and other liabilities	**4,930**	3,944
Total liabilities	**160,702**	167,141
Equity		
Preferred stock (no par value; 40,999,000 shares authorized; 1,265 shares issued and outstanding at both June 30, 2018 and December 31, 2017)	**1,265**	1,265
Common equity:		
Common stock ($5 par; 150,000,000 shares authorized; 714 shares issued and outstanding at both June 30, 2018 and December 31, 2017)	**—**	—
Additional paid-in capital	**18,135**	18,130
Retained earnings	**1,221**	1,130
Accumulated other comprehensive loss	**(636)**	(431)
Total common equity	**18,720**	18,829
Total equity	**19,985**	20,094
Total liabilities and equity	**$ 180,687**	$ 187,235

(1) The following table summarizes assets and liabilities related to our consolidated variable interest entities ("VIEs") at June 30, 2018 and December 31, 2017 which are consolidated on our balance sheet. Assets and liabilities exclude intercompany balances that eliminate in consolidation. See Note 17, "Variable Interest Entities," for additional information.

	June 30, 2018	December 31, 2017
	(in millions)	
Assets		
Other assets	**$ 136**	$ 154
Total assets	**$ 136**	$ 154
Liabilities		
Long-term debt	**$ 73**	$ 73
Interest, taxes and other liabilities	**57**	59
Total liabilities	**$ 130**	$ 132

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)

Six Months Ended June 30,	2018	2017
	(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	**18,130**	18,148
Employee benefit plans	**5**	(6)
Balance at end of period	**18,135**	18,142
Retained earnings		
Balance at beginning of period	**1,130**	1,560
Reclassification from accumulated other comprehensive loss of cumulative effect adjustment to initially apply new accounting guidance for equity investments which were previously classified as available-for-sale, net of tax	**(4)**	—
Cumulative effect adjustment to initially apply new accounting guidance for equity investments which were previously measured at cost, net of tax	**10**	—
Reclassification from accumulated other comprehensive loss of cumulative effective adjustment to initially apply new accounting guidance for stranded tax effects resulting from the Tax Cuts and Jobs Act ("Tax Legislation")	**91**	—
Reclassification to accumulated other comprehensive loss of cumulative effect adjustment to initially apply new accounting guidance for financial liabilities measured under the fair value option, net of tax	**—**	(174)
Balance at beginning of period, adjusted	**1,227**	1,386
Net income	**31**	500
Cash dividends declared on preferred stock	**(37)**	(39)
Balance at end of period	**1,221**	1,847
Accumulated other comprehensive loss		
Balance at beginning of period	**(431)**	(618)
Reclassification to retained earnings of cumulative effect adjustment to initially apply new accounting guidance for equity investments which were previously classified as available-for-sale, net of tax	**4**	—
Reclassification to retained earnings of cumulative effective adjustment to initially apply new accounting guidance for stranded tax effects resulting from Tax Legislation	**(91)**	—
Reclassification from retained earnings of cumulative effect adjustment to initially apply new accounting guidance for financial liabilities measured under the fair value option, net of tax	**—**	174
Balance at beginning of period, adjusted	**(518)**	(444)
Other comprehensive income (loss), net of tax	**(118)**	127
Balance at end of period	**(636)**	(317)
Total common equity	**18,720**	19,672
Total equity	**$ 19,985**	$ 20,937

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

CONSOLIDATED STATEMENT OF CASH FLOWS (UNAUDITED)

Six Months Ended June 30,	2018	2017
	(in millions)	
Cash flows from operating activities		
Net income	**$ 31**	$ 500
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**(46)**	(45)
Provision for credit losses	**(116)**	(98)
Net realized gains on securities available-for-sale	**(15)**	(24)
Net change in other assets and liabilities	**639**	(580)
Net change in loans held for sale:		
Originations and purchases of loans held for sale	**(1,311)**	(1,109)
Sales and collections of loans held for sale	**1,786**	1,463
Net change in trading assets and liabilities	**(11,023)**	(4,041)
Lower of amortized cost or fair value adjustments on loans held for sale	**(4)**	(14)
Gain on instruments designated at fair value and related derivatives	**(34)**	(33)
Net cash used in operating activities	**(10,093)**	(3,981)
Cash flows from investing activities		
Net change in interest bearing deposits with banks	**(11,331)**	(9,839)
Net change in federal funds sold and securities purchased under agreements to resell	**22,442**	11,444
Securities available-for-sale:		
Purchases of securities available-for-sale	**(5,410)**	(6,082)
Proceeds from sales of securities available-for-sale	**2,610**	10,334
Proceeds from maturities of securities available-for-sale	**1,594**	873
Securities held-to-maturity:		
Purchases of securities held-to-maturity	**(2,344)**	(1,863)
Proceeds from maturities of securities held-to-maturity	**1,154**	1,218
Change in loans:		
Collections, net of originations	**5,728**	4,829
Loans sold to third parties	**445**	1,666
Net cash used for acquisitions of properties and equipment	**(2)**	(11)
Outflows related to the sale of a portion of our Private Banking business	**(378)**	—
Other, net	**(10)**	451
Net cash provided by investing activities	**14,498**	13,020
Cash flows from financing activities		
Net change in deposits	**(3,757)**	(12,097)
Debt:		
Net change in short-term borrowings	**1,741**	3,784
Issuance of long-term debt	**2,678**	2,828
Repayment of long-term debt	**(5,220)**	(3,683)
Other increases (decreases) in capital surplus	**5**	(6)
Dividends paid	**(37)**	(39)
Net cash used in financing activities	**(4,590)**	(9,213)
Net change in cash, due from banks and restricted cash	**(185)**	(174)
Cash, due from banks and restricted cash at beginning of period	**4,044**	4,374
Cash, due from banks and restricted cash at end of period[1]	**$ 3,859**	$ 4,200

(1) The following table provides a reconciliation of the total amount of cash, cash equivalents and restricted cash disaggregated by the line items in which they appear within the consolidated balance sheet:

At June 30,	2018	2017
	(in millions)	
Cash and due from banks	**$ 1,340**	$ 992
Restricted cash included in interest bearing deposits with banks	**2,519**	3,208
Total cash, due from banks and restricted cash	**$ 3,859**	$ 4,200

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

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 presentation 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, 2017 (the "2017 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. Trading Assets and Liabilities

Trading assets and liabilities consisted of the following:

	June 30, 2018	December 31, 2017
	(in millions)	
Trading assets:		
U.S. Treasury	**$ 4,733**	$ 3,391
U.S. Government agency issued or guaranteed	**114**	122
U.S. Government sponsored enterprises	**27**	210
Asset-backed securities	**240**	236
Corporate and foreign bonds	**7,687**	6,180
Other securities	**—**	12
Precious metals	**9,212**	2,274
Derivatives, net	**3,546**	3,725
Total trading assets	**$ 25,559**	$ 16,150
Trading liabilities:		
Securities sold, not yet purchased	**$ 982**	$ 1,722
Payables for precious metals	**—**	524
Derivatives, net	**2,295**	2,633
Total trading liabilities	**$ 3,277**	$ 4,879

At June 30, 2018 and December 31, 2017, the fair value of derivatives included in trading assets is net of $2,472 million and $3,423 million, respectively, relating to amounts recognized for the obligation to return cash collateral received under master netting agreements with derivative counterparties.

At June 30, 2018 and December 31, 2017, the fair value of derivatives included in trading liabilities is net of $4,058 million and $3,680 million, respectively, relating to amounts recognized for the right to reclaim cash collateral paid under master netting agreements with derivative counterparties.

See Note 9, "Derivative Financial Instruments," for further information on our trading derivatives and related collateral.

3. Securities

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

June 30, 2018	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in millions)			
Securities available-for-sale:				
U.S. Treasury	**$ 14,019**	**$ 148**	**$ (407)**	**$ 13,760**
U.S. Government sponsored enterprises:				
Mortgage-backed securities	**5,274**	**4**	**(196)**	**5,082**
Collateralized mortgage obligations	**621**	**—**	**(42)**	**579**
Direct agency obligations	**2,990**	**51**	**(3)**	**3,038**
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	**5,112**	**1**	**(186)**	**4,927**
Collateralized mortgage obligations	**775**	**—**	**(32)**	**743**
Direct agency obligations	**341**	**15**	**—**	**356**
Asset-backed securities collateralized by:				
Home equity	**49**	**—**	**(2)**	**47**
Other	**101**	**6**	**—**	**107**
Foreign debt securities(1)	**2,388**	**1**	**—**	**2,389**
Total available-for-sale securities	**$ 31,670**	**$ 226**	**$ (868)**	**$ 31,028**
Securities held-to-maturity:				
U.S. Government sponsored enterprises:				
Mortgage-backed securities	**$ 1,944**	**$ 1**	**$ (47)**	**$ 1,898**
Collateralized mortgage obligations	**1,772**	**31**	**(35)**	**1,768**
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	**2,286**	**2**	**(75)**	**2,213**
Collateralized mortgage obligations	**9,136**	**14**	**(239)**	**8,911**
Obligations of U.S. states and political subdivisions	**12**	**1**	**—**	**13**
Asset-backed securities collateralized by residential mortgages	**2**	**—**	**—**	**2**
Total held-to-maturity securities	**$ 15,152**	**$ 49**	**$ (396)**	**$ 14,805**

December 31, 2017	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
		(in millions)		
Securities available-for-sale:				
U.S. Treasury	$ 15,340	$ 153	$ (329)	$ 15,164
U.S. Government sponsored enterprises:				
Mortgage-backed securities	3,616	—	(77)	3,539
Collateralized mortgage obligations	648	—	(24)	624
Direct agency obligations	3,369	85	—	3,454
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	5,152	1	(87)	5,066
Collateralized mortgage obligations	792	1	(18)	775
Direct agency obligations	419	19	—	438
Asset-backed securities collateralized by:				
Home equity	54	—	(3)	51
Other	506	4	—	510
Foreign debt securities[1]	902	—	—	902
Equity securities	183	—	(6)	177
Total available-for-sale securities	$ 30,981	$ 263	$ (544)	$ 30,700
Securities held-to-maturity:				
U.S. Government sponsored enterprises:				
Mortgage-backed securities	$ 2,113	$ 10	$ (12)	$ 2,111
Collateralized mortgage obligations	1,281	41	(18)	1,304
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	2,485	4	(13)	2,476
Collateralized mortgage obligations	8,083	18	(106)	7,995
Obligations of U.S. states and political subdivisions	12	1	—	13
Asset-backed securities collateralized by residential mortgages	3	—	—	3
Total held-to-maturity securities	$ 13,977	$ 74	$ (149)	$ 13,902

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

Net unrealized losses were higher within the available-for-sale portfolio in the six months ended June 30, 2018 due primarily to increasing yields on U.S. Government sponsored mortgage-backed, U.S. Government agency mortgage-backed and U.S. Treasury securities.

The following table summarizes gross unrealized losses and related fair values at June 30, 2018 and December 31, 2017 classified as to the length of time the losses have existed:

	One Year or Less					Greater Than One Year				
June 30, 2018	**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)									
Securities available-for-sale:										
U.S. Treasury	**7**	**$**	**(18)**	**$**	**808**	**38**	**$**	**(389)**	**$**	**8,859**
U.S. Government sponsored enterprises	**134**		**(45)**		**1,657**	**88**		**(196)**		**3,016**
U.S. Government agency issued or guaranteed	**47**		**(146)**		**4,396**	**40**		**(72)**		**1,284**
Asset-backed securities	**1**		**—**		**—**	**4**		**(2)**		**47**
Foreign debt securities	**13**		**—**		**1,141**	**1**		**—**		**45**
Securities available-for-sale	**202**	**$**	**(209)**	**$**	**8,002**	**171**	**$**	**(659)**	**$**	**13,251**
Securities held-to-maturity:										
U.S. Government sponsored enterprises	**338**	**$**	**(38)**	**$**	**1,788**	**277**	**$**	**(44)**	**$**	**918**
U.S. Government agency issued or guaranteed	**184**		**(153)**		**5,976**	**475**		**(161)**		**3,531**
Obligations of U.S. states and political subdivisions	**—**		**—**		**—**	**1**		**—**		**—**
Securities held-to-maturity	**522**	**$**	**(191)**	**$**	**7,764**	**753**	**$**	**(205)**	**$**	**4,449**

	One Year or Less					Greater Than One Year				
December 31, 2017	**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)									
Securities available-for-sale:										
U.S. Treasury	3	$	(3)	$	463	48	$	(326)	$	10,285
U.S. Government sponsored enterprises	83		(7)		883	77		(94)		3,109
U.S. Government agency issued or guaranteed	52		(85)		5,161	23		(20)		573
Asset-backed securities	—		—		—	4		(3)		51
Foreign debt securities	10		—		733	1		—		44
Equity securities	—		—		—	1		(6)		177
Securities available-for-sale	148	$	(95)	$	7,240	154	$	(449)	$	14,239
Securities held-to-maturity:										
U.S. Government sponsored enterprises	264	$	(5)	$	1,126	284	$	(25)	$	1,020
U.S. Government agency issued or guaranteed	116		(48)		5,973	506		(71)		2,962
Obligations of U.S. states and political subdivisions	1		—		—	2		—		—
Securities held-to-maturity	381	$	(53)	$	7,099	792	$	(96)	$	3,982

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 other-than-temporary impairment. The decline in fair value may be caused by, among other things, the illiquidity of the market. We have reviewed the securities for which there is an unrealized loss for other-than-temporary impairment in accordance with our accounting policies, discussed further below. At June 30, 2018 and December 31, 2017, we do not consider any of our debt securities to be other-than-temporarily impaired 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 securities until their individual maturities. However, other-than-temporary impairments may occur in future periods if the credit quality of the securities deteriorates.

Other-Than-Temporary Impairment On a quarterly basis, we perform an assessment to determine whether there have been any events or economic circumstances to indicate that a security with an unrealized loss has suffered other-than-temporary impairment. A debt security 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 other-than-temporary.

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 considered other-than-temporary and the unrealized loss is recorded in earnings. An impairment is also considered other-than-temporary if a credit loss exists (i.e., the present value of the expected future cash flows is less than the amortized cost basis of the debt security). In the event a credit loss exists, the credit loss component of an other-than-temporary impairment is recorded in earnings while the remaining portion of the impairment loss attributable to factors other than credit loss is recognized, net of tax, in other comprehensive income (loss).

For all securities held in the available-for-sale or held-to-maturity portfolios for which unrealized losses attributed to factors other than credit existed, we do not have the intention to sell and believe we will not be required to sell the securities for contractual, regulatory or liquidity reasons as of the reporting date. For a complete description of the factors considered when analyzing debt securities for impairments, see Note 4, "Securities," in our 2017 Form 10-K. There have been no material changes in our process for assessing impairment during 2018.

During the three and six months ended June 30, 2018 and 2017, none of our debt securities were determined to have either initial other-than-temporary impairment or changes to previous other-than-temporary impairment estimates relating to the credit component, as such, there were no other-than-temporary impairment losses recognized related to credit loss.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Gross realized gains	**$ 21**	$ 28	**$ 30**	$ 33
Gross realized losses	**(11)**	(9)	**(15)**	(9)
Net realized gains	**$ 10**	$ 19	**$ 15**	$ 24

Contractual Maturities and Yields The following table summarizes the amortized cost and fair values of securities available-for-sale and securities held-to-maturity at June 30, 2018 by contractual maturity. Expected maturities differ from contractual maturities because borrowers have the right to prepay obligations without prepayment penalties in certain cases. The table below also reflects the distribution of maturities of debt securities held at June 30, 2018, together with the approximate taxable equivalent yield of the portfolio. The yields shown are calculated by dividing annualized interest income, including the accretion of discounts and the amortization of premiums, by the amortized cost of securities outstanding at June 30, 2018. Yields on tax-exempt obligations have been computed on a taxable equivalent basis using applicable statutory tax rates.

	Within One Year		After One But Within Five Years		After Five But Within Ten Years		After Ten Years	
Taxable Equivalent Basis	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**
				(dollars are in millions)				
Available-for-sale:								
U.S. Treasury	$ —	—%	$ 3,979	2.16%	$ 7,342	2.11%	$ 2,698	3.13%
U.S. Government sponsored enterprises	370	3.83	2,147	2.94	2,460	2.76	3,908	3.08
U.S. Government agency issued or guaranteed	50	1.85	72	2.23	11	3.89	6,095	2.67
Asset-backed securities	—	—	—	—	—	—	150	4.41
Foreign debt securities	1,400	.13	988	1.80	—	—	—	—
Total amortized cost	$ 1,820	.93%	$ 7,186	2.34%	$ 9,813	2.27%	$ 12,851	2.91%
Total fair value	$ 1,824		$ 7,171		$ 9,443		$ 12,590	
Held-to-maturity:								
U.S. Government sponsored enterprises	$ —	—%	$ 430	2.64%	$ 171	2.75%	$ 3,115	2.89%
U.S. Government agency issued or guaranteed	—	—	20	3.72	30	3.51	11,372	2.56
Obligations of U.S. states and political subdivisions	1	4.29	5	3.64	5	4.72	1	4.41
Asset-backed securities	—	—	—	—	—	—	2	8.84
Total amortized cost	$ 1	4.29%	$ 455	2.70%	$ 206	2.91%	$ 14,490	2.63%
Total fair value	$ 1		$ 449		$ 201		$ 14,154	

Equity Securities As discussed more fully in Note 21, "New Accounting Pronouncements," beginning January 1, 2018, equity securities (except those accounted for under the equity method or those that result in consolidation) are measured at fair value with changes in fair value recognized in net income.

Included in other assets at June 30, 2018 were $283 million of equity securities which were carried at fair value and $5 million of equity securities without readily determinable fair values which were carried at amortized cost less impairment adjusted for observable price changes.

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. At June 30, 2018, none of our equity securities without readily determinable fair values were determined to be impaired.

Also included in other assets were investments in Federal Home Loan Bank stock and Federal Reserve Bank stock of $201 million and $631 million, respectively, at both June 30, 2018 and December 31, 2017.

4. Loans

Loans consisted of the following:

	June 30, 2018	December 31, 2017
	(in millions)	
Commercial loans:		
Real estate, including construction	**$ 11,245**	$ 10,533
Business and corporate banking	**12,109**	12,504
Global banking[1]	**18,877**	20,088
Other commercial[2]	**4,612**	9,910
Total commercial	**46,843**	53,035
Consumer loans:		
Residential mortgages	**17,326**	17,273
Home equity mortgages	**1,086**	1,191
Credit cards	**841**	721
Other consumer	**303**	343
Total consumer	**19,556**	19,528
Total loans	**$ 66,399**	$ 72,563

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

(2) Includes loans to HSBC affiliates which totaled $1,895 million and $6,750 million at June 30, 2018 and December 31, 2017, respectively. See Note 14, "Related Party Transactions," for additional information regarding loans to HSBC affiliates.

At both June 30, 2018 and December 31, 2017, net deferred origination costs and net unamortized premium on our loans totaled $81 million and $8 million, respectively.

Aging Analysis of Past Due Loans The following table summarizes the past due status of our loans, excluding loans held for sale, at June 30, 2018 and December 31, 2017. The aging of past due amounts is determined based on the contractual delinquency status of payments under the loan. An account is generally considered to be contractually delinquent when payments have not been made in accordance with the loan terms. Delinquency status is affected by customer account management policies and practices such as re-age, which results in the re-setting of the contractual delinquency status to current.

	Past Due				
At June 30, 2018	**30 - 89 Days**	**90+ Days**	**Total Past Due 30 Days or More**	**Current[(1)]**	**Total Loans**
			(in millions)		
Commercial loans:					
Real estate, including construction	**$ 18**	**$ 9**	**$ 27**	**$ 11,218**	**$ 11,245**
Business and corporate banking	**11**	**4**	**15**	**12,094**	**12,109**
Global banking	**—**	**—**	**—**	**18,877**	**18,877**
Other commercial	**1**	**—**	**1**	**4,611**	**4,612**
Total commercial	**30**	**13**	**43**	**46,800**	**46,843**
Consumer loans:					
Residential mortgages	**365**	**297**	**662**	**16,664**	**17,326**
Home equity mortgages	**8**	**31**	**39**	**1,047**	**1,086**
Credit cards	**11**	**11**	**22**	**819**	**841**
Other consumer	**5**	**5**	**10**	**293**	**303**
Total consumer	**389**	**344**	**733**	**18,823**	**19,556**
Total loans	**$ 419**	**$ 357**	**$ 776**	**$ 65,623**	**$ 66,399**

	Past Due				
At December 31, 2017	**30 - 89 Days**	**90+ Days**	**Total Past Due 30 Days or More**	**Current[(1)]**	**Total Loans**
			(in millions)		
Commercial loans:					
Real estate, including construction	$ 27	$ 9	$ 36	$ 10,497	$ 10,533
Business and corporate banking	25	5	30	12,474	12,504
Global banking	—	25	25	20,063	20,088
Other commercial	43	—	43	9,867	9,910
Total commercial	95	39	134	52,901	53,035
Consumer loans:					
Residential mortgages	369	344	713	16,560	17,273
Home equity mortgages	11	36	47	1,144	1,191
Credit cards	8	9	17	704	721
Other consumer	5	7	12	331	343
Total consumer	393	396	789	18,739	19,528
Total loans	$ 488	$ 435	$ 923	$ 71,640	$ 72,563

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

Nonaccrual Loans Nonaccrual loans, including nonaccrual loans held for sale, and accruing loans 90 days or more delinquent consisted of the following:

	June 30, 2018	December 31, 2017
	(in millions)	
Nonaccrual loans:		
Commercial:		
Real estate, including construction	**$ 13**	$ 12
Business and corporate banking	**218**	215
Global banking	**117**	385
Other commercial	**—**	1
Commercial nonaccrual loans held for sale	**—**	—
Total commercial	**348**	613
Consumer:		
Residential mortgages[(1)(2)(3)]	**405**	414
Home equity mortgages[(1)(2)]	**63**	67
Consumer nonaccrual loans held for sale	**1**	1
Total consumer	**469**	482
Total nonaccruing loans	**817**	1,095
Accruing loans contractually past due 90 days or more:		
Commercial:		
Business and corporate banking	**1**	1
Total commercial	**1**	1
Consumer:		
Credit cards	**11**	9
Other consumer	**5**	8
Total consumer	**16**	17
Total accruing loans contractually past due 90 days or more	**17**	18
Total nonperforming loans	**$ 834**	$ 1,113

(1) At June 30, 2018 and December 31, 2017, nonaccrual consumer mortgage loans held for investment include $348 million and $360 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 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.

(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.

The following table provides additional information on our nonaccrual loans:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
	(in millions)			
Interest income that would have been recorded if the nonaccrual loans had been current in accordance with contractual terms during the period	**$ 13**	$ 18	**$ 27**	$ 38
Interest income that was recorded on nonaccrual loans and included in interest income during the period	**6**	2	**15**	13

Impaired Loans A loan is considered to be impaired when it is deemed probable that not all principal and interest amounts due according to the contractual terms of the loan agreement will be collected. Probable losses from impaired loans are quantified and recorded as a component of the overall allowance for credit losses. Commercial and consumer loans for which we have modified the loan terms as part of a troubled debt restructuring are considered to be impaired loans. Additionally, commercial loans in nonaccrual status, or that have been partially charged-off or assigned a specific allowance for credit losses are also considered impaired loans.

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 deferment 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. TDR Loans are reserved for based on the present value of expected future cash flows discounted at the loans' original effective interest rates, which generally results in a higher reserve requirement for these loans, the loan's observable market price or, in the case of certain secured loans, the estimated fair value of the underlying collateral. 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 such terms reflect current market rates at the time of restructure, they will no longer be reported as a TDR Loan beginning in the year after restructuring. During the three and six months ended June 30, 2018 and 2017 there were no commercial loans that met this criteria and were removed from TDR Loan classification.

The following table presents information about loans which were modified during the three and six months ended June 30, 2018 and 2017 and as a result of this action became classified as TDR Loans:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Commercial loans:				
Business and corporate banking	**$ —**	$ 24	**$ —**	$ 24
Global banking	**—**	86	**—**	86
Total commercial	**—**	110	**—**	110
Consumer loans:				
Residential mortgages	**12**	10	**17**	16
Home equity mortgages	**1**	2	**3**	4
Credit cards	**1**	1	**2**	2
Total consumer	**14**	13	**22**	22
Total	**$ 14**	$ 123	**$ 22**	$ 132

The weighted-average contractual rate reduction for consumer loans which became classified as TDR Loans during the three and six months ended June 30, 2018 was 1.58 percent and 2.02 percent, respectively, compared with 1.78 percent and 1.71 percent during the three and six months ended June 30, 2017, 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 information about our TDR Loans and the related allowance for credit losses for TDR Loans:

	June 30, 2018		December 31, 2017	
	Carrying Value	Unpaid Principal Balance	Carrying Value	Unpaid Principal Balance
	(in millions)			
TDR Loans:[1][2]				
Commercial loans:				
Business and corporate banking	**$ 117**	**$ 139**	$ 194	$ 266
Global banking	**124**	**130**	175	180
Total commercial[3]	**241**	**269**	369	446
Consumer loans:				
Residential mortgages[4]	**663**	**754**	683	779
Home equity mortgages[4]	**34**	**67**	33	66
Credit cards	**4**	**4**	4	4
Total consumer	**701**	**825**	720	849
Total TDR Loans[5]	**$ 942**	**$ 1,094**	$ 1,089	$ 1,295
Allowance for credit losses for TDR Loans:[6]				
Commercial loans:				
Business and corporate banking	**$ 3**		$ 12	
Global banking	**—**		19	
Total commercial	**3**		31	
Consumer loans:				
Residential mortgages	**5**		7	
Home equity mortgages	**1**		1	
Credit cards	**1**		1	
Total consumer	**7**		9	
Total allowance for credit losses for TDR Loans	**$ 10**		$ 40	

(1) TDR Loans are considered to be impaired loans. For commercial loans, impaired loans include other loans in addition to TDR Loans which totaled $200 million and $329 million at June 30, 2018 and December 31, 2017, respectively.

(2) The carrying value of TDR Loans includes basis adjustments on the loans, such as partial charge-offs, unamortized deferred fees and costs on originated loans and premiums or discounts on purchased loans.

(3) Additional commitments to lend to commercial borrowers whose loans have been modified in TDR Loans totaled $121 million and $245 million at June 30, 2018 and December 31, 2017, respectively.

(4) At June 30, 2018 and December 31, 2017, the carrying value of consumer mortgage TDR Loans held for investment includes $635 million and $655 million, respectively, of loans that are recorded at the lower of amortized cost or fair value of the collateral less cost to sell.

(5) At June 30, 2018 and December 31, 2017, the carrying value of TDR Loans includes $433 million and $559 million, respectively, of loans which are classified as nonaccrual.

(6) Included in the allowance for credit losses.

The following table presents information about average TDR Loans and interest income recognized on TDR Loans:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Average balance of TDR Loans:				
Commercial loans:				
Real estate, including construction	**$ —**	$ 31	**$ —**	$ 31
Business and corporate banking	**137**	265	**156**	277
Global banking	**110**	143	**132**	145
Total commercial	**247**	439	**288**	453
Consumer loans:				
Residential mortgages	**664**	708	**670**	712
Home equity mortgages	**35**	30	**34**	29
Credit cards	**4**	4	**4**	4
Total consumer	**703**	742	**708**	745
Total average balance of TDR Loans	**$ 950**	$ 1,181	**$ 996**	$ 1,198
Interest income recognized on TDR Loans:				
Commercial loans:				
Business and corporate banking	**$ —**	$ 1	**$ 4**	$ 4
Global banking	**1**	1	**2**	1
Total commercial	**1**	2	**6**	5
Consumer loans:				
Residential mortgages	**7**	7	**14**	14
Home equity mortgages	**1**	1	**1**	1
Total consumer	**8**	8	**15**	15
Total interest income recognized on TDR Loans	**$ 9**	$ 10	**$ 21**	$ 20

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 six months ended June 30, 2018 and 2017:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Consumer loans:				
Residential mortgages	**$ —**	$ 2	**$ 2**	$ 5
Home equity mortgages	**1**	—	**2**	—
Total consumer	**$ 1**	$ 2	**$ 4**	$ 5

During the three and six months ended June 30, 2018 and 2017, 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.

Impaired commercial loans The following table presents information about impaired commercial loans and the related impairment reserve for impaired commercial loans:

	Amount with Impairment Reserves(1)	Amount without Impairment Reserves(1)	Total Impaired Commercial Loans(1)(2)	Impairment Reserve	Unpaid Principal Balance
			(in millions)		
At June 30, 2018					
Real estate, including construction	**$ 3**	**$ 8**	**$ 11**	**$ 1**	**$ 12**
Business and corporate banking	**137**	**120**	**257**	**27**	**288**
Global banking	**28**	**145**	**173**	**15**	**179**
Total commercial	**$ 168**	**$ 273**	**$ 441**	**$ 43**	**$ 479**
At December 31, 2017					
Real estate, including construction	$ —	$ 11	$ 11	$ —	$ 11
Business and corporate banking	121	129	250	45	311
Global banking	262	175	437	82	520
Total commercial	$ 383	$ 315	$ 698	$ 127	$ 842

(1) Reflects the carrying value of impaired commercial loans and includes basis adjustments on the loans, such as partial charge-offs, unamortized deferred fees and costs on originated loans and premiums or discounts on purchased loans.

(2) Includes impaired commercial loans that are also considered TDR Loans which totaled $241 million and $369 million at June 30, 2018 and December 31, 2017, respectively.

The following table presents information about average impaired commercial loans and interest income recognized on impaired commercial loans:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
		(in millions)		
Average balance of impaired commercial loans:				
Real estate, including construction	**$ 12**	$ 44	**$ 11**	$ 43
Business and corporate banking	**272**	304	**264**	317
Global banking	**248**	577	**311**	605
Other commercial	**—**	7	**—**	7
Total average balance of impaired commercial loans	**$ 532**	$ 932	**$ 586**	$ 972
Interest income recognized on impaired commercial loans:				
Business and corporate banking	**$ 1**	$ 1	**$ 6**	$ 5
Global banking	**1**	1	**2**	1
Total interest income recognized on impaired commercial loans	**$ 2**	$ 2	**$ 8**	$ 6

Commercial Loan Credit Quality Indicators The following credit quality indicators are monitored for 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 table summarizes criticized commercial loans:

	Special Mention	Substandard	Doubtful	Total
	(in millions)			
At June 30, 2018				
Real estate, including construction	**$ 480**	**$ 85**	**$ 4**	**$ 569**
Business and corporate banking	**368**	**334**	**25**	**727**
Global banking	**297**	**1,059**	**14**	**1,370**
Other commercial	**10**	**—**	**—**	**10**
Total commercial	**$ 1,155**	**$ 1,478**	**$ 43**	**$ 2,676**
At December 31, 2017				
Real estate, including construction	$ 467	$ 117	$ 1	$ 585
Business and corporate banking	477	519	44	1,040
Global banking	452	1,612	82	2,146
Other commercial	11	—	—	11
Total commercial	$ 1,407	$ 2,248	$ 127	$ 3,782

Nonperforming The following table summarizes the status of our commercial loan portfolio, excluding loans held for sale:

	Performing Loans	Nonaccrual Loans	Accruing Loans Contractually Past Due 90 days or More	Total
	(in millions)			
At June 30, 2018				
Real estate, including construction	**$ 11,232**	**$ 13**	**$ —**	**$ 11,245**
Business and corporate banking	**11,890**	**218**	**1**	**12,109**
Global banking	**18,760**	**117**	**—**	**18,877**
Other commercial	**4,612**	**—**	**—**	**4,612**
Total commercial	**$ 46,494**	**$ 348**	**$ 1**	**$ 46,843**
At December 31, 2017				
Real estate, including construction	$ 10,521	$ 12	$ —	$ 10,533
Business and corporate banking	12,288	215	1	12,504
Global banking	19,703	385	—	20,088
Other commercial	9,909	1	—	9,910
Total commercial	$ 52,421	$ 613	$ 1	$ 53,035

Credit risk profile The following table shows the credit risk profile of our commercial loan portfolio:

		Investment Grade[1]		Non-Investment Grade		Total
				(in millions)		
At June 30, 2018						
Real estate, including construction	**$**	**8,132**	**$**	**3,113**	**$**	**11,245**
Business and corporate banking		**5,331**		**6,778**		**12,109**
Global banking		**13,208**		**5,669**		**18,877**
Other commercial		**3,426**		**1,186**		**4,612**
Total commercial	**$**	**30,097**	**$**	**16,746**	**$**	**46,843**
At December 31, 2017						
Real estate, including construction	$	7,456	$	3,077	$	10,533
Business and corporate banking		5,752		6,752		12,504
Global banking		13,218		6,870		20,088
Other commercial		8,341		1,569		9,910
Total commercial	$	34,767	$	18,268	$	53,035

(1) Investment grade includes commercial loans with credit ratings of at least BBB- or above or the equivalent based on our internal credit rating system.

Consumer Loan Credit Quality Indicators The following credit quality indicators are utilized for our consumer loan portfolio:

Delinquency The following table summarizes dollars of two-months-and-over contractual delinquency and as a percent of total loans and loans held for sale ("delinquency ratio") for our consumer loan portfolio:

	June 30, 2018			December 31, 2017		
		Delinquent Loans	Delinquency Ratio		Delinquent Loans	Delinquency Ratio
			(dollars are in millions)			
Residential mortgages[1][2]	**$**	**356**	**2.05%**	$	425	2.46%
Home equity mortgages[1][2]		**32**	**2.95**		39	3.27
Credit cards		**15**	**1.78**		12	1.66
Other consumer		**8**	**2.23**		10	2.48
Total consumer	**$**	**411**	**2.09%**	$	486	2.48%

(1) At June 30, 2018 and December 31, 2017, consumer mortgage loan delinquency includes $285 million and $342 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less cost to sell, including $1 million and $1 million, respectively, relating to loans held for sale.

(2) At June 30, 2018 and December 31, 2017, consumer mortgage loans and loans held for sale include $162 million and $159 million, respectively, of loans that were in the process of foreclosure.

Nonperforming The following table summarizes the status of our consumer loan portfolio, excluding loans held for sale:

	Performing Loans	Nonaccrual Loans	Accruing Loans Contractually Past Due 90 days or More	Total
		(in millions)		
At June 30, 2018				
Residential mortgages	**$ 16,921**	**$ 405**	**$ —**	**$ 17,326**
Home equity mortgages	**1,023**	**63**	**—**	**1,086**
Credit cards	**830**	**—**	**11**	**841**
Other consumer	**298**	**—**	**5**	**303**
Total consumer	**$ 19,072**	**$ 468**	**$ 16**	**$ 19,556**
At December 31, 2017				
Residential mortgages	$ 16,859	$ 414	$ —	$ 17,273
Home equity mortgages	1,124	67	—	1,191
Credit cards	712	—	9	721
Other consumer	335	—	8	343
Total consumer	$ 19,030	$ 481	$ 17	$ 19,528

Troubled debt restructurings See discussion of impaired loans above for further details on this credit quality indicator.

Concentration of Credit Risk At June 30, 2018 and December 31, 2017, our loan portfolios included interest-only residential mortgage and home equity mortgage loans totaling $3,275 million and $3,424 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.

5. *Allowance for Credit Losses*

The following table summarizes the changes in the allowance for credit losses by product and the related loan balance by product during the three and six months ended June 30, 2018 and 2017:

	Commercial				Consumer				
	Real Estate, including Construction	Business and Corporate Banking	Global Banking	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	Total
					(in millions)				
Three Months Ended June 30, 2018									
Allowance for credit losses – beginning of period	**$ 92**	**$ 207**	**$ 211**	**$ 19**	**$ 18**	**$ 10**	**$ 38**	**$ 4**	**$ 599**
Provision charged (credited) to income	**(4)**	**(27)**	**(25)**	**—**	**(4)**	**—**	**13**	**2**	**(45)**
Charge-offs	**—**	**(6)**	**(32)**	**—**	**(1)**	**(2)**	**(7)**	**(2)**	**(50)**
Recoveries	**—**	**22**	**—**	**—**	**2**	**1**	**1**	**1**	**27**
Net (charge-offs) recoveries	**—**	**16**	**(32)**	**—**	**1**	**(1)**	**(6)**	**(1)**	**(23)**
Allowance for credit losses – end of period	**$ 88**	**$ 196**	**$ 154**	**$ 19**	**$ 15**	**$ 9**	**$ 45**	**$ 5**	**$ 531**
Three Months Ended June 30, 2017									
Allowance for credit losses – beginning of period	$ 92	$ 266	$ 470	$ 15	$ 24	$ 17	$ 31	$ 6	$ 921
Provision charged (credited) to income	(9)	(5)	—	—	(8)	(4)	6	(1)	(21)
Charge-offs	(2)	(2)	(45)	(1)	—	(2)	(8)	(1)	(61)
Recoveries	—	2	—	—	4	1	1	1	9
Net (charge-offs) recoveries	(2)	—	(45)	(1)	4	(1)	(7)	—	(52)
Allowance for credit losses – end of period	$ 81	$ 261	$ 425	$ 14	$ 20	$ 12	$ 30	$ 5	$ 848
Six Months Ended June 30, 2018									
Allowance for credit losses – beginning of period	**$ 82**	**$ 244**	**$ 264**	**$ 18**	**$ 25**	**$ 11**	**$ 32**	**$ 5**	**$ 681**
Provision charged (credited) to income	**6**	**(61)**	**(74)**	**1**	**(14)**	**(1)**	**25**	**2**	**(116)**
Charge-offs	**—**	**(31)**	**(37)**	**—**	**(1)**	**(4)**	**(15)**	**(3)**	**(91)**
Recoveries	**—**	**44**	**1**	**—**	**5**	**3**	**3**	**1**	**57**
Net (charge-offs) recoveries	**—**	**13**	**(36)**	**—**	**4**	**(1)**	**(12)**	**(2)**	**(34)**
Allowance for credit losses – end of period	**$ 88**	**$ 196**	**$ 154**	**$ 19**	**$ 15**	**$ 9**	**$ 45**	**$ 5**	**$ 531**
Ending balance: collectively evaluated for impairment	**$ 87**	**$ 169**	**$ 139**	**$ 19**	**$ 10**	**$ 8**	**$ 44**	**$ 5**	**$ 481**
Ending balance: individually evaluated for impairment	**1**	**27**	**15**	**—**	**5**	**1**	**1**	**—**	**50**
Total allowance for credit losses	**$ 88**	**$ 196**	**$ 154**	**$ 19**	**$ 15**	**$ 9**	**$ 45**	**$ 5**	**$ 531**
Loans:									
Collectively evaluated for impairment[1]	**$ 11,234**	**$ 11,852**	**$ 18,704**	**$ 4,612**	**$ 16,397**	**$ 1,019**	**$ 837**	**$ 303**	**$ 64,958**
Individually evaluated for impairment[2]	**11**	**257**	**173**	**—**	**59**	**3**	**4**	**—**	**507**
Loans carried at lower of amortized cost or fair value less cost to sell	**—**	**—**	**—**	**—**	**870**	**64**	**—**	**—**	**934**
Total loans	**$ 11,245**	**$ 12,109**	**$ 18,877**	**$ 4,612**	**$ 17,326**	**$ 1,086**	**$ 841**	**$ 303**	**$ 66,399**

	Commercial				Consumer				
	Real Estate, including Construction	Business and Corporate Banking	Global Banking	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	Total
	(in millions)								
Six Months Ended June 30, 2017									
Allowance for credit losses – beginning of period	$ 92	$ 317	$ 508	$ 13	$ 26	$ 20	$ 34	$ 7	$ 1,017
Provision charged (credited) to income	(8)	(47)	(39)	2	(8)	(6)	9	(1)	(98)
Charge-offs	(3)	(23)	(45)	(1)	(3)	(4)	(16)	(2)	(97)
Recoveries	—	14	1	—	5	2	3	1	26
Net (charge-offs) recoveries	(3)	(9)	(44)	(1)	2	(2)	(13)	(1)	(71)
Allowance for credit losses – end of period	$ 81	$ 261	$ 425	$ 14	$ 20	$ 12	$ 30	$ 5	$ 848
Ending balance: collectively evaluated for impairment	$ 74	$ 221	$ 223	$ 14	$ 13	$ 11	$ 29	$ 5	$ 590
Ending balance: individually evaluated for impairment	7	40	202	—	7	1	1	—	258
Total allowance for credit losses	$ 81	$ 261	$ 425	$ 14	$ 20	$ 12	$ 30	$ 5	$ 848
Loans:									
Collectively evaluated for impairment[1]	$ 10,197	$ 12,584	$ 20,446	$ 4,427	$ 16,114	$ 1,215	$ 643	$ 424	$ 66,050
Individually evaluated for impairment[2]	43	284	601	6	58	3	4	—	999
Loans carried at lower of amortized cost or fair value less cost to sell	—	—	—	—	947	67	—	—	1,014
Total loans	$ 10,240	$ 12,868	$ 21,047	$ 4,433	$ 17,119	$ 1,285	$ 647	$ 424	$ 68,063

(1) Other commercial includes loans to HSBC affiliates totaling $1,895 million and $1,423 million at June 30, 2018 and 2017, respectively, for which we do not carry an associated allowance for credit losses.

(2) For consumer loans and certain small business loans, these amounts represent TDR Loans for which we evaluate reserves using a discounted cash flow methodology. Each loan is individually identified as a TDR Loan and then grouped together with other TDR Loans with similar characteristics. The discounted cash flow analysis is then applied to these groups of TDR Loans. Loans individually evaluated for impairment exclude TDR Loans that are carried at the lower of amortized cost or fair value of the collateral less cost to sell which totaled $635 million and $670 million at June 30, 2018 and 2017, respectively.

6. *Loans Held for Sale*

Loans held for sale consisted of the following:

	June 30, 2018	December 31, 2017
	(in millions)	
Commercial loans:		
Real estate, including construction	**$ —**	$ 115
Global banking	**126**	533
Total commercial	**126**	648
Consumer loans:		
Residential mortgages	**31**	6
Other consumer	**56**	61
Total consumer	**87**	67
Total loans held for sale	**$ 213**	$ 715

Commercial Loans Commercial loans held for sale primarily consists of certain loans that we have elected to designate under the fair value option which include 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 $90 million and $471 million at June 30, 2018 and December 31, 2017, respectively. See Note 10, "Fair Value Option," for additional information.

Commercial loans held for sale also includes certain loans that we no longer intend to hold for investment and transferred to held for sale which totaled $36 million and $62 million at June 30, 2018 and December 31, 2017, respectively. During the three and six months ended June 30, 2018, we reversed less than $1 million and $3 million, respectively, of the lower of amortized cost or fair value adjustment previously recorded on commercial loans held for sale as a component of other income in the consolidated statement of income as a result of an increase in fair value due to improved pricing compared with reversing $2 million and $1 million during the three and six months ended June 30, 2017, respectively.

Consumer Loans Prior to 2018 applications, we sold agency-eligible residential mortgage loan originations on a servicing released basis directly to PHH Mortgage Corporation ("PHH Mortgage"). Beginning with 2018 applications, PHH Mortgage is no longer obligated to purchase these loans from us directly upon origination and instead we currently intend to market these loans for sale to other third parties on a servicing retained basis. Gains and losses from the sale of these residential mortgage loans are reflected as a component of residential mortgage banking expense in the accompanying consolidated statement of income.

Other consumer loans held for sale reflects student loans which we no longer originate.

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. As discussed above, prior to 2018 applications, PHH Mortgage was obligated to purchase agency-eligible loans from us directly upon origination and, as such, we retained none of the risk of market changes in mortgage rates for these loans purchased by PHH Mortgage. Beginning with 2018 applications, we now market these loans for sale to other third parties. As a result, in 2018, we have reinstated 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, partially mitigating the interest rate risk for these mortgage loans. Revenue associated with this economic hedging program, which is included in residential mortgage banking expense in the consolidated statement of income, was less than $1 million during both the three and six months ended June 30, 2018.

Valuation Allowances 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 $3 million and $5 million at June 30, 2018 and December 31, 2017, respectively. The valuation allowance on commercial loans held for sale was $6 million and $10 million at June 30, 2018 and December 31, 2017, respectively.

7. Goodwill

Goodwill was $1,607 million at both June 30, 2018 and December 31, 2017. Goodwill for these periods reflects accumulated impairment losses of $670 million, which were recognized in prior periods. During the first half of 2018, there were no events or changes in circumstances to indicate that it is more likely than not the fair values of any of our reporting units have reduced below their respective carrying amounts.

8. Sale of Certain Private Banking Client Relationships

In August 2017, our Private Banking business entered into an agreement to refer parts of its Latin America portfolio, consisting primarily of clients based in areas where we do not have a corporate presence, including Central America and the Andean Pact, to UBS Wealth Management Americas ("UBS"). Under the terms of the agreement, we facilitate the referral of these client relationships to UBS, including the transfer of their client assets as well as the transfer of the relationship managers and client service employees that support these clients. At the time the agreement was signed, total client assets associated with these relationships consisted of approximately $3.5 billion in client investments (which were not reported on our balance sheet) and $1.7 billion in client deposits (which were reported on our balance sheet). Loans associated with these client relationships were not included in the agreement. UBS will pay us a fee of 0.5 percent of the aggregate client assets transferred during the first two years after the agreement was signed. Therefore, the consideration we expect to receive is contingent upon the clients' decisions to transfer their accounts to UBS, the timing and amounts of client assets transferred and the acceptance of the client assets by UBS. As a result of entering into the agreement, we recorded the contingent consideration expected to be received of $15 million as a receivable at estimated fair value within other assets and recognized a pre-tax gain on sale, net of allocated goodwill and transaction costs, of $8 million in other income during the third quarter of 2017. The fair value of the contingent consideration is estimated using a discounted cash flow methodology with changes in fair value recognized in other income. During the second quarter of 2018, we reduced the contingent consideration receivable to $12 million and recognized a $3 million loss in other income as a result of a decline in estimated fair value based on the amount of client assets transferred to date and a revised estimate of the amount of remaining client assets that we expect will be transferred.

Through June 30, 2018, we have completed the transfers of approximately $1.3 billion of client investments and $0.7 billion of client deposits to UBS. We have estimated the amount of remaining client deposits that we expect will be transferred to UBS, which was approximately $0.1 billion at June 30, 2018 compared with $0.7 billion at December 31, 2017, and have classified them as held for sale in our consolidated balance sheet. No lower of cost or fair value adjustment was required as a result of the transfer of deposits to held for sale. An additional $0.1 billion of deposits at June 30, 2018 could be transferred in the event all remaining client deposits associated with these client relationships were to be transferred.

9. Derivative Financial Instruments

In the normal course of business, the derivative instruments entered 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 table below. 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 table below.

	June 30, 2018		December 31, 2017	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	(in millions)			
Derivatives accounted for as fair value hedges[1]				
OTC-cleared[2]	$ —	$ —	$ 84	$ 390
Bilateral OTC[2]	—	**100**	—	134
Interest rate contracts	—	**100**	84	524
Derivatives accounted for as cash flow hedges[1]				
Foreign exchange contracts - bilateral OTC[2]	**36**	—	10	—
OTC-cleared[2]	—	—	4	86
Bilateral OTC[2]	—	**9**	—	22
Interest rate contracts	—	**9**	4	108
Total derivatives accounted for as hedges	**36**	**109**	98	632
Trading derivatives not accounted for as hedges[3]				
Exchange-traded[2]	**7**	**132**	6	59
OTC-cleared[2]	**122**	**14**	11,905	10,526
Bilateral OTC[2]	**9,805**	**10,765**	11,549	12,997
Interest rate contracts	**9,934**	**10,911**	23,460	23,582
Exchange-traded[2]	**1**	—	4	—
Bilateral OTC[2]	**18,197**	**17,550**	15,746	14,666
Foreign exchange contracts	**18,198**	**17,550**	15,750	14,666
Equity contracts - bilateral OTC[2]	**2,831**	**2,812**	2,820	2,806
Exchange-traded[2]	**104**	**28**	52	108
Bilateral OTC[2]	**732**	**674**	502	613
Precious metals contracts	**836**	**702**	554	721
OTC-cleared[2]	**161**	**156**	67	75
Bilateral OTC[2]	**782**	**643**	589	485
Credit contracts	**943**	**799**	656	560
Other non-qualifying derivatives not accounted for as hedges[1]				
OTC-cleared[2]	—	—	519	60
Bilateral OTC[2]	**124**	**282**	170	164
Interest rate contracts	**124**	**282**	689	224
Foreign exchange contracts - bilateral OTC[2]	**42**	**18**	—	—
Equity contracts - bilateral OTC[2]	**968**	**298**	1,264	145
Precious metals contracts - bilateral OTC[2]	—	—	—	1
Credit contracts - bilateral OTC[2]	**16**	**11**	—	24
Other contracts - bilateral OTC[2][4]	**8**	**59**	6	52
Total derivatives	**33,936**	**33,551**	45,297	43,413
Less: Gross amounts of receivable / payable subject to enforceable master netting agreements[5][7]	**27,075**	**27,075**	36,394	36,394
Less: Gross amounts of cash collateral received / posted subject to enforceable master netting agreements[6][7]	**3,166**	**4,178**	4,480	3,823
Net amounts of derivative assets / liabilities presented in the balance sheet	**3,695**	**2,298**	4,423	3,196
Less: Gross amounts of financial instrument collateral received / posted subject to enforceable master netting agreements but not offset in the consolidated balance sheet	**663**	**394**	742	370
Net amounts of derivative assets / liabilities	**$ 3,032**	**$ 1,904**	$ 3,681	$ 2,826

(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. During the first quarter of 2018, a central clearing counterparty amended its rules for OTC-cleared interest rate derivatives to legally re-characterize daily variation margin

payments to be settlement payments as opposed to cash collateral posted. The impact of reflecting the rule change for this central clearing counterparty as of December 31, 2017 would have been a reduction in gross derivative assets and liabilities of approximately $11.5 billion and $10.3 billion, respectively, with corresponding decreases in the related counterparty and cash collateral netting.

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

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

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

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

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

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

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 senior and subordinated debt obligations. The fair value of fixed-rate (U.S. dollar and non-U.S. dollar denominated) assets and liabilities fluctuates in response to changes in interest rates or foreign currency exchange rates. We utilize interest rate swaps, forward and futures contracts and foreign currency swaps to minimize our exposure to changes in fair value caused by interest rate and foreign currency 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 terminated and the hedged item continues to exist, the basis adjustment is amortized over the remaining life of the hedged item.

We recorded basis adjustments for active fair value hedges which decreased the carrying amount of our debt by $184 million and $132 million at June 30, 2018 and December 31, 2017, respectively. During the three and six months ended June 30, 2018, respectively, we amortized nil and $1 million of basis adjustments related to terminated and/or re-designated fair value hedges of our debt compared with $1 million and $3 million during the three and six months ended June 30, 2017, respectively. The total accumulated unamortized basis adjustments related to terminated and/or re-designated fair value hedges amounted to a decrease in the carrying amount of our debt of $7 million at June 30, 2018 and an increase of $7 million at December 31, 2017.

We recorded basis adjustments for active fair value hedges of available-for-sale ("AFS") securities which decreased the carrying amount of the securities by $96 million at June 30, 2018 and increased the carrying amount of the securities by $279 million at December 31, 2017.

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

	Gain (Loss) on Derivative		Gain (Loss) on Hedged Items		Net Ineffective Gain (Loss) Recognized
	Net Interest Income	Other Income	Net Interest Income	Other Income	Other Income
			(in millions)		
Three Months Ended June 30, 2018					
Interest rate contracts / AFS Securities	**$ (10)**	**$ 125**	**$ 89**	**$ (117)**	**$ 8**
Interest rate contracts / long-term debt	**(14)**	**(7)**	**(53)**	**4**	**(3)**
Total	**$ (24)**	**$ 118**	**$ 36**	**$ (113)**	**$ 5**
Three Months Ended June 30, 2017					
Interest rate contracts / AFS Securities	$ (36)	$ (147)	$ 91	$ 147	$ —
Interest rate contracts / long-term debt	4	32	(68)	(30)	2
Total	$ (32)	$ (115)	$ 23	$ 117	$ 2
Six Months Ended June 30, 2018					
Interest rate contracts / AFS Securities	**$ (33)**	**$ 487**	**$ 176**	**$ (474)**	**$ 13**
Interest rate contracts / long-term debt	**(20)**	**(67)**	**(110)**	**65**	**(2)**
Total	**$ (53)**	**$ 420**	**$ 66**	**$ (409)**	**$ 11**
Six Months Ended June 30, 2017					
Interest rate contracts / AFS Securities	$ (67)	$ (61)	$ 180	$ 64	$ 3
Interest rate contracts / long-term debt	12	19	(134)	(16)	3
Total	$ (55)	$ (42)	$ 46	$ 48	$ 6

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 the effective portion of a qualifying cash flow hedge are recognized initially in other comprehensive income. When the cash flows being hedged materialize and are recorded in income or expense, the associated gain or loss from the hedging derivative previously recorded in accumulated other comprehensive loss ("AOCI") is reclassified into earnings in the same accounting period in which the designated forecasted transaction or hedged item affects earnings. If a cash flow hedge of a forecasted transaction is de-designated because it is no longer highly effective, or if the hedge relationship is terminated, the cumulative gain or loss on the hedging derivative to that date will continue to be reported in AOCI unless it is probable that the hedged forecasted transaction will not occur by the end of the originally specified time period as documented at the inception of the hedge, at which time the cumulative gain or loss is released into earnings.

At June 30, 2018 and December 31, 2017, active cash flow hedge relationships extend or mature through July 2036. During the three and six months ended June 30, 2018, respectively, $5 million and $9 million of losses related to terminated and/or re-designated cash flow hedge relationships were amortized to earnings from AOCI compared with losses of $3 million and $6 million during the three and six months ended June 30, 2017, respectively. During the next twelve months, we expect to amortize $21 million of remaining losses to earnings resulting from these terminated and/or re-designated cash flow hedges. The interest accrual related to the hedging instruments is recognized in 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 all terminated cash flow hedges) and their locations on the consolidated statement of income:

	Gain (Loss) Recognized in AOCI on Derivative (Effective Portion) 2018	2017	Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Gain (Loss) Reclassed From AOCI into Income (Effective Portion) 2018	2017	Location of Gain (Loss) Recognized in Income on the Derivative (Ineffective Portion and Amount Excluded from Effectiveness Testing)	Gain (Loss) Recognized in Income on the Derivative (Ineffective Portion) 2018	2017
				(in millions)				
Three Months Ended June 30,								
Foreign exchange contracts	**$ (1)**	$ —	Net interest income	**$ —**	$ —	Other income	**$ —**	$ —
Interest rate contracts	**$ 9**	$ (9)	Net interest income	**$ (5)**	$ (3)	Other income	**$ —**	$ —
Total	**$ 8**	$ (9)		**$ (5)**	$ (3)		**$ —**	$ —
Six Months Ended June 30,								
Foreign exchange contracts	**$ (6)**	$ —	Net interest income	**$ —**	$ —	Other income	**$ —**	$ —
Interest rate contracts	**12**	(11)	Net interest income	**(9)**	(6)	Other income	**—**	—
Total	**$ 6**	$ (11)		**$ (9)**	$ (6)		**$ —**	$ —

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

Our non-qualifying hedging and other activities include:

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

Derivative instruments designated as economic hedges that do not qualify for hedge accounting are recorded at fair value through profit and loss. Realized and unrealized gains and losses on economic hedges are recognized in gain (loss) on instruments designated at fair value and related derivatives or other income 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:

	Location of Gain (Loss) Recognized in Income on Derivatives	Amount of Gain (Loss) Recognized in Income on Derivatives			
		Three Months Ended June 30,		Six Months Ended June 30,	
		2018	2017	**2018**	2017
		(in millions)			
Interest rate contracts	Trading revenue	**$ 126**	$ (177)	**$ 329**	$ (197)
Foreign exchange contracts	Trading revenue	**28**	126	**(72)**	69
Equity contracts	Trading revenue	**2**	(2)	**(1)**	(1)
Precious metals contracts	Trading revenue	**85**	51	**215**	111
Credit contracts	Trading revenue	**(1)**	(46)	**(4)**	(46)
Total		**$ 240**	$ (48)	**$ 467**	$ (64)

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:

	Location of Gain (Loss) Recognized in Income on Derivatives	Amount of Gain (Loss) Recognized in Income on Derivatives			
		Three Months Ended June 30,		Six Months Ended June 30,	
		2018	2017	**2018**	2017
		(in millions)			
Interest rate contracts	Gain (loss) on instruments designated at fair value and related derivatives	**$ (54)**	$ 72	**$ (216)**	$ 75
Foreign exchange contracts	Gain (loss) on instruments designated at fair value and related derivatives	**(8)**	(6)	**(10)**	3
Equity contracts	Gain (loss) on instruments designated at fair value and related derivatives	**167**	161	**(172)**	521
Credit contracts	Other income	**12**	2	**10**	(30)
Other contracts[1]	Other income	**(12)**	(2)	**(14)**	(2)
Total		**$ 105**	$ 227	**$ (402)**	$ 567

(1) Consists of swap agreements entered into in conjunction with the sales of certain 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 liability position at June 30, 2018 was $1,025 million, for which we had posted collateral of $665 million. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a liability position at December 31, 2017 was $1,063 million, for which we had posted collateral of $758 million. Substantially all of the collateral posted is in the form of cash or securities available-for-sale. See Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," for further details.

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

	One-notch downgrade	Two-notch downgrade
	(in millions)	
Amount of additional collateral to be posted upon downgrade	$ 25	$ 46

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

	June 30, 2018	December 31, 2017
	(in millions)	
Interest rate:		
Futures and forwards	**$ 937,672**	$ 735,757
Swaps	**3,009,143**	2,687,273
Options written	**100,512**	77,144
Options purchased	**117,847**	93,042
	4,165,174	3,593,216
Foreign exchange:		
Swaps, futures and forwards	**1,061,194**	924,163
Options written	**29,417**	25,911
Options purchased	**29,916**	26,617
Spot	**40,302**	19,401
	1,160,829	996,092
Commodities, equities and precious metals:		
Swaps, futures and forwards	**53,437**	38,709
Options written	**33,847**	31,631
Options purchased	**45,720**	43,202
	133,004	113,542
Credit derivatives	**91,081**	90,290
Other contracts[1]	**748**	644
Total	**$ 5,550,836**	$ 4,793,784

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

10. 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") and endorsed by the European Union ("EU"). 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 securities purchased and sold under resale and repurchase agreements, 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 related to interest rate, credit and other risks as well as the mark-to-market adjustment on the related derivatives and the net realized gains or losses on these derivatives are reported in gain (loss) on instruments designated at fair value and related derivatives in the consolidated statement of income.

Loans 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. The election allows 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 consensus pricing obtained from independent sources, relevant broker quotes or observed market prices of instruments with similar characteristics. Where observable market parameters are not available, fair value is determined based on contractual cash flows adjusted for estimates of prepayment rates, expected default rates and loss severity discounted at management's estimate of the expected rate of return required by market participants. We also consider loan-specific risk mitigating factors such as collateral arrangements in determining the fair value estimate. Interest from these loans is recorded as interest income in the consolidated statement of income. Because a substantial majority of the loans elected for the fair value option are floating rate assets, changes in their fair value are primarily attributable to changes in loan-specific credit risk factors. The components of gain (loss) related to loans designated at fair value are summarized in the table below. At June 30, 2018 and December 31, 2017, no loans for which the fair value option has been elected were 90 days or more past due or in nonaccrual status.

Resale and Repurchase Agreements We elected to apply FVO accounting to certain securities purchased and sold under resale and repurchase agreements which are trading in nature. The election allows us to account for these resale and repurchase agreements at fair value which is consistent with the manner in which the instruments are managed. The fair value of the resale and repurchase agreements is determined using market rates currently offered on comparable transactions with similar underlying collateral and maturities. Interest on these resale and repurchase agreements is recorded as interest income or expense in the consolidated statement of income. The components of gain (loss) related to these resale and repurchase agreements designated at fair value are summarized in the table below.

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 to hedge accounting 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. The components of gain (loss) in the consolidated statement of income related to long-term debt designated at fair value are summarized in the table below.

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

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

	Fair Value	Unpaid Principal Balance	Fair Value Over (Under) Unpaid Principal Balance
		(in millions)	
At June 30, 2018			
Commercial loans held for sale	**$ 90**	**$ 94**	**$ (4)**
Securities purchased under resale agreements	**395**	**395**	**—**
Securities sold under repurchase agreements	**1,315**	**1,315**	**—**
Fixed rate long-term debt	**1,973**	**1,750**	**223**
Hybrid instruments:			
Structured deposits	**7,701**	**7,926**	**(225)**
Structured notes	**10,409**	**9,649**	**760**
At December 31, 2017			
Commercial loans held for sale	$ 471	$ 483	$ (12)
Securities purchased under resale agreements	80	80	—
Securities sold under repurchase agreements	2,032	2,031	1
Fixed rate long-term debt	2,230	1,750	480
Hybrid instruments:			
Structured deposits	7,693	7,685	8
Structured notes	10,656	9,530	1,126

Components of Gain (Loss) on Instruments Designated at Fair Value and Related Derivatives The following table summarizes the components of gain (loss) on instruments designated at fair value and related derivatives reflected in the consolidated statement of income for the three and six months ended June 30, 2018 and 2017:

	Loans	Securities Purchased Under Resale Agreements	Securities Sold Under Repurchase Agreements	Long-Term Debt	Hybrid Instruments	Total
			(in millions)			
Three Months Ended June 30, 2018						
Interest rate and other components[1]	**$ —**	**$ —**	**$ 1**	**$ 34**	**$ (135)**	**$ (100)**
Credit risk component[2]	**(1)**	**—**	**—**	**—**	**—**	**(1)**
Total mark-to-market on financial instruments designated at fair value	**(1)**	**—**	**1**	**34**	**(135)**	**(101)**
Mark-to-market on related derivatives	**—**	**—**	**—**	**(33)**	**127**	**94**
Net realized gain on related long-term debt derivatives	**—**	**—**	**—**	**11**	**—**	**11**
Gain (loss) on instruments designated at fair value and related derivatives	**$ (1)**	**$ —**	**$ 1**	**$ 12**	**$ (8)**	**$ 4**
Three Months Ended June 30, 2017						
Interest rate and other components[1]	$ —	$ 1	$ 2	$ (26)	$ (204)	$ (227)
Credit risk component[2]	(1)	—	—	—	—	(1)
Total mark-to-market on financial instruments designated at fair value	(1)	1	2	(26)	(204)	(228)
Mark-to-market on related derivatives	—	—	—	17	196	213
Net realized gain on related long-term debt derivatives	—	—	—	14	—	14
Gain (loss) on instruments designated at fair value and related derivatives	$ (1)	$ 1	$ 2	$ 5	$ (8)	$ (1)
Six Months Ended June 30, 2018						
Interest rate and other components[1]	**$ —**	**$ —**	**$ —**	**$ 122**	**$ 307**	**$ 429**
Credit risk component[2]	**3**	**—**	**—**	**—**	**—**	**3**
Total mark-to-market on financial instruments designated at fair value	**3**	**—**	**—**	**122**	**307**	**432**
Mark-to-market on related derivatives	**—**	**—**	**—**	**(110)**	**(312)**	**(422)**
Net realized gain on related long-term debt derivatives	**—**	**—**	**—**	**24**	**—**	**24**
Gain (loss) on instruments designated at fair value and related derivatives	**$ 3**	**$ —**	**$ —**	**$ 36**	**$ (5)**	**$ 34**
Six Months Ended June 30, 2017						
Interest rate and other components[1]	$ —	$ 7	$ 3	$ (7)	$ (567)	$ (564)
Credit risk component[2]	(2)	—	—	—	—	(2)
Total mark-to-market on financial instruments designated at fair value	(2)	7	3	(7)	(567)	(566)
Mark-to-market on related derivatives	—	—	—	(7)	577	570
Net realized gain on related long-term debt derivatives	—	—	—	29	—	29
Gain (loss) on instruments designated at fair value and related derivatives	$ (2)	$ 7	$ 3	$ 15	$ 10	$ 33

(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 common equity as a component of other comprehensive income.

11. Accumulated Other Comprehensive Loss

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

Three Months Ended June 30,	2018	2017
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	**$ (494)**	$ (354)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $(22) million and $70 million, respectively	**(73)**	118
Reclassification adjustment for gains realized in net income, net of tax of $(3) million and $(7) million, respectively(2)	**(7)**	(12)
Amortization of net unrealized losses on securities transferred from available-for-sale to held-to-maturity realized in net income, net of tax of $1 million and $2 million, respectively(3)	**4**	4
Total other comprehensive income (loss) for period	**(76)**	110
Balance at end of period	**(570)**	(244)
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	**(11)**	95
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during the period, net of tax of $41 million and $(6) million, respectively	**129**	(9)
Total other comprehensive income (loss) for period	**129**	(9)
Balance at end of period	**118**	86
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	**(197)**	(156)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $2 million and $(3) million, respectively	**6**	(5)
Reclassification adjustment for losses realized in net income, net of tax of $1 million and $1 million, respectively(5)	**4**	2
Total other comprehensive income (loss) for period	**10**	(3)
Balance at end of period	**(187)**	(159)
Pension and postretirement benefit liability:		
Balance at beginning of period	**4**	—
Other comprehensive income (loss) for period:		
Change in unfunded pension and postretirement liability, net of tax of less than $1 million and less than $1 million, respectively	**(1)**	—
Total other comprehensive loss for period	**(1)**	—
Balance at end of period	**3**	—
Total accumulated other comprehensive loss at end of period	**$ (636)**	$ (317)

Six Months Ended June 30,	2018	2017
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	**$ (250)**	$ (461)
Cumulative effective adjustment to initially apply new accounting guidance for equity investments which were previously classified as available-for-sale, net of tax of $2 million[1]	**4**	—
Cumulative effective adjustment to initially apply new accounting guidance for stranded tax effects resulting from Tax Legislation[1]	**(53)**	—
Balance at beginning of period, adjusted	**(299)**	(461)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $(85) million and $134 million, respectively	**(266)**	224
Reclassification adjustment for gains realized in net income, net of tax of $(4) million and $(9) million, respectively[2]	**(11)**	(15)
Amortization of net unrealized losses on securities transferred from available-for-sale to held-to-maturity realized in net income, net of tax of $2 million and $5 million, respectively[3]	**6**	8
Total other comprehensive income (loss) for period	**(271)**	217
Balance at end of period	**(570)**	(244)
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	**(19)**	—
Cumulative effective adjustment to initially apply new accounting guidance for stranded tax effects resulting from Tax Legislation[1]	**(4)**	—
Cumulative effect adjustment to initially apply new accounting guidance for financial liabilities measured under the fair value option, net of tax of $103 million[4]	**—**	174
Balance at beginning of period, adjusted	**(23)**	174
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $46 million and $(52) million, respectively	**141**	(88)
Total other comprehensive income (loss) for period	**141**	(88)
Balance at end of period	**118**	86
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	**(164)**	(157)
Cumulative effective adjustment to initially apply new accounting guidance for stranded tax effects resulting from Tax Legislation[1]	**(35)**	—
Balance at beginning of period, adjusted	**(199)**	(157)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $2 million and $(4) million, respectively	**5**	(6)
Reclassification adjustment for losses realized in net income, net of tax of $2 million and $2 million, respectively[5]	**7**	4
Total other comprehensive income (loss) for period	**12**	(2)
Balance at end of period	**(187)**	(159)
Pension and postretirement benefit liability:		
Balance at beginning of period	**2**	—
Cumulative effective adjustment to initially apply new accounting guidance for stranded tax effects resulting from Tax Legislation[1]	**1**	—
Balance at beginning of period, adjusted	**3**	—
Other comprehensive income (loss) for period:		
Change in unfunded pension and postretirement liability, net of tax of less than $1 million and less than $1 million, respectively	**—**	—
Total other comprehensive income for period	**—**	—
Balance at end of period	**3**	—
Total accumulated other comprehensive loss at end of period	**$ (636)**	$ (317)

(1) See Note 21, "New Accounting Pronouncements," for additional discussion.

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

(3) Amount amortized to net income is included in interest income in our consolidated statement of income. During 2014, we transferred securities from available-for-sale to held-to-maturity. At the date of transfer, AOCI included net pretax unrealized losses of $234 million 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) See Note 2, "Summary of Significant Accounting Polices and New Accounting Pronouncements," in our 2017 Form 10-K for additional discussion.

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

12. Pension and Other Postretirement Benefits

Defined Benefit Pension Plan The table below 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. We have not been allocated any portion of the Plan's net pension liability.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Interest cost on projected benefit obligation	**$ 15**	$ 18	**$ 30**	$ 36
Expected return on plan assets	**(19)**	(22)	**(40)**	(43)
Amortization of net actuarial loss	**5**	8	**10**	18
Administrative costs	**1**	1	**2**	2
Pension expense	**$ 2**	$ 5	**$ 2**	$ 13

Postretirement Plans Other Than Pensions Our employees also participate in plans which provide medical and life insurance benefits to retirees and eligible dependents. These plans cover substantially all 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. The following table reflects the components of the net periodic postretirement benefit cost:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Interest cost on accumulated benefit obligation	**$ 1**	$ —	**$ 1**	$ 1
Net periodic postretirement benefit cost	**$ 1**	$ —	**$ 1**	$ 1

13. Fee Income from Contracts with Customers

The following table summarizes fee income from contracts with customers disaggregated by type of activity, as well as a reconciliation to total other revenues, during the three and six months ended June 30, 2018 and 2017. Following the table is a description of the various types of fee-based activities and how revenue associated with these activities is recognized.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Credit card fees	**$ 15**	$ 14	**$ 26**	$ 25
Trust and investment management fees	**34**	39	**72**	77
Other fees and commissions:				
Account services	**73**	69	**138**	137
Credit facilities	**86**	71	**164**	143
Custodial fees	**3**	6	**5**	11
Other fees	**22**	17	**37**	34
Total other fees and commissions	**184**	163	**344**	325
Servicing and other fees from HSBC affiliates	**87**	81	**186**	195
Insurance[1]	**3**	3	**6**	7
Total fee income from contracts with customers	**323**	300	**634**	629
Other non-fee revenues	**214**	258	**416**	522
Total other revenues[2]	**$ 537**	$ 558	**$ 1,050**	$ 1,151

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

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

Credit card fees Credit card fees include interchange fees earned from merchants who accept our cards in connection with the purchase of their goods and/or services. These fees are recognized when we satisfy the performance obligation by simultaneously approving a card holder's purchase at the point of sale and remitting payment to the merchant. We recognized interchange fees of $22 million and $43 million during the three and six months ended June 30, 2018, respectively, compared with $20 million and $39 million during the three and six months ended June 30, 2017, respectively. Annual fees on credit cards, net of direct lending costs, are billed upfront and recognized on a straight-line basis over one year. Other credit card fees such as cash advance and over-limit fees are transaction based and are recognized and billed at the point in time the transaction occurs which is when the performance obligation is met. Costs related to our credit card rewards program vary based on multiple factors including card holder activity, card holder reward redemption rates and card holder reward selections. These costs are recorded when the rewards are earned by the customer and are presented as a reduction to credit card fees. Credit card rewards program costs totaled $9 million and $21 million during the three and six months ended June 30, 2018, respectively, compared with $7 million and $16 million during the three and six months ended June 30, 2017, respectively.

Trust and investment management fees Trust and investment management fees include investment management and administration fees which are typically billed as a percentage of the average value of a customer's assets during an agreed payment period or for some contracts, the value of a customer's assets at the end of an agreed payment period and therefore represent variable consideration. The fee percentage and payment period are agreed with the customer upfront. Generally, payment periods are monthly or quarterly and coincide with our reporting periods, thereby resolving the uncertainty of the variable consideration by the reporting date. For payment periods that do not coincide with our reporting periods, judgment is required to estimate the fee and determine the amount to include in an accrual. An accrual is only recorded to the extent it is highly probable that a significant reversal of revenue will not occur. In most cases, a significant reversal of revenue is not highly probable. Other trust and investment management fees are transaction based and are recognized and billed at the point in time the transaction occurs which is when the performance obligation is met. From time to time, we may also receive performance fees from some funds, though these fees are typically only recognized when the performance fee is determinable and the uncertainty of the variable consideration is resolved.

Account services We provide services for various commercial and consumer customer accounts that generate fees from various activities including: accounts statements, ATM transactions, cash withdrawals, wire transfers, check cashing, debit cards and internet and phone banking. The fees for these services are established in the customer account agreement and are either billed individually at the time the service is performed or on a monthly basis for a package or bundle of services as the services are performed. The performance obligation for these services is met when the services are performed. Customer account agreements typically include a package of services with multiple performance obligations or a bundle of services making up a single performance obligation. In the case of a package of services, the pattern of transfer to the customer is usually the same for all services, and therefore the package of services is treated as a single performance obligation. In some cases, a package or bundle of services is billed upfront as an annual fee and recognized on a straight-line basis over one year as the services are performed and the performance obligation is met.

Credit facilities Credit facilities fees include fees generated from lending activities that are not included in the direct loan origination fees which are recognized in interest income as an adjustment to yield. This includes fees associated with loan commitments, revolving credit facilities, standby letters of credit, loan syndication and other transaction based fees. These fees are either billed as a fixed price or as a percentage of the approved lending limit or transaction value. The fee percentage is agreed with the customer upfront. Although the percentage-based fees represent variable consideration, the uncertainty of the variable consideration is resolved by the time the revenue is recognized as the lending limit or transaction value is known on the contract or transaction date. Loan syndication fees received for managing a syndication and other transaction based fees are recognized and billed at the point in time the transaction occurs, which is when the performance obligation is met. Fees associated with loan commitments, revolving credit facilities and standby letters of credit are billed upfront and recognized on a straight-line basis over the period the service is performed which is when the performance obligation is met (e.g. the commitment period). In the event a loan commitment or standby letter of credit is exercised, the remaining unamortized fee is recognized as an adjustment to yield over the loan term.

Custodial fees We earn fees from providing customers with custody services, including the safekeeping of financial assets and the processing and servicing of those assets. These fees are typically recognized and billed on a monthly basis over the period the service is performed which is when the performance obligation is met, as a percentage of the value of the customer's assets held in custody (calculated daily or monthly). The fee percentage is agreed with the customer upfront.

Other fees and commissions Other fees and commissions include fees received associated with various other activities such as remittances, imports/exports, clearing and other miscellaneous services. These fees are typically transaction based and are recognized and billed at the point in time the transaction occurs which is when the performance obligation is met.

Servicing and other fees from HSBC affiliates We receive fees from other HSBC affiliates for providing them with various banking, wealth management and other miscellaneous services as well as support for certain administrative and global business activities. These fees are reported in servicing and other fees from HSBC affiliates and are typically recognized and billed on a monthly basis over the period the service is performed or for some fees that are transaction based, at the point in time the transaction occurs, which is when the performance obligation is met. See Note 14, "Related Party Transactions," for additional information regarding the various services provided and other transactions with HSBC affiliates.

Insurance We earn commissions from the sale of third-party insurance policies which are typically recognized on a weekly or monthly basis, when the policy goes into effect which is when the performance obligation is met.

Deferred Fee Income

Information related to deferred fee income on loan commitments, revolving credit facilities and standby letters of credit is included in Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," and Note 19, "Fair Value Measurements." Excluding these items, we had deferred fee income related to certain account service fees that are paid upfront and recognized over the service period and annual fees on credit cards which collectively totaled $2 million and $1 million at June 30, 2018 and December 31, 2017, respectively. We expect to recognize this revenue over a remaining period of one year or less.

Other than as described above under trust and investment management fees, we do not use significant judgments in the determination of the amount and timing of fee income from contracts with customers. Additionally, costs to obtain or fulfill contracts with customers were immaterial.

14. Related Party Transactions

In the normal course of business, we conduct transactions with HSBC and its subsidiaries. HSBC policy requires that these transactions occur at prevailing market rates and terms and include funding arrangements, derivative transactions, servicing arrangements, information technology support, centralized support services, banking and other miscellaneous services 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 ("HSBC Bank USA") to other HSBC affiliates (other than Federal Deposit Insurance Corporation ("FDIC") insured banks) are legally required to be secured by eligible collateral. The following tables and discussions below present the more significant related party balances and the income (expense) generated by related party transactions:

	June 30, 2018	December 31, 2017
	(in millions)	
Assets:		
Cash and due from banks	**$ 351**	$ 191
Interest bearing deposits with banks	**182**	473
Securities purchased under agreements to resell[1]	**330**	1,115
Trading assets	**111**	63
Loans	**1,895**	6,750
Other[2]	**212**	134
Total assets	**$ 3,081**	$ 8,726
Liabilities:		
Deposits	**$ 11,502**	$ 10,521
Trading liabilities	**174**	737
Short-term borrowings	**838**	1,595
Long-term debt	**4,843**	4,841
Other[2]	**282**	387
Total liabilities	**$ 17,639**	$ 18,081

(1) Reflects purchases of securities 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.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
	(in millions)			
Income/(Expense):				
Interest income	**$ 24**	$ 11	**$ 46**	$ 35
Interest expense	**(90)**	(70)	**(168)**	(136)
Net interest expense	**(66)**	(59)	**(122)**	(101)
Trading revenue (expense)	**(627)**	(891)	**531**	(806)
Servicing and other fees from HSBC affiliates:[1]				
HSBC Bank plc	**43**	34	**84**	75
HSBC Markets (USA) Inc. ("HMUS")	**30**	18	**61**	35
HSBC Finance Corporation ("HSBC Finance")	**1**	3	**2**	37
Other HSBC affiliates	**13**	26	**39**	48
Total servicing and other fees from HSBC affiliates	**87**	81	**186**	195
Gain (loss) on instruments designated at fair value and related derivatives	**135**	164	**(303)**	524
Support services from HSBC affiliates:[1]				
HSBC Technology & Services (USA) ("HTSU")	**(310)**	(302)	**(608)**	(595)
HMUS	**(25)**	(31)	**(56)**	(60)
Other HSBC affiliates	**(70)**	(66)	**(152)**	(128)
Total support services from HSBC affiliates	**(405)**	(399)	**(816)**	(783)
Rental income from HSBC affiliates, net[1][2]	**14**	15	**26**	28
Stock based compensation expense[3]	**(10)**	(11)	**(15)**	(18)

(1) During the fourth quarter of 2017, we changed our presentation for certain cost reimbursements that were previously netted as an offset to affiliate expense and began presenting these reimbursements gross in affiliate income for consistency in presentation across similar transactions. Separately, we also concluded that rental revenue we receive from our affiliates for rent on certain office space would be better presented as a reduction to occupancy expense as opposed to a reduction to affiliate expense. As a result, we have reclassified prior period amounts in order to conform to the current year presentation, which increased servicing and other fees from HSBC affiliates by $29 million and $61 million, respectively, increased support services from HSBC affiliates by $44 million and $89 million, respectively, and increased rental income from HSBC affiliates, net by $15 million and $28 million, respectively, during the three and six months ended June 30, 2017. Reported net income for the three and six months ended June 30, 2017 remained unaffected.

(2) We receive rental revenue 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.

(3) Employees may participate in one or more stock compensation plans sponsored by HSBC. These expenses are included in salaries and employee benefits in our consolidated statement of income. Certain employees are also eligible to participate in a defined benefit pension plan and other postretirement plans sponsored by HSBC North America which are discussed in Note 12, "Pension and Other Postretirement Benefits."

During the six months ended June 30, 2018, our results were impacted by an out of period adjustment which increased servicing and other fees from HSBC affiliates by approximately $10 million in connection with costs reimbursements related to prior years.

Funding Arrangements with HSBC Affiliates:

We use HSBC affiliates to fund a portion of our borrowing and liquidity needs. At both June 30, 2018 and December 31, 2017, long-term debt with affiliates reflected $4.9 billion of floating rate borrowings from HSBC North America. The outstanding balances include $2.0 billion of senior debt which matures in August 2021, $0.9 billion of subordinated debt which matures in May 2025 and $2.0 billion of senior debt which matures in August 2026.

We have a $150 million uncommitted line of credit with HSBC North America. There was no outstanding balance under this credit facility at either June 30, 2018 or December 31, 2017.

We have also incurred short-term borrowings with certain affiliates, largely securities sold under repurchase agreements with HSBC Securities (USA) Inc. ("HSI"). In addition, certain affiliates have also placed deposits with us.

Lending and Derivative Related Arrangements Extended to HSBC Affiliates:

At June 30, 2018 and December 31, 2017, we have the following loan balances outstanding with HSBC affiliates:

	June 30, 2018	December 31, 2017
	(in millions)	
HMUS and subsidiaries	**$ 1,890**	$ 6,690
Other short-term affiliate lending	**5**	60
Total loans	**$ 1,895**	$ 6,750

HMUS and subsidiaries We have extended loans and lines, some of them uncommitted, to HMUS and its subsidiaries in the amount of $7.9 billion at both June 30, 2018 and December 31, 2017 of which $1.9 billion and $6.7 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. Included in the outstanding borrowings at December 31, 2017 was a $5.0 billion overnight loan to HSI that was repaid in early January as the wire process from HSI to settle daily activity failed.

We have extended lines of credit to various other HSBC affiliates totaling $3.7 billion which did not have any outstanding balances at either June 30, 2018 and December 31, 2017.

Other short-term affiliate lending In addition to loans and lines extended to affiliates discussed above, from time to time we may extend loans to affiliates which are generally short term in nature. At June 30, 2018 and December 31, 2017, there were $5 million and $60 million, respectively, of these loans outstanding.

HSBC Finance During the first quarter of 2017, we received $28 million of loan prepayment fees from HSBC Finance associated with the payoff of their loan, which were included in servicing and other fees from HSBC affiliates.

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 $812.5 billion and $768.4 billion at June 30, 2018 and December 31, 2017, 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 $125 million and $64 million at June 30, 2018 and December 31, 2017, respectively. Our Global Banking and Markets business accounts for these transactions on a mark to market basis, with the change in value of contracts with HSBC affiliates substantially offset by the change in value of related contracts entered into with unaffiliated third parties.

Services Provided Between HSBC Affiliates:

Under multiple service level agreements, we provide services to and receive services from various HSBC affiliates. The following summarizes these activities:

- HSBC North America's technology and support services, including risk management, compliance, operations, finance, tax, legal, human resources, corporate affairs and other shared services, are centralized within HTSU. HTSU also provides certain item processing and statement processing activities to us. The fees we pay HTSU for the centralized support services and processing activities are included in support services from HSBC affiliates. We also receive fees from HTSU for providing certain administrative services to them. The fees we receive from HTSU are included in servicing and other fees from HSBC affiliates. In certain cases, for facilities used by HTSU, we may guarantee their performance under the lease agreements.
- We use HSBC Global Services Limited, an HSBC affiliate located outside of the United States, to provide various support services to our operations including among other areas, customer service, systems, collection and accounting functions. The expenses related to these services are included in support services from HSBC affiliates.
- We utilize HSI, a subsidiary of HMUS, for broker dealer, debt underwriting, customer referrals, loan syndication and other treasury and traded markets related services, pursuant to service level agreements. Debt underwriting fees charged by HSI are deferred as a reduction of long-term debt and amortized to interest expense over the life of the related debt. Fees charged by HSI for the other services are included in support services from HSBC affiliates. We also receive fees from HSI for providing certain wealth management services to them. The fees we receive from HSI are included in servicing and other fees from HSBC affiliates.
- We receive fees from other subsidiaries of HSBC, including HSBC Bank plc, for providing them with banking and other miscellaneous services as well as support for certain administrative and global business activities. These fees are reported in servicing and other fees from HSBC affiliates.
- Prior to 2018, we received residential mortgage loan servicing fees from HSBC Finance for services performed on their behalf and paid residential mortgage loan servicing fees to HSBC Finance for services performed on our behalf. The fees

we received from HSBC Finance were reported in servicing and other fees from HSBC affiliates. During 2017, HSBC Finance completed the execution of their receivable sales program and, as a result, we are no longer servicing residential mortgage loans for HSBC Finance. Fees we paid to HSBC Finance were reported in support services from HSBC affiliates. This included fees paid for the servicing of residential mortgage loans that we previously purchased from HSBC Finance. During 2017, we sold these residential mortgage loans to third parties.

Other Transactions with HSBC Affiliates

At both June 30, 2018 and December 31, 2017, we had $1,265 million of non-cumulative preferred stock issued and outstanding to HSBC North America. See Note 17, "Preferred Stock," in our 2017 Form 10-K for additional details.

15. Business Segments

We have five distinct business segments that we utilize for management reporting and analysis purposes, which are aligned with HSBC's global business strategy: Retail Banking and Wealth Management ("RBWM"), Commercial Banking ("CMB"), Global Banking and Markets ("GB&M"), Private Banking ("PB") and a Corporate Center ("CC"). There have been no changes in the basis of our segmentation as compared with the presentation in our 2017 Form 10-K.

Our segment results are presented in accordance with HSBC Group accounting and reporting policies, which apply IFRSs as issued by the IASB and endorsed by the EU, and, 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.

As discussed more fully below, during the first quarter of 2018, we adopted new accounting guidance under the Group Reporting Basis for the requirements of IFRS 9, "Financial Instruments" ("IFRS 9"), and we also implemented a change in accounting policy under the Group Reporting Basis to classify structured notes and deposits as liabilities designated under the fair value option. There have been no additional changes in the measurement of segment profit as compared with the presentation in our 2017 Form 10-K.

A summary of differences between U.S. GAAP and the Group Reporting Basis as they impact our results are presented in Note 22, "Business Segments," in our 2017 Form 10-K. Other than the changes discussed below, there have been no other significant changes since December 31, 2017 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

Expected credit losses / loan impairment - In January 2018, we adopted new accounting guidance under the Group Reporting Basis in conjunction with HSBC's adoption of the requirements of IFRS 9 on January 1, 2018 with the exception of the provisions relating to the presentation of gains and losses on financial instruments designated at fair value which were previously adopted in 2017.

Under IFRS 9, expected credit losses ("ECL") are recognized for a) financial assets measured at amortized cost, including loans, securities purchased under agreements to resell and certain debt securities; b) financial assets measured at fair value with changes in fair value recorded through other comprehensive income (loss), primarily debt securities; and c) certain loan commitments and financial guarantee contracts. Financial assets which have not experienced a significant increase in credit risk since initial recognition are considered to be in 'stage 1'; financial assets which are considered to have experienced a significant increase in credit risk are in 'stage 2'; and financial assets for which there is objective evidence of impairment so are considered to be in default or otherwise credit-impaired are in 'stage 3'. At initial recognition and for financial assets that remain in stage 1, an allowance (or provision in the case of some loan commitments and financial guarantees) is required for ECL resulting from default events that are possible within the next 12 months ('12-month ECL'). In the event of a significant increase in credit risk, an allowance (or provision) is required for ECL resulting from all possible default events over the expected life of the financial instrument ('lifetime ECL') and financial assets are moved to stage 2 or stage 3.

The adoption of the new accounting guidance on January 1, 2018 on our customer loan portfolio resulted in an increase to our customer loan allowance for ECL of approximately $60 million with a corresponding charge to equity under the Group Reporting Basis. The impact of adoption on the allowance for other financial assets was not significant.

Structured notes and deposits - Structured notes and deposits have historically been classified as trading liabilities under the Group Reporting Basis and carried at fair value with changes in fair value recorded in earnings. Beginning January 1, 2018, HSBC concluded that a change in accounting policy and presentation from trading liabilities to liabilities designated under the fair value option for structured notes and deposits under the Group Reporting Basis would be appropriate since it would better align with the presentation of similar financial instruments by peers under IFRSs and therefore provide more relevant information about the effect of these financial liabilities on reported financial position and performance. As a result, the fair value movement on structured notes and deposits attributable to our own credit spread is now being recorded in other comprehensive income (loss) under the Group Reporting Basis, consistent with U.S. GAAP. During the three and six months ended June 30, 2017, total other revenues under the Group Reporting Basis in GB&M included a gain of $26 million and a loss of $23 million, respectively, from the fair value movement on structured notes and deposits attributable to our own credit spread.

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									
	RBWM	CMB	GB&M	PB	CC	Adjustments/ Reconciling Items	Total	Group Reporting Basis Adjustments[5]	Group Reporting Basis Reclassi- fications[6]	U.S. GAAP Consolidated Totals
						(in millions)				
Three Months Ended June 30, 2018										
Net interest income[1]	$ 225	$ 195	$ 151	$ 43	$ 18	$ —	$ 632	$ 6	$ (83)	$ 555
Other operating income	71	58	252	16	72	—	469	(9)	77	537
Total operating income	296	253	403	59	90	—	1,101	(3)	(6)	1,092
Expected credit losses / provision for credit losses	3	(36)	(143)	—	1	—	(175)	118	12	(45)
	293	289	546	59	89	—	1,276	(121)	(18)	1,137
Operating expenses[2]	341	139	209	61	54	—	804	—	(18)	786
Profit (loss) before income tax expense	$ (48)	$ 150	$ 337	$ (2)	$ 35	$ —	$ 472	$ (121)	$ —	$ 351
Three Months Ended June 30, 2017										
Net interest income[1]	$ 221	$ 181	$ 156	$ 56	$ (7)	$ —	$ 607	$ (16)	$ (9)	$ 582
Other operating income[3]	238	52	169	21	78	—	558	(11)	11	558
Total operating income	459	233	325	77	71	—	1,165	(27)	2	1,140
Loan impairment charges / provision for credit losses	(3)	(5)	(2)	1	—	—	(9)	(21)	9	(21)
	462	238	327	76	71	—	1,174	(6)	(7)	1,161
Operating expenses[2][3]	287	141	248	63	125	—	864	(8)	(7)	849
Profit (loss) before income tax expense	$ 175	$ 97	$ 79	$ 13	$ (54)	$ —	$ 310	$ 2	$ —	$ 312
Six Months Ended June 30, 2018										
Net interest income[1]	$ 441	$ 381	$ 300	$ 90	$ 33	$ —	$ 1,245	$ 14	$ (152)	$ 1,107
Other operating income	164	113	449	36	155	—	917	(20)	153	1,050
Total operating income	605	494	749	126	188	—	2,162	(6)	1	2,157
Expected credit losses / provision for credit losses	6	(46)	(157)	(3)	4	—	(196)	67	13	(116)
	599	540	906	129	184	—	2,358	(73)	(12)	2,273
Operating expenses[2]	666	290	425	122	586	—	2,089	(9)	(12)	2,068
Profit (loss) before income tax expense	$ (67)	$ 250	$ 481	$ 7	$ (402)	$ —	$ 269	$ (64)	$ —	$ 205
Balances at end of period:										
Total assets	$ 18,691	$ 23,851	$ 79,535	$ 7,075	$ 85,703	$ —	$ 214,855	$ (34,168)	$ —	$ 180,687
Total loans, net[4]	16,695	22,879	17,786	6,036	1,865	—	65,261	(1,341)	1,948	65,868
Goodwill	581	358	—	321	—	—	1,260	347	—	1,607
Total deposits[4]	32,672	23,643	32,749	8,112	4,553	—	101,729	(3,168)	15,794	114,355

	Group Reporting Basis Consolidated Amounts									
	RBWM	CMB	GB&M	PB	CC	Adjustments/ Reconciling Items	Total	Group Reporting Basis Adjustments(5)	Group Reporting Basis Reclassi-fications(6)	U.S. GAAP Consolidated Totals
						(in millions)				
Six Months Ended June 30, 2017										
Net interest income(1)	$ 434	$ 361	$ 308	$ 109	$ 1	$ —	$ 1,213	$ (29)	$ (5)	$ 1,179
Other operating income(3)	386	104	311	42	172	—	1,015	129	7	1,151
Total operating income	820	465	619	151	173	—	2,228	100	2	2,330
Loan impairment charges / provision for credit losses	6	(41)	(37)	3	(1)	—	(70)	(48)	20	(98)
	814	506	656	148	174	—	2,298	148	(18)	2,428
Operating expenses(2)(3)	573	280	472	124	235	—	1,684	2	(18)	1,668
Profit (loss) before income tax expense	$ 241	$ 226	$ 184	$ 24	$ (61)	$ —	$ 614	$ 146	$ —	$ 760
Balances at end of period:										
Total assets	$ 18,960	$ 23,515	$ 80,426	$ 8,131	$ 97,950	$ —	$ 228,982	$ (35,632)	$ —	$ 193,350
Total loans, net	16,709	22,335	19,805	6,354	3,292	—	68,495	(1,035)	(245)	67,215
Goodwill	581	358	—	325	—	—	1,264	348	—	1,612
Total deposits	34,868	20,799	20,920	10,262	7,572	—	94,421	(3,849)	26,571	117,143

(1) 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. 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. The objective of these charges/credits is to transfer interest rate risk from the segments to one centralized unit in Balance Sheet Management and more appropriately reflect the profitability of the segments.

(2) Expenses for the segments include fully apportioned corporate overhead expenses.

(3) During the fourth quarter of 2017, we changed our presentation for certain cost reimbursements that were previously netted as an offset to affiliate expense and began presenting these reimbursements gross in affiliate income. As a result, we have reclassified prior period amounts in order to conform to the current year presentation, which increased both RBWM other operating income and RBWM operating expenses $13 million and $24 million and also increased both GB&M other operating income and GB&M operating expenses $16 million and $37 million during the three and six months ended June 30, 2017, respectively. See Note 14, "Related Party Transactions," for additional information.

(4) In addition to the changes discussed above, in conjunction with HSBC's adoption of the requirements of IFRS 9 we also adopted changes in presentation under the Group Reporting Basis related to affiliate loans and deposits as well as cash collateral posted and received. Beginning January 1, 2018, affiliate loans have been reclassified from other assets to loans, affiliate deposits have been reclassified from other liabilities to deposits, cash collateral posted has been reclassified from loans to other assets and cash collateral received has been reclassified from deposits to other liabilities. As a result of these changes, total loans, net and total deposits in the GB&M segment increased $0.1 billion and $8.4 billion, respectively, and total loans, net and total deposits in the CC segment decreased $2.3 billion and $1.1 billion, respectively, at June 30, 2018.

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

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

16. Retained Earnings and Regulatory Capital Requirements

Bank dividends are one of the sources of funds used for payment of shareholder dividends and other HSBC USA cash needs. Approval from the Office of the Comptroller of the Currency ("the 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, or if the dividend resulted in a reduction of permanent capital. 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.

HSBC Bank USA is also required to maintain reserve balances either in the form of vault cash or on deposit with the Federal Reserve Bank, based on a percentage of deposits. At June 30, 2018 and December 31, 2017, HSBC Bank USA was required to maintain $2,519 million and $2,929 million, respectively, of reserve balances with the Federal Reserve Bank which are reported within interest bearing deposits with banks on the consolidated balance sheet.

The following table summarizes the capital amounts and ratios of HSBC USA and HSBC Bank USA, calculated in accordance with banking regulations in effect at June 30, 2018 and December 31, 2017:

	June 30, 2018			December 31, 2017		
	Capital Amount	Well-Capitalized Ratio[1]	Actual Ratio	Capital Amount	Well-Capitalized Ratio[1]	Actual Ratio
	(dollars are in millions)					
Common equity Tier 1 ratio:						
HSBC USA	**$ 17,142**	**4.5%** [2]	**13.8%**	$ 17,428	4.5% [2]	14.2%
HSBC Bank USA	**19,061**	**6.5**	**15.7**	19,294	6.5	16.7
Tier 1 capital ratio:						
HSBC USA	**18,407**	**6.0**	**14.8**	18,696	6.0	15.3
HSBC Bank USA	**21,561**	**8.0**	**17.7**	21,786	8.0	18.8
Total capital ratio:						
HSBC USA	**21,900**	**10.0**	**17.6**	22,565	10.0	18.4
HSBC Bank USA	**25,135**	**10.0**	**20.7**	25,522	10.0	22.1
Tier 1 leverage ratio:						
HSBC USA	**18,407**	**4.0** [2]	**10.2**	18,696	4.0 [2]	9.9
HSBC Bank USA	**21,561**	**5.0**	**12.1**	21,786	5.0	11.7
Supplementary leverage ratio ("SLR"):						
HSBC USA	**18,407**	**3.0** [3]	**7.4**			N/A
HSBC Bank USA	**21,561**	**3.0** [3]	**8.7**			N/A
Risk-weighted assets:						
HSBC USA	**124,276**			122,584		
HSBC Bank USA	**121,652**			115,667		
Adjusted quarterly average assets:[4]						
HSBC USA	**179,850**			188,774		
HSBC Bank USA	**177,685**			186,551		
Total leverage exposure:[5]						
HSBC USA	**250,273**			N/A		
HSBC Bank USA	**247,296**			N/A		

(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 have 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 minimum ratios.

(3) Beginning January 1, 2018, HSBC USA and HSBC Bank USA are required to maintain the regulatory minimum SLR of 3 percent. There is no SLR component in the definition of a well-capitalized banking institution.

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

(5) Represents the SLR denominator which includes adjusted quarterly average assets plus certain off-balance sheet exposures.

N/A Not Applicable

In 2013, U.S. banking regulators issued a final rule implementing the Basel III capital framework in the United States ("the Basel III rule") which, for banking organizations such as HSBC North America and HSBC Bank USA, became effective in 2014 with certain provisions being phased in over time through the beginning of 2019. As a result, the capital ratios in the table above are reported in accordance with the fully phased-in Basel III rule for June 30, 2018 and in accordance with the transition rules within the Basel III rule for December 31, 2017. In addition, risk-weighted assets in the table above are calculated using the general risk-based capital rules of the Basel III Standardized Approach.

17. Variable Interest Entities

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

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

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

Consolidated VIEs The following table summarizes assets and liabilities related to our consolidated VIEs at June 30, 2018 and December 31, 2017 which are consolidated on our balance sheet. Assets and liabilities exclude intercompany balances that eliminate in consolidation.

	June 30, 2018		December 31, 2017	
	Consolidated Assets	Consolidated Liabilities	Consolidated Assets	Consolidated Liabilities
	(in millions)			
Low income housing limited liability partnership:				
Other assets	**$ 136**	**$ —**	$ 154	$ —
Long-term debt	**—**	**73**	—	73
Interest, taxes and other liabilities	**—**	**57**	—	59
Total	**$ 136**	**$ 130**	$ 154	$ 132

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 is mandatorily redeemable at a future date. 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 are the primary beneficiary of the LLP due to the nature of our continuing involvement and, as a result, consolidate the LLP and report the equity interest issued to the third party investor in other liabilities 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.

As a practical expedient, 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.

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 involvements in these VIEs, at June 30, 2018 and December 31, 2017:

	Total Assets Held by Unconsolidated VIEs	Carrying Value of Variable Interests Held Reported as		Maximum Exposure to Loss
		Assets	Liabilities	
		(in millions)		
At June 30, 2018				
Structured note vehicles	**$ 3,023**	**$ 1,803**	**$ 7**	**$ 3,013**
Limited partnership investments	**1,576**	**453**	**283**	**453**
Total	**$ 4,599**	**$ 2,256**	**$ 290**	**$ 3,466**
At December 31, 2017				
Structured note vehicles	$ 3,019	$ 1,803	$ 6	$ 3,013
Limited partnership investments	1,566	412	262	412
Refinancing SPE	412	116	—	116
Total	$ 4,997	$ 2,331	$ 268	$ 3,541

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

Structured note vehicles We provide derivatives, such as interest rate and currency swaps, to structured note vehicles and, in certain instances, invest in the vehicles' debt instruments. We hold variable interests in these structured note vehicles in the form of total return swaps under which we take on the risks and benefits of the structured notes they issue. The same risks and benefits are passed on to third party entities through back-end total return swaps. We earn a spread for facilitating the transaction. Since we do not have the power to direct the activities of the VIE and are not the primary beneficiary, we do not consolidate them. Our maximum exposure to loss is the notional amount of the derivatives wrapping the structured notes. The maximum exposure to loss of $3,013 million at June 30, 2018 will occur in the unlikely scenario where the value of the structured notes is reduced to zero and, at the same time, the counterparty of the back-end swap defaults with zero recovery. In certain instances, we hold credit default swaps with the structured note vehicles under which we receive credit protection on specified reference assets in exchange for the payment of a premium. Through these derivatives, the vehicles assume the credit risk associated with the reference assets which are then passed on to the holders of the debt instruments they issue. Because they create rather than absorb variability, the credit default swaps we hold are not considered variable interests. We record all investments in, and derivative contracts with, unconsolidated structured note vehicles at fair value on our consolidated balance sheet.

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.

Refinancing SPE Prior to the second quarter of 2018, we organized and provided loans to a SPE to purchase a senior secured financing facility from the originator designed to finance a third party borrower's acquisition of a portfolio of commercial real estate loans in Mexico. During the second quarter of 2018, the loans we provided to the SPE were repaid in full and the SPE was terminated.

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 2, "Trading Assets and Liabilities," Note 3, "Securities," and Note 19, "Fair Value Measurements," and, therefore, are not disclosed in this note to avoid redundancy.

18. Guarantee Arrangements, Pledged Assets and Repurchase Agreements

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

The following table presents total carrying value and contractual amounts of our sell protection credit derivatives and major off-balance sheet guarantee arrangements at June 30, 2018 and December 31, 2017. Following the table is a description of the various arrangements.

	June 30, 2018		December 31, 2017	
	Carrying Value	Notional / Maximum Exposure to Loss	Carrying Value	Notional / Maximum Exposure to Loss
	(in millions)			
Credit derivatives[1][2]	**$ (158)**	**$ 42,543**	$ 303	$ 42,328
Financial standby letters of credit, net of participations[3][4]	**—**	**5,456**	—	5,128
Performance standby letters of credit, net of participations[3][4]	**—**	**3,629**	—	3,580
Total	**$ (158)**	**$ 51,628**	$ 303	$ 51,036

(1) Includes $23,033 million and $25,639 million of notional issued for the benefit of HSBC affiliates at June 30, 2018 and December 31, 2017, 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 $1,194 million and $1,264 million of both financial and performance standby letters of credit issued for the benefit of HSBC affiliates at June 30, 2018 and December 31, 2017, respectively.

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

Credit-Risk Related Guarantees

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

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

We manage our exposure to credit derivatives using a variety of risk mitigation strategies where we enter into offsetting hedge positions or transfer the economic risks, in part or in entirety, to investors through the issuance of structured credit products. We actively manage the credit and market risk exposure in the credit derivative portfolios on a net basis and, as such, retain no or a limited net position at any time. The following table summarizes our net credit derivative positions at June 30, 2018 and December 31, 2017:

	June 30, 2018		December 31, 2017	
	Carrying / Fair Value	Notional	Carrying / Fair Value	Notional
	(in millions)			
Sell-protection credit derivative positions	**$ (158)**	**$ 42,543**	$ 303	$ 42,328
Buy-protection credit derivative positions	**335**	**48,538**	(188)	47,962
Net position[1]	**$ 177**	**$ 5,995**	$ 115	$ 5,634

(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. At June 30, 2018, the total amount of outstanding financial standby letters of credit (net of participations) and performance guarantees (net of participations) were $5,456 million and $3,629 million, respectively. At December 31, 2017, the total amount of outstanding financial standby letters of credit (net of participations) and performance guarantees (net of participations) were $5,128 million and $3,580 million, respectively.

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 $46 million and $48 million at June 30, 2018 and December 31, 2017, respectively. Also included in other liabilities is an allowance for credit losses on unfunded standby letters of credit of $18 million and $26 million at June 30, 2018 and December 31, 2017, respectively.

The following table summarizes the credit ratings related to guarantees including the ratings of counterparties against which we sold credit protection and financial standby letters of credit at June 30, 2018 as an indicative proxy of payment risk:

Notional/Contractual Amounts	Average Life (in years)	Credit Ratings of the Obligors or the Transactions		
		Investment Grade	Non-Investment Grade	Total
		(dollars are in millions)		
Sell-protection Credit Derivatives[1]				
Single name credit default swaps ("CDS")	3.1	$ 24,417	$ 7,342	$ 31,759
Index credit derivatives	4.5	5,293	3,910	9,203
Total return swaps	2.1	1,297	284	1,581
Subtotal		31,007	11,536	42,543
Standby Letters of Credit[2]	1.0	7,563	1,522	9,085
Total		$ 38,570	$ 13,058	$ 51,628

(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 27, "Litigation and Regulatory Matters," in our 2017 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in this Form 10-Q. Accordingly, the Class B Shares are considered restricted and are only transferable under limited circumstances, which include transfers to other Class B shareholders.

Beginning in late 2016 and into 2017, we sold substantially all of our remaining Visa Class B Shares to a third party. The net pre-tax gains associated with these sales (which included net pre-tax gains of approximately $166 million and $312 million during the three and six months ended June 30, 2017, respectively) were recorded as a component of other income in the consolidated statement of income. 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 $59 million and $52 million at June 30, 2018 and December 31, 2017, 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. In the third quarter of 2017, we 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. During the second quarter of 2018, we recorded a loss of $7 million related to a change in the Visa Class B Share conversion rate announced by Visa as a result of the outstanding litigation. 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. See Note 9, "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.

Mortgage Loan Repurchase Obligations We have provided various representations and warranties related to the origination and sale of mortgage loans including, 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. From 2013 to 2017, agency-eligible mortgage loan originations were sold directly to PHH Mortgage and PHH Mortgage is responsible for origination representations and warranties for all loans purchased. With the insourcing of our mortgage fulfillment operations, effective with applications starting January 2, 2018, we are now responsible for origination representations and warranties for all new agency-eligible mortgage loan originations sold to third parties.

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 totaled $2 million and $3 million at June 30, 2018 and December 31, 2017, respectively.

The following table summarizes the change in our estimated repurchase liability during the three and six months ended June 30, 2018 and 2017 for obligations arising from the breach of representations and warranties associated with mortgage loans sold:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Balance at beginning of period	**$ 10**	$ 11	**$ 10**	$ 12
Decrease in liability recorded through earnings	**(1)**	(1)	**(1)**	(1)
Realized losses	**—**	1	**—**	—
Balance at end of period	**$ 9**	$ 11	**$ 9**	$ 11

Our repurchase liability of $9 million at June 30, 2018 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 June 30, 2018. 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 27, "Litigation and Regulatory Matters," in our 2017 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in this Form 10-Q for additional discussion of related exposure. The outstanding principal balance on these loans was approximately $3.9 billion and $4.1 billion at June 30, 2018 and December 31, 2017, respectively.

Pledged Assets

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

	June 30, 2018	December 31, 2017
	(in millions)	
Interest bearing deposits with banks	**$ 3,040**	$ 2,952
Trading assets[(1)]	**2,986**	3,185
Securities available-for-sale[(2)]	**7,043**	7,210
Securities held-to-maturity[(2)]	**1,894**	2,131
Loans[(3)]	**16,489**	17,404
Other assets[(4)]	**2,566**	2,253
Total	**$ 34,018**	$ 35,135

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

(2) 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 Federal Home Loan Bank of New York ("FHLB") and the Federal Reserve Bank of New York.

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

(4) Other assets represent cash on deposit with non-banks related to derivative collateral support agreements.

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 $1,335 million and $524 million at June 30, 2018 and December 31, 2017, respectively. The fair value of trading assets that could be sold or repledged was $2,982 million and $3,185 million at June 30, 2018 and December 31, 2017, respectively.

The fair value of collateral we accepted under security resale agreements but was not reported on the consolidated balance sheet was $13,919 million and $34,759 million at June 30, 2018 and December 31, 2017, respectively, discussed further below. Of this collateral, $12,419 million and $32,459 million could be sold or repledged at June 30, 2018 and December 31, 2017, respectively, of which $1,333 million and $1,231 million, respectively, had been sold or repledged as collateral under repurchase agreements or to cover short sales.

The above discussion does not include a security-for-security lending transaction of $500 million at June 30, 2018 under which we acted as lender and received securities that can be sold or repledged as collateral. We recognized the securities received as a component of other assets and the obligation to return those securities as a component of interest, taxes and other liabilities. In July 2018, the security-for-security lending transaction matured and the securities we had received as collateral were returned to the borrower.

Repurchase Agreements

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

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

The following table provides information about resale and repurchase agreements that are subject to offset at June 30, 2018 and December 31, 2017:

				Gross Amounts Not Offset in the Balance Sheet		
	Gross Amounts Recognized	Gross Amounts Offset in the Balance Sheet(1)	Net Amounts Presented in the Balance Sheet	Financial Instruments(2)	Cash Collateral Received / Pledged	Net Amount(3)
			(in millions)			
At June 30, 2018						
Assets:						
Securities purchased under resale agreements	**$ 12,919**	**$ 2,743**	**$ 10,176**	**$ 10,171**	**$ —**	**$ 5**
Liabilities:						
Securities sold under repurchase agreements	**$ 5,486**	**$ 2,743**	**$ 2,743**	**$ 2,737**	**$ —**	**$ 6**
At December 31, 2017						
Assets:						
Securities purchased under resale agreements	$ 33,974	$ 1,356	$ 32,618	$ 32,616	$ —	$ 2
Liabilities:						
Securities sold under repurchase agreements	$ 4,721	$ 1,356	$ 3,365	$ 3,364	$ —	$ 1

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

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

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

The following table provides the class of collateral pledged and remaining contractual maturity of repurchase agreements accounted for as secured borrowings at June 30, 2018 and December 31, 2017:

	Overnight and Continuous	Up to 30 Days	31 to 90 Days	91 Days to One Year	Greater Than One Year	Total
			(in millions)			
At June 30, 2018						
U.S. Treasury, U.S. Government sponsored and U.S. Government agency securities	**$ 2,702**	**$ 780**	**$ 298**	**$ 591**	**$ 1,000**	**$ 5,371**
Foreign debt securities	**—**	**115**	**—**	**—**	**—**	**115**
Total repurchase agreements accounted for as secured borrowings	**$ 2,702**	**$ 895**	**$ 298**	**$ 591**	**$ 1,000**	**$ 5,486**
At December 31, 2017						
U.S. Treasury, U.S. Government sponsored and U.S. Government agency securities	$ 1,166	$ 838	$ 888	$ 284	$ 1,464	$ 4,640
Foreign debt securities	—	81	—	—	—	81
Total repurchase agreements accounted for as secured borrowings	$ 1,166	$ 919	$ 888	$ 284	$ 1,464	$ 4,721

19. Fair Value Measurements

Accounting principles related to fair value measurements provide a framework for measuring fair value that focuses on the exit price that would be received to sell an asset or paid to transfer a liability in the principal market (or in the absence of the principal market, the most advantageous market) accessible in an orderly transaction between willing market participants (the "Fair Value Framework"). Where required by the applicable accounting standards, assets and liabilities are measured at fair value using the "highest and best use" valuation premise. Fair value measurement guidance clarifies that financial instruments do not have alternative use and, as such, the fair value of financial instruments should be determined using an "in-exchange" valuation premise. However, the fair value measurement literature 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 risk adjustment - The credit risk 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. Transfers between leveling categories are assessed, determined and recognized at the end of each reporting period.

Valuation Control Framework We have established a control framework which is designed to ensure that fair values are either determined or validated by a function independent of the risk-taker. To that end, the ultimate responsibility for the determination of fair values rests with Finance. Finance has established an independent price validation process to ensure that the assets and liabilities measured at fair value are properly stated.

A valuation committee, chaired by the Head of Product Control, meets monthly to review, monitor and discuss significant valuation matters arising from credit and market risks. The committee is responsible for reviewing and approving valuation policies and procedures including any valuation adjustments pertaining to, among other things, independent price verification, market liquidity, unobservable inputs, model uncertainty and counterparty credit risk. All valuation models are reviewed by the valuation committee in terms of model development, enhancements and performance. All models are independently reviewed by the Markets Independent Model Review function and applicable valuation model recommendations are reported to and discussed with the valuation committee. Significant valuation risks identified in business activities are corroborated and addressed by the committee members and, where applicable, are escalated to the Chief Financial Officer of HUSI and the Audit Committee of the Board of Directors.

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. Any significant valuation adjustments are reported to and discussed with the valuation committee.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis The following table presents information about our assets and liabilities measured at fair value on a recurring basis at June 30, 2018 and December 31, 2017, and indicates the fair value hierarchy of the valuation techniques utilized to determine such fair value. Unless otherwise noted below, assets and liabilities in the following table are recorded at fair value through net income.

	Fair Value Measurements on a Recurring Basis					
June 30, 2018	**Level 1**	**Level 2**	**Level 3**	**Gross Balance**	**Netting**[8]	**Net Balance**
			(in millions)			
Assets:						
Securities purchased under agreements to resell[1]	$ —	$ 395	$ —	$ 395	$ —	$ 395
Trading assets, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	4,732	142	—	4,874	—	4,874
Collateralized debt obligations	—	—	131	131	—	131
Asset-backed securities:						
Residential mortgages	—	17	—	17	—	17
Student loans	—	92	—	92	—	92
Corporate and other domestic debt securities	—	—	1,803	1,803	—	1,803
Debt securities issued by foreign entities	5,674	210	—	5,884	—	5,884
Precious metals trading	—	9,212	—	9,212	—	9,212
Derivatives:[2]						
Interest rate contracts	7	10,051	—	10,058	—	10,058
Foreign exchange contracts	1	18,274	1	18,276	—	18,276
Equity contracts	—	3,675	124	3,799	—	3,799
Precious metals contracts	104	732	—	836	—	836
Credit contracts	—	839	120	959	—	959
Other contracts[3]	—	—	8	8	—	8
Derivatives netting	—	—	—	—	(30,241)	(30,241)
Total derivatives	112	33,571	253	33,936	(30,241)	3,695
Securities available-for-sale:[4]						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	17,154	11,331	—	28,485	—	28,485
Asset-backed securities:						
Home equity	—	47	—	47	—	47
Other	—	—	107	107	—	107
Debt securities issued by foreign entities	2,132	257	—	2,389	—	2,389
Loans[1]	—	90	—	90	—	90
Other assets:						
Equity securities[5]	—	190	—	190	—	190
Equity Securities measured at net asset value[5][6]	—	—	—	93	—	93
Other[7]	—	—	12	12	—	12
Total assets	$ 29,804	$ 55,554	$ 2,306	$ 87,757	$ (30,241)	$ 57,516
Liabilities:						
Domestic deposits[1]	$ —	$ 6,825	$ 876	$ 7,701	$ —	$ 7,701
Trading liabilities, excluding derivatives	975	7	—	982	—	982
Derivatives:[2]						
Interest rate contracts	132	11,170	—	11,302	—	11,302
Foreign exchange contracts	—	17,566	2	17,568	—	17,568
Equity contracts	—	2,988	122	3,110	—	3,110
Precious metals contracts	28	674	—	702	—	702
Credit contracts	—	800	10	810	—	810
Other contracts[3]	—	—	59	59	—	59
Derivatives netting	—	—	—	—	(31,253)	(31,253)
Total derivatives	160	33,198	193	33,551	(31,253)	2,298
Short-term borrowings[1]	—	1,315	—	1,315	—	1,315
Long-term debt[1]	—	11,825	557	12,382	—	12,382
Total liabilities	$ 1,135	$ 53,170	$ 1,626	$ 55,931	$ (31,253)	$ 24,678

December 31, 2017	Level 1	Level 2	Level 3	Gross Balance	Netting[8]	Net Balance
	Fair Value Measurements on a Recurring Basis					
	(in millions)					
Assets:						
Securities purchased under agreements to resell[1]	$ —	$ 80	$ —	$ 80	$ —	$ 80
Trading assets, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	3,391	332	—	3,723	—	3,723
Collateralized debt obligations	—	—	129	129	—	129
Asset-backed securities:						
Residential mortgages	—	16	—	16	—	16
Student loans	—	91	—	91	—	91
Corporate and other domestic debt securities	—	—	1,803	1,803	—	1,803
Debt securities issued by foreign entities	4,167	210	—	4,377	—	4,377
Equity securities[5]	—	12	—	12	—	12
Precious metals trading	—	2,274	—	2,274	—	2,274
Derivatives:[2]						
Interest rate contracts	6	24,231	—	24,237	—	24,237
Foreign exchange contracts	4	15,754	2	15,760	—	15,760
Equity contracts	—	3,911	173	4,084	—	4,084
Precious metals contracts	52	502	—	554	—	554
Credit contracts	—	536	120	656	—	656
Other contracts[3]	—	—	6	6	—	6
Derivatives netting	—	—	—	—	(40,874)	(40,874)
Total derivatives	62	44,934	301	45,297	(40,874)	4,423
Securities available-for-sale:[4]						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	19,056	10,004	—	29,060	—	29,060
Asset-backed securities:						
Home equity	—	51	—	51	—	51
Other	—	399	111	510	—	510
Debt securities issued by foreign entities	850	52	—	902	—	902
Equity securities[5]	—	177	—	177	—	177
Loans[1]	—	471	—	471	—	471
Other assets[7]	—	—	15	15	—	15
Total assets	$ 27,526	$ 59,103	$ 2,359	$ 88,988	$ (40,874)	$ 48,114
Liabilities:						
Domestic deposits[1]	$ —	$ 6,796	$ 897	$ 7,693	$ —	$ 7,693
Trading liabilities, excluding derivatives	1,722	524	—	2,246	—	2,246
Derivatives:[2]						
Interest rate contracts	59	24,379	—	24,438	—	24,438
Foreign exchange contracts	—	14,664	2	14,666	—	14,666
Equity contracts	—	2,859	92	2,951	—	2,951
Precious metals contracts	108	614	—	722	—	722
Credit contracts	—	578	6	584	—	584
Other contracts[3]	—	—	52	52	—	52
Derivatives netting	—	—	—	—	(40,217)	(40,217)
Total derivatives	167	43,094	152	43,413	(40,217)	3,196
Short-term borrowings[1]	—	2,032	—	2,032	—	2,032
Long-term debt[1]	—	12,245	641	12,886	—	12,886
Total liabilities	$ 1,889	$ 64,691	$ 1,690	$ 68,270	$ (40,217)	$ 28,053

(1) See Note 10, "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.

(2) Includes trading derivative assets of $3,546 million and $3,725 million and trading derivative liabilities of $2,295 million and $2,633 million at June 30, 2018 and December 31, 2017, respectively, as well as derivatives held for hedging and commitments accounted for as derivatives. See Note 9, "Derivatives," for additional information. Excluding changes in fair value of a derivative instrument associated with the effective portion of a qualifying cash flow hedge, which is recognized initially in other comprehensive income (loss), derivative assets and liabilities are recorded at fair value through net income.

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

(4) Securities available-for-sale are recorded at fair value through other comprehensive income (loss).

(5) See Note 3, "Securities," and Note 21, "New Accounting Pronouncements," for additional information. Beginning January 1, 2018, all equity investments are being recorded together as a component of other assets.

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

(7) Represents contingent consideration receivable associated with the sale of a portion of our Private Banking business.

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

Transfers between levels of the fair value hierarchy are recognized at the end of each reporting period.

Transfers between Level 1 and Level 2 measurements There were no transfers between Levels 1 and 2 during the three and six months ended June 30, 2018 and 2017.

Information on Level 3 assets and liabilities The following table summarizes additional information about changes in the fair value of Level 3 assets and liabilities during the three and six months ended June 30, 2018 and 2017. 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								
	Apr. 1, 2018	Earnings	Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2018	Current Period Unrealized Gains (Losses)
					(in millions)					
Assets:										
Trading assets, excluding derivatives:(1)										
Collateralized debt obligations	$ 131	$ 1	$ —	$ —	$ —	$ (1)	$ —	$ —	$ 131	$ 1
Corporate and other domestic debt securities	1,803	—	—	—	—	—	—	—	1,803	—
Derivatives, net:(2)										
Foreign exchange contracts	—	(1)	—	—	—	—	—	—	(1)	(1)
Equity contracts	27	(10)	—	—	—	(16)	(1)	2	2	(7)
Credit contracts	113	1	—	—	—	(4)	—	—	110	(3)
Other contracts(3)	(44)	(12)	—	—	—	5	—	—	(51)	—
Other asset-backed securities available-for-sale(4)	107	—	—	—	—	—	—	—	107	—
Other assets(5)	15	(3)	—	—	—	—	—	—	12	—
Total assets	$ 2,152	$ (24)	$ —	$ —	$ —	$ (16)	$ (1)	$ 2	$ 2,113	$ (10)
Liabilities:										
Domestic deposits(6)	$ (916)	$ 2	$ 5	$ —	$ (88)	$ 38	$ (10)	$ 93	$ (876)	$ 8
Long-term debt(6)	(630)	(5)	1	—	(28)	74	—	31	(557)	1
Total liabilities	$ (1,546)	$ (3)	$ 6	$ —	$ (116)	$ 112	$ (10)	$ 124	$ (1,433)	$ 9

	Jan. 1, 2018	Total Realized / Unrealized Gains (Losses) Included in Earnings	Total Realized / Unrealized Gains (Losses) Included in Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2018	Current Period Unrealized Gains (Losses)
					(in millions)					
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 129	$ 8	$ —	$ —	$ —	$ (6)	$ —	$ —	$ 131	$ 8
Corporate and other domestic debt securities	1,803	—	—	—	—	—	—	—	1,803	—
Derivatives, net:[2]										
Foreign exchange contracts	—	(1)	—	—	—	—	—	—	(1)	(1)
Equity contracts	81	(50)	—	—	—	(30)	(1)	2	2	(45)
Credit contracts	114	2	—	—	—	(6)	—	—	110	(4)
Other contracts[3]	(46)	(14)	—	—	—	9	—	—	(51)	—
Other asset-backed securities available-for-sale[4]	111	—	(4)	—	—	—	—	—	107	(4)
Other assets[5]	15	(3)	—	—	—	—	—	—	12	—
Total assets	$ 2,207	$ (58)	$ (4)	$ —	$ —	$ (33)	$ (1)	$ 2	$ 2,113	$ (46)
Liabilities:										
Domestic deposits[6]	$ (897)	$ 23	$ 3	$ —	$ (179)	$ 60	$ (13)	$ 127	$ (876)	$ 25
Long-term debt[6]	(641)	6	5	—	(143)	141	—	75	(557)	18
Total liabilities	$ (1,538)	$ 29	$ 8	$ —	$ (322)	$ 201	$ (13)	$ 202	$ (1,433)	$ 43

	Apr. 1, 2017	Total Realized / Unrealized Gains (Losses) Included in: Earnings	Total Realized / Unrealized Gains (Losses) Included in: Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2017	Current Period Unrealized Gains (Losses)
					(in millions)					
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 184	$ 15	$ —	$ —	$ —	$ (68)	$ —	$ —	$ 131	$ 4
Corporate and other domestic debt securities	2,884	—	—	—	—	(1,081)	—	—	1,803	—
Derivatives, net:[2]										
Interest rate contracts	—	—	—	—	—	—	—	—	—	—
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—
Equity contracts	21	12	—	—	—	(4)	—	3	32	11
Credit contracts	181	1	—	—	—	(39)	—	—	143	(4)
Other contracts[3]	(26)	—	—	—	(18)	—	—	—	(44)	—
Other asset-backed securities available-for-sale[4]	107	—	—	—	—	—	—	—	107	1
Total assets	$ 3,351	$ 28	$ —	$ —	$ (18)	$ (1,192)	$ —	$ 3	$ 2,172	$ 12
Liabilities:										
Domestic deposits[6]	$ (1,216)	$ (9)	$ 7	$ —	$ (48)	$ 86	$ (18)	$ 56	$ (1,142)	$ —
Long-term debt[6]	(558)	(14)	(1)	—	(37)	62	—	7	(541)	(12)
Total liabilities	$ (1,774)	$ (23)	$ 6	$ —	$ (85)	$ 148	$ (18)	$ 63	$ (1,683)	$ (12)

	Jan. 1, 2017	Total Realized / Unrealized Gains (Losses) Included in: Earnings	Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2017	Current Period Unrealized Gains (Losses)
	(in millions)									
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 184	$ 18	$ —	$ —	$ —	$ (71)	$ —	$ —	$ 131	$ 5
Corporate and other domestic debt securities	2,884	—	—	—	—	(1,081)	—	—	1,803	—
Derivatives, net:[2]										
Interest rate contracts	1	(1)	—	—	—	—	—	—	—	(1)
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—
Equity contracts	(2)	39	—	—	—	(8)	—	3	32	32
Credit contracts	193	(4)	—	—	—	(46)	—	—	143	(14)
Other contracts[3]	(9)	—	—	—	(35)	—	—	—	(44)	—
Other asset-backed securities available-for-sale[4]	105	2	—	—	—	—	—	—	107	2
Total assets	$ 3,356	$ 54	$ —	$ —	$ (35)	$ (1,206)	$ —	$ 3	$ 2,172	$ 24
Liabilities:										
Domestic deposits[6]	$ (1,407)	$ (14)	$ 12	$ —	$ (91)	$ 277	$ (21)	$ 102	$ (1,142)	$ (4)
Long-term debt[6]	(499)	(40)	(6)	—	(122)	78	(2)	50	(541)	(37)
Total liabilities	$ (1,906)	$ (54)	$ 6	$ —	$ (213)	$ 355	$ (23)	$ 152	$ (1,683)	$ (41)

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

(2) Level 3 net derivatives included derivative assets of $253 million and derivative liabilities of $193 million at June 30, 2018 and derivative assets of $301 million and derivative liabilities of $170 million at June 30, 2017. Gains (losses) on derivatives, net are predominantly included in trading revenue in the consolidated statement of income.

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

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

(5) Represents contingent consideration receivable associated with the sale of a portion of our Private Banking business. Gains (losses) associated with this transaction are included in other income in the consolidated statement of income.

(6) 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 (loss) on instruments designated at fair value and related derivatives in the consolidated statement of income.

The following table presents quantitative information about the unobservable inputs used to determine the recurring fair value measurement of assets and liabilities classified as Level 3 fair value measurements at June 30, 2018 and December 31, 2017:

June 30, 2018

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Collateralized debt obligations	$ 131	Broker quotes or consensus pricing and, where applicable, discounted cash flows	Prepayment rates	**0%**
			Conditional default rates	**0% - 1%**
			Loss severity rates	**90% - 95%**
Corporate and other domestic debt securities	$ 1,803	Discounted cash flows	Spread volatility on collateral assets	**2% - 4%**
			Correlation between insurance claim shortfall and collateral value	**80%**
Foreign exchange derivative contracts[1]	$ (1)	Option pricing model	Implied volatility of currency pairs	**9% - 11%**
Equity derivative contracts[1]	$ 2	Option pricing model	Equity / Equity Index volatility	**7% - 35%**
			Equity / Equity and Equity / Index correlation	**44% - 79%**
			Equity dividend yields	**0% - 14%**
Credit derivative contracts	110	Option pricing model and, where applicable, discounted cash flows	Credit default swap spreads	**95bps - 115bps**
Other derivative contracts	$ (51)	Discounted cash flows	Conversion rate	**1.6 times**
			Expected duration	**2 - 4 years**
Other asset-backed securities available-for-sale	$ 107	Discounted cash flows	Market assumptions related to yields for comparable instruments	**1% - 3%**
Other assets	$ 12	Discounted cash flows	Client transfer rates based on rating	**50% - 95%**
Domestic deposits (structured deposits)[1][2]	$ (876)	Option adjusted discounted cash flows	Implied volatility of currency pairs	**9% - 11%**
			Equity / Equity Index volatility	**7% - 30%**
			Equity / Equity and Equity / Index correlation	**44% - 51%**
Long-term debt (structured notes)[1][2]	$ (557)	Option adjusted discounted cash flows	Implied volatility of currency pairs	**9% - 11%**
			Equity / Equity Index volatility	**7% - 30%**
			Equity / Equity and Equity / Index correlation	**44% - 79%**

December 31, 2017

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Collateralized debt obligations	$ 129	Broker quotes or consensus pricing and, where applicable, discounted cash flows	Prepayment rates	0% - 6%
			Conditional default rates	4% - 6%
			Loss severity rates	55% - 60%
Corporate and other domestic debt securities	$ 1,803	Discounted cash flows	Spread volatility on collateral assets	2% - 4%
			Correlation between insurance claim shortfall and collateral value	80%
Interest rate derivative contracts	$ —	Market comparable adjusted for probability to fund	Probability to fund for rate lock commitments	41% - 100%
Foreign exchange derivative contracts(1)	$ —	Option pricing model	Implied volatility of currency pairs	6% - 9%
Equity derivative contracts(1)	$ 81	Option pricing model	Equity / Equity Index volatility	7% - 42%
			Equity / Equity and Equity / Index correlation	42% - 80%
			Equity dividend yields	0% - 8%
Credit derivative contracts	$ 114	Option pricing model and, where applicable, discounted cash flows	Issuer by issuer correlation of defaults	82% - 83%
			Credit default swap spreads	154bps - 174bps
Other derivative contracts	$ (46)	Discounted cash flows	Conversion rate	1.6 times
			Expected duration	2 - 4 years
Other asset-backed securities available-for-sale	$ 111	Discounted cash flows	Market assumptions related to yields for comparable instruments	1% - 3%
Other assets	$ 15	Discounted cash flows	Client transfer rates based on rating	50% - 95%
Domestic deposits (structured deposits)(1)(2)	$ (897)	Option adjusted discounted cash flows	Implied volatility of currency pairs	6% - 9%
			Equity / Equity Index volatility	7% - 42%
			Equity / Equity and Equity / Index correlation	42% - 80%
Long-term debt (structured notes)(1)(2)	$ (641)	Option adjusted discounted cash flows	Implied volatility of currency pairs	6% - 9%
			Equity / Equity Index volatility	7% - 42%
			Equity / Equity and Equity / Index correlation	42% - 80%

(1) 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.

(2) Structured deposits and structured notes contain embedded derivative features whose fair value measurements contain significant Level 3 inputs.

Significant Unobservable Inputs for Recurring Fair Value Measurements

Collateralized Debt Obligations ("CDOs")

- *Prepayment rate* - The rate at which borrowers pay off the mortgage loans early. The prepayment rate is affected by a number of factors including the location of the mortgage collateral, the interest rate type of the mortgage loans, borrowers' credit and sensitivity to interest rate movement.
- *Default rate* - Annualized percentage of default rate over a group of collateral such as residential or commercial mortgage loans. The default rate and loss severity rate are positively correlated. The default rate of our portfolio is tilted towards the high end of the range.
- *Loss severity rate* **-** Included in our Level 3 CDOs portfolio are trust preferred securities. The loss severity rate of the trust preferred securities is close to the mid-point of the range.

Derivatives

- *Implied volatility* - The implied volatility is a significant pricing input for freestanding or embedded options including equity, foreign currency and interest rate options. 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. The implied volatility for different foreign currency pairs is between 9 percent and 11 percent while the implied volatility for equity/equity or equity/equity index is between 7 percent and 35 percent, respectively, at June 30, 2018. Although implied foreign currency volatility and equity volatility appear to be widely distributed at the portfolio level, the deviation of implied volatility on a trade-by-trade basis is narrower. The average deviation of implied volatility for the foreign currency pair and at-the-money equity option are 4 percent and 7 percent, respectively, at June 30, 2018.

- *Correlations of a group of foreign currency or equity* - Correlation measures the relative change in values among two or more variables (i.e., equity or foreign currency pair). Variables can be positively or negatively correlated. Correlation is a key input in determining the fair value of a derivative referenced to a basket of variables such as equities or foreign currencies. A majority of the correlations are not observable, but are derived based on historical data. The correlation between equity/equity and equity/equity index was between 44 percent and 79 percent at June 30, 2018.

Sensitivity of Level 3 Inputs to Fair Value Measurements

*Collateralized debt obligation*s - Probability of default, prepayment speed and loss severity rate are significant unobservable inputs. Significant increase (decrease) in these inputs will result in a lower (higher) fair value measurement of a collateralized debt obligation. A change in assumption for default probability is often accompanied by a directionally similar change in loss severity, and a directionally opposite change in prepayment speed.

Corporate and domestic debt securities - The fair value measurement of certain corporate debt securities is affected by the fair value of the underlying portfolios of investments used as collateral and the make-whole guarantee provided by third party guarantors. The probability that the collateral fair value declines below the collateral call threshold concurrent with the guarantors' failure to perform its make whole obligation is unobservable. The increase (decrease) in the probability the collateral value falls below the collateral call threshold is often accompanied by a directionally similar change in default probability of the guarantor.

Credit derivatives - Correlation of default among a basket of reference credit names is a significant unobservable input if the credit attributes of the portfolio are not within the parameters of relevant standardized CDS indices. Significant increase (decrease) in the default correlation will result in a lower (higher) fair value measurement of the credit derivative. A change in assumption for default correlation is often accompanied by a directionally similar change in default probability and loss rates of other credit names in the basket. For certain credit derivatives, the credit spreads of credit default swap contracts insuring asset backed securities is a significant unobservable input. Significant increase (decrease) in the credit spreads will result in a lower (higher) fair value measurement of the credit derivative.

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 implied volatility is not observable. Significant increase (decrease) in the implied volatility will result in a higher (lower) fair value of a long position in the derivative contract.

Other derivatives - The fair value of the swap agreements we entered into in conjunction with the sales of certain 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 result in a higher (lower) fair value measurement of the derivative.

Other 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 result in a decrease (increase) in the fair value measurement of the securities.

Other assets - The fair value of the contingent consideration receivable associated with the sale of a portion of our Private Banking business is dependent upon the clients' decisions to transfer their accounts to UBS, the timing and amounts of client assets transferred and the acceptance of the client assets by UBS which are significant unobservable inputs. An increase (decrease) in the client transfer rate would result in a higher (lower) fair value measurement of the receivable.

Significant Transfers Into and Out of Level 3 Measurements During the three and six months ended June 30, 2018, we transferred $93 million and $127 million, respectively, of domestic deposits and $31 million and $75 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. Additionally, during the three and six months ended June 30, 2018, we transferred $10 million and $13 million, respectively, of domestic deposits, which we have elected to carry at fair value, from Level 2 to Level 3 as a result of a change in the observability of underlying instruments that resulted in the embedded derivative being unobservable.

During the three and six months ended June 30, 2017, we transferred $56 million and $102 million, respectively, of domestic deposits and $7 million and $50 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 in maturity and there is more observability in short term volatility. Additionally, during the three and six months ended June 30, 2017, we transferred $18 million and $21 million, respectively, of domestic deposits, which we have elected to carry at fair value, from Level 2 to Level 3 as a result of a change in the observability of underlying instruments that resulted in the embedded derivative being unobservable.

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) mortgage and commercial loans classified as held for sale reported at the lower of amortized cost or fair value and (b) impaired loans or assets that are written down to fair value based on the valuation of underlying collateral during the period. These instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustment in certain circumstances (e.g., impairment). The following table presents the fair value hierarchy level within which the fair value of the financial and non-financial assets has been recorded at June 30, 2018 and December 31, 2017. The gains (losses) during the three and six months ended June 30, 2018 and 2017 are also included.

	Non-Recurring Fair Value Measurements at June 30, 2018				Total Gains (Losses) For the Three Months Ended June 30, 2018	Total Gains (Losses) For the Six Months Ended June 30, 2018
	Level 1	Level 2	Level 3	Total		
				(in millions)		
Residential mortgage loans held for sale[(1)]	**$ —**	**$ —**	**$ 2**	**$ 2**	**$ —**	**$ —**
Consumer loans[(2)]	**—**	**9**	**—**	**9**	**(1)**	**(2)**
Commercial loans held for sale[(3)]	**—**	**35**	**—**	**35**	**—**	**3**
Impaired commercial loans[(4)]	**—**	**—**	**155**	**155**	**46**	**101**
Real estate owned[(5)]	**—**	**8**	**—**	**8**	**1**	**2**
Total assets at fair value on a non-recurring basis	**$ —**	**$ 52**	**$ 157**	**$ 209**	**$ 46**	**$ 104**

	Non-Recurring Fair Value Measurements at December 31, 2017				Total Gains (Losses) For the Three Months Ended June 30, 2017	Total Gains (Losses) For the Six Months Ended June 30, 2017
	Level 1	Level 2	Level 3	Total		
				(in millions)		
Residential mortgage loans held for sale[(1)]	$ —	$ —	$ 2	$ 2	$ 3	$ 7
Consumer loans[(2)]	—	21	—	21	(4)	(8)
Commercial loans held for sale[(3)]	—	62	—	62	1	—
Impaired commercial loans[(4)]	—	—	289	289	(15)	49
Real estate owned[(5)]	—	6	—	6	2	4
Total assets at fair value on a non-recurring basis	$ —	$ 89	$ 291	$ 380	$ (13)	$ 52

(1) At June 30, 2018 and December 31, 2017, the fair value of the loans held for sale was below cost. Certain residential mortgage loans held for sale have been classified as Level 3 fair value measurements within the fair value hierarchy as the underlying real estate properties used to determine fair value are illiquid assets as a result of market conditions. Additionally, the fair value of these properties is affected by, among other things, the location, the payment history and the completeness of the loan documentation.

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

(3) At June 30, 2018 and December 31, 2017, the fair value of the loans held for sale was below cost.

(4) Certain commercial loans have undergone troubled debt restructurings and are considered impaired. As a matter of practical expedient, 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) 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.

The following tables present quantitative information about non-recurring fair value measurements of assets and liabilities classified with Level 3 of the fair value hierarchy at June 30, 2018 and December 31, 2017:

At June 30, 2018

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Residential mortgage loans held for sale	$ 2	Third party appraisal valuation based on estimated loss severities, including collateral values	Loss severity rates	**30% - 100%**
Impaired commercial loans	155	Valuation of third party appraisal on underlying collateral	Loss severity rates	**0% - 57%**

At December 31, 2017

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Residential mortgage loans held for sale	$ 2	Third party appraisal valuation based on estimated loss severities, including collateral values	Loss severity rates	30% - 100%
Impaired commercial loans	289	Valuation of third party appraisal on underlying collateral	Loss severity rates	9% - 61%

Significant Unobservable Inputs for Non-Recurring Fair Value Measurements

Residential mortgage loans held for sale includes subprime residential mortgage loans which were previously acquired with the intent of securitizing or selling them to third parties. The weighted average loss severity rate for these was approximately 70 percent at June 30, 2018. These severity rates are primarily impacted by the value of the underlying collateral securing the loans.

The weighted average severity rate for impaired commercial loans was approximately 22 percent at June 30, 2018. These severity rates are primarily impacted by the value of the underlying collateral securing the loans.

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

Securities purchased and sold under resale and repurchase agreements designated under FVO - We elected to apply FVO accounting to certain securities purchased and sold under resale and repurchase agreements at fair value. The fair value of these resale and repurchase agreements is determined using market rates currently offered on comparable transactions with similar underlying collateral and maturities.

Consumer loans held for sale – Consumer loans held for sale are recorded at the lower of amortized cost or fair value. The fair value estimates of consumer loans held for sale are determined primarily 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 determined using the discounted cash flow method using assumptions consistent with those which would be used by market participants in valuing such loans, including estimates of prepayment rates, default rates, loss severities and market rates of return. We also may hold discussions on value directly with potential investors.

Commercial loans held for sale - Commercial loans held for sale (that are not designated under FVO as discussed below) are recorded at the lower of amortized cost or fair value. The fair value estimates of commercial loans held for sale are determined primarily using observable market consensus 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.

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 consensus 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 impaired loans – 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, including collateralized debt obligations – 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.
- Other domestic debt and foreign debt securities (corporate and government) - 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 new 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 $40 million and $43 million at June 30, 2018 and December 31, 2017, respectively.

The following tables provide additional information relating to asset-backed securities as well as certain collateralized debt obligations held at June 30, 2018:

Trading asset-backed securities:

Rating of Securities:[1]	Collateral Type:	Level 2	Level 3	Total
			(in millions)	
AAA - A	Student loans	$ 92	$ —	$ 92
BBB - B	Collateralized debt obligations	—	131	131
CCC - Unrated	Residential mortgages - Subprime	17	—	17
		$ 109	$ 131	$ 240

Available-for-sale securities backed by collateral:

Rating of Securities:[1]	Collateral Type:	Level 2	Level 3	Total
			(in millions)	
AAA - A	Home equity - Alt A	$ 47	$ —	$ 47
	Other	—	49	49
	Total AAA -A	$ 47	$ 49	$ 96
BBB -B	Other	—	58	58
		$ 47	$ 107	$ 154

(1) We utilize Standard and Poor's ("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. Ratings for collateralized debt obligations represent the ratings associated with the underlying collateral.

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 risk adjustments") in determining the fair value measurement. For derivative instruments, we calculate the credit risk 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 risk 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.

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 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, certain securities purchased and sold under resale and repurchase agreements, deposits with no stated maturity (e.g. demand, savings and certain money market deposits), short-term borrowings and dividends payable.

The following table summarizes the carrying value and estimated fair value of our financial instruments, excluding financial instruments that are carried at fair value on a recurring basis, at June 30, 2018 and December 31, 2017 and their classification within the fair value hierarchy:

June 30, 2018	Carrying Value	Fair Value	Level 1	Level 2	Level 3
			(in millions)		
Financial assets:					
Short-term financial assets	$ 23,444	$ 23,444	$ 1,340	$ 22,078	$ 26
Federal funds sold and securities purchased under agreements to resell	9,781	9,781	—	9,781	—
Securities held-to-maturity	15,152	14,805	—	14,805	—
Commercial loans, net of allowance for credit losses	46,386	48,041	—	—	48,041
Commercial loans held for sale	36	36	—	36	—
Consumer loans, net of allowance for credit losses	19,482	18,661	—	—	18,661
Consumer loans held for sale:					
Residential mortgages	31	31	—	30	1
Other consumer	56	56	—	—	56
Financial liabilities:					
Short-term financial liabilities	$ 5,101	$ 5,103	$ —	$ 5,077	$ 26
Deposits:					
Without fixed maturities	95,321	95,321	—	95,321	—
Fixed maturities	11,202	11,153	—	11,153	—
Deposits held for sale	130	130	—	130	—
Long-term debt	19,367	19,676	—	19,676	—

December 31, 2017	Carrying Value	Fair Value	Level 1	Level 2	Level 3
			(in millions)		
Financial assets:					
Short-term financial assets	$ 12,304	$ 12,304	$ 1,115	$ 11,157	$ 32
Federal funds sold and securities purchased under agreements to resell	32,538	32,538	—	32,538	—
Securities held-to-maturity	13,977	13,902	—	13,902	—
Commercial loans, net of allowance for credit losses	52,427	54,210	—	—	54,210
Commercial loans held for sale	177	177	—	177	—
Consumer loans, net of allowance for credit losses	19,455	18,598	—	—	18,598
Consumer loans held for sale:					
Residential mortgages	6	6	—	5	1
Other consumer	61	61	—	—	61
Financial liabilities:					
Short-term financial liabilities	$ 2,650	$ 2,667	$ —	$ 2,635	$ 32
Deposits:					
Without fixed maturities	100,502	100,502	—	100,502	—
Fixed maturities	9,834	9,782	—	9,782	—
Deposits held for sale	673	673	—	673	—
Long-term debt	22,080	22,717	—	22,717	—

Lending-related commitments - The fair value of loan commitments, revolving credit facilities and standby letters of credit are not included in the 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 $168 million and $158 million at June 30, 2018 and December 31, 2017, respectively.

20. Litigation and Regulatory Matters

The following supplements, and should be read together with, the disclosure in Note 27, "Litigation and Regulatory Matters," in our 2017 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in our Form 10-Q for the three month period ended March 31, 2018 (the "2018 First Quarter Form 10-Q"). Only those matters with significant updates and new matters since our disclosure in our 2017 Form 10-K and our 2018 First Quarter Form 10-Q are reported herein.

In addition to the matters described below and in our 2017 Form 10-K and our 2018 First Quarter Form 10-Q, in the ordinary course of business, we are routinely named as defendants in, or as parties to, various legal actions and proceedings relating to activities of our current and/or former operations. These legal actions and proceedings may include claims for substantial or indeterminate compensatory or punitive damages, or for injunctive relief. In the ordinary course of business, we also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In connection with formal and informal inquiries by these regulators, we receive numerous requests, subpoenas and orders seeking documents, testimony and other information in connection with various aspects of our regulated activities.

Due to the inherent unpredictability of legal matters, including litigation, governmental and regulatory matters, particularly where the damages sought are substantial or indeterminate or when the proceedings or investigations are in the early stages, we cannot determine with any degree of certainty the timing or ultimate resolution of such matters or the eventual loss, fines, penalties or business impact, if any, that may result. We establish reserves for litigation, governmental and regulatory matters when those matters present loss contingencies that are both probable and can be reasonably estimated. Once established, reserves are adjusted from time to time, as appropriate, in light of additional information. The actual costs of resolving litigation and regulatory matters, however, may be substantially higher than the amounts reserved for those matters. During the three and six months ended June 30, 2018, we recorded expenses of $16 million and $510 million, respectively, related to various legal matters.

For the legal matters disclosed below, including litigation and governmental and regulatory matters, as well as for the legal matters disclosed in Note 27, "Litigation and Regulatory Matters," in our 2017 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in our 2018 First Quarter Form 10-Q, as to which a loss in excess of accrued liability is reasonably possible in future periods and for which there is sufficient currently available information on the basis of which management believes it can make a reliable estimate, we believe a reasonable estimate could be as much as $325 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 below investigations, as well as for the investigations disclosed in Note 27, "Litigation and Regulatory Matters," in our 2017 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in our 2018 First 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.

Credit Card Litigation In June 2018, the defendants, including the HSBC entities, reached an agreement in principle with counsel for the putative Federal Rule of Civil Procedure 23(b)(3) opt-out class, seeking monetary relief, to resolve all claims as filed in a third consolidated amended class action complaint in *In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation*, MDL 1720, E.D.N.Y. The settlement is subject to documentation of final settlement terms and court approval. If the settlement is finalized and approved, certain HSBC entities are responsible for a *pro rata* portion of the settlement amount, for which they are reserved, pursuant to the settlement and judgment sharing agreements entered into by the defendants.

County of Cook v. HSBC North America Holdings Inc., et al. Following the U.S. Supreme Court's decision in the *City of Miami v. Bank of America Corp. & Wells Fargo & Co.* case, the stay of the Cook County action was lifted and an amended complaint was filed in July 2017. In May 2018, the court granted in part and denied in part defendants' motion to dismiss the amended complaint that was filed in August 2017. The court's ruling on the motion to dismiss allows Cook County's case to proceed, but significantly narrows the categories of damages available for potential recovery.

Foreign Exchange ("FX") Matters

U.S. Litigation In addition to the Consolidated Action that has been settled subject to final court approval (*In re Foreign Exchange Benchmark Rates Antitrust Litigation*; No. 13-CV-7789(LGS)), other putative class actions making similar allegations are pending against HSBC defendants, as well as other defendants, in the United States District Court for the Southern District of New York on behalf of: (1) ERISA plan participants (*Allen v. Bank of America Corporation, et al.*; No. 1:15-CV-4285); (2) retail customers (*Nypl v. JPMorgan Chase, et al.*; No. 1:15-CV-9300); and (3) "indirect purchasers" of FX (*Contant v. Bank of America Corporation, et al.*; No. 1:17-CV-03139). The Court of Appeals for the Second Circuit affirmed the U.S. district court's dismissal of the *Allen* action in July 2018. In the *Contant* action, plaintiffs have filed a motion for leave to amend in response to the court's dismissal of the action in March 2018. It is possible that additional actions will be initiated against the HSBC entities, including HSBC Bank USA, in relation to their historical foreign exchange activities.

Investigations In August 2016, the U.S. Department of Justice ("DOJ") indicted two now-former HSBC employees and charged them with wire fraud and conspiracy relating to a 2011 foreign exchange transaction. One of the former employees was found guilty in October 2017, and has appealed his conviction.

Precious Metals Fix Matters

In re Commodity Exchange Inc., Gold Futures and Options Trading Litigation (Gold Fix Litigation) In July 2018, the court granted the motion to dismiss filed by the newly added non-HSBC defendant.

In re London Silver Fixing, Ltd. Antitrust Litigation (Silver Fix Litigation) In July 2018, the court granted the motion to dismiss filed by the newly added non-HSBC defendants.

Madoff Litigation

In 2008, Bernard L. Madoff ("Madoff") was arrested and ultimately pleaded guilty to running a Ponzi scheme and a trustee was appointed for the liquidation of his firm, Bernard L. Madoff Investment Securities LLC ("Madoff Securities"), an SEC-registered broker-dealer and investment adviser. Various non-U.S. HSBC companies provided custodial, administration and similar services to a number of funds incorporated outside the United States whose assets were invested with Madoff Securities. Plaintiffs (including funds, funds investors and the Madoff Securities trustee ("Trustee"), as described below) have commenced Madoff-related proceedings against numerous defendants arising out of Madoff Securities' fraud.

In one of the cases, *SPV OSUS Ltd. v. HSBC Bank plc, HSBC Bank USA N.A., et al.,* HSBC USA Inc. removed the case to the federal district court in New York in April 2018. Defendants filed a motion to dismiss in July 2018.

Supranational, Sovereign and Agency ("SSA") Bonds The Superior Court of Justice action that was filed in the Province of Ontario, Canada has now lapsed; accordingly, the Federal Court action will proceed.

Benchmark Rate Litigation

In July 2018, defendants filed a motion to dismiss in the Canadian Dealer Offered Rate putative class action. *Fire & Police Pension Association of Colorado, et al. v. Bank of Montreal, et al.* (Case No. 18-cv-00342)

Mortgage Securitization Matters

In July 2018, HSBC North America and certain subsidiaries, including HSBC Bank USA, reached a settlement in principle to resolve the DOJ's ongoing investigation of their legacy residential mortgage-backed securities ("RMBS") origination and securitization activities. The settlement in principle will resolve actual and potential civil claims by the DOJ relating to the RMBS activities of HSBC North America and certain of its subsidiaries from 2005 to 2007.

Under the terms of the settlement in principle, HSBC North America has agreed to pay a civil monetary cash penalty of $765 million, of which $492 million has been allocated to HUSI and is fully reserved as of June 30, 2018. Substantially all of the amount of this penalty was reserved for in the first quarter of 2018.

The settlement in principle is subject to the negotiation of definitive documentation, and there can be no assurance that the DOJ and the HSBC entities will agree on the final documentation of the settlement.

Separately, HSBC North America and certain subsidiaries, including HSBC Bank USA, have resolved the Massachusetts State Attorney General's civil investigation of their legacy RMBS origination and securitization activities. The settlement will require HSBC North America to pay $26.8 million to the Attorney General, a portion of which has been allocated to HUSI and is fully reserved.

Residential Funding Litigation

We have settled for an amount within reserves.

Mortgage Securitization Trust Litigation

Since 2014, Plaintiff-Investors in 280 RMBS trusts have sued HSBC Bank USA, as mortgage securitization trustee, in a number of cases: BlackRock et al., Royal Park Investments SA/NV ("RPI"), Phoenix Light SF Limited, the National Credit Union Administration Board, as Liquidating Agent, Commerzbank AG, and Triaxx, IKB Bank AG, RMBS Recovery Holdings I LLC, et al., VRS Holdings 2 LLC and Reliance Standard Life Insurance Company. BlackRock's and RPI's motion for class certification has been denied, and the U.S. Court of Appeals for the Second Circuit denied a request for review of the decision.

Anti-Money Laundering, Bank Secrecy Act and Office of Foreign Assets Control Matters

In June 2018, the Office of the Comptroller of the Currency ("OCC") terminated the 2010 consent cease and desist order and the 2012 enterprise-wide compliance consent order after determining that HSBC Bank USA had satisfied the requirements of the respective orders. The 2010 consent cease and desist order entered into with the Federal Reserve Board by our parent, HSBC North America, and the second OCC consent order entered into in 2012 by HSBC Bank USA which, among other things, required the bank to correct the circumstances noted in the OCC's report and imposed certain restrictions on HSBC Bank USA, still remain open.

Charlotte Freeman, et al. v. HSBC Holdings plc, et al. In July 2018, the magistrate judge issued a recommendation that the court deny the defendants', including HSBC Bank USA's, motion to dismiss.

Jeffrey Siegel, et al. v. HSBC Holdings plc, et al. In July 2018, the court granted HSBC North America's and HSBC Bank USA's motion to dismiss.

Rigoberto Vasquez and Eva Garcia et al v. Hong Kong and Shanghai Banking Corporation Ltd., HSBC Bank USA, N.A., et al. This putative class action was filed in the U.S. District Court for the Southern District of New York in March 2018 against HSBC Bank USA and the Hong Kong and Shanghai Bank Corporation and contains allegations similar to the *Ramiro Giron, et al. v. Hong Kong and Shanghai Bank Corporation, Ltd., et al* action. Plaintiffs purport to represent those that invested in a Ponzi scheme allegedly orchestrated by Phil Ming Xu and certain companies he allegedly controlled, such as WCM777. Hong Kong and Shanghai Banking Corporation is alleged to have accepted wire transfers from plaintiffs to WCM777 from investors in furtherance of the Ponzi scheme. HSBC Bank USA is alleged to have acted as Hong Kong and Shanghai Banking Corporation's correspondent bank for certain wire transfers to WCM777. The purported class period is from June 2013 to May 2014. Plaintiffs allege claims for Racketeer Influenced and Corrupt Organizations Act violations, aiding and abetting fraud, aiding and abetting breach of fiduciary duty, and aiding and abetting conversion. Plaintiffs seek compensatory damages in the amount of $37 million plus punitive damages, interest and attorneys' fees and costs.

Telephone Consumer Protection Act ("TCPA") Litigation

In July 2018, the parties reached an agreement in principle to settle the action. The settlement is subject to documentation of final settlement terms and court approval.

21. New Accounting Pronouncements

The following new accounting pronouncements were adopted effective January 1, 2018:

- ***Recognition of Revenue from Contracts with Customers*** In May 2014, the Financial Accounting Standards Board ("FASB") issued an Accounting Standards Update ("ASU") which provides a principles-based framework for revenue recognition. Additionally, the ASU requires improved disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of revenue that is recognized. The core principle of the five-step revenue recognition framework is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The scope of the new guidance is limited to certain revenues classified as fee based income. We conducted an analysis of the impact the new ASU will have on our operations and did not identify any changes in revenue recognition. Therefore, the adoption of this guidance did not have any impact on our financial position or results of operations. See Note 13, "Fee Income from Contracts with Customers," for the new disclosure required by this standard.
- ***Financial Instruments - Classification and Measurement (Excluding Financial Liabilities Measured Under the Fair Value Option)*** In January 2016, the FASB issued an ASU which changes aspects of its guidance on classification and measurement of financial instruments. The ASU requires equity investments (except those accounted for under the equity method or those that result in consolidation) to be measured at fair value with changes in fair value recognized in net income. Under a practicability exception, entities may measure equity investments that do not have readily determinable fair values at cost adjusted for changes in observable prices minus impairment. Under this exception, a qualitative assessment for impairment will be required and, if impairment exists, the carrying amount of the investments must be adjusted to their fair value and an impairment loss recognized in net income, prospectively. Additionally, the ASU requires new disclosure related to equity investments and modifies certain disclosure requirements related to the fair value of financial instruments. The adoption of this guidance required a cumulative effect adjustment to the consolidated balance sheet as of January 1, 2018, resulting in an increase in retained earnings of $10 million, after tax, to reflect the impact of recording certain equity investments at fair value which were previously measured at cost, as well as a reclassification from accumulated other comprehensive loss to retained earnings of an after tax loss of $4 million related to equity investments which were previously classified as available-for-sale. The adoption of this guidance also resulted in all equity investments being recorded together as a component of other assets and, as a result, we reclassified $12 million and $177 million of equity investments which

were previously classified as trading securities and available-for-sale securities, respectively, to other assets as of January 1, 2018. See Note 3, "Securities," for the new disclosure required by this standard.

- ***Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments*** In August 2016, the FASB issued an ASU that provides targeted amendments to clarify how certain cash receipts and cash payments should be classified in the statement of cash flows. Under the ASU, the portion of the cash payments attributable to accreted interest for the settlement of zero-coupon bonds should be classified as cash outflows for operating activities rather than financing activities and cash proceeds from the settlement of bank-owned life insurance policies should be classified as cash inflows from investing activities rather than operating activities. While the adoption of this guidance resulted in a change in classification in the statement of cash flows, it did not have a material impact on the statement of cash flows, and it did not have any impact on our financial position or results of operations. The adoption of this guidance required prior periods to be restated and resulted in an increase in cash used in operating activities of $5 million and a decrease in cash used in financing activities of $5 million during the six months ended June 30, 2017.
- ***Statement of Cash Flows - Restricted Cash*** In November 2016, the FASB issued an ASU that clarifies how restricted cash and restricted cash equivalents should be presented in the statement of cash flows. The ASU requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. While the adoption of this guidance resulted in a change in classification in the statement of cash flows to include our required reserve balance with the Federal Reserve Bank within a new line item called cash, due from banks and restricted cash, it did not have any impact on our financial position or results of operations. The adoption of this guidance on January 1, 2018 required prior periods to be restated and resulted in an increase in cash provided by investing activities of $69 million during the six months ended June 30, 2017.
- ***Business Combinations - Clarifying the Definition of a Business*** In January 2017, the FASB issued an ASU which provides clarification on the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The amendments in the ASU provide a screen to determine when an integrated set of activities and assets (a "set") is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. This screen reduces the number of transactions that need to be further evaluated, and therefore are considered businesses. The amendments also provide a framework to assist entities in evaluating whether both an input and a substantive process are present. The adoption of this guidance did not have any impact on our financial position or results of operations.
- ***Compensation - Retirement Benefits*** In March 2017, the FASB issued an ASU that requires only the service cost component of net periodic pension and postretirement benefit costs to be reported in salaries and employee benefits in the statement of income while the other components of net periodic pension and postretirement benefit costs are required to be reported separately from the service cost component. The adoption of this guidance did not have a material impact on our financial statement presentation.
- ***Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Loss*** In February 2018, the FASB issued an ASU that allows for the reclassification of tax effects within accumulated other comprehensive loss (referred to as stranded tax effects) to retained earnings resulting from the change in the federal corporate income tax rate in the Tax Legislation which was signed into law on December 22, 2017. We elected to early adopt this guidance in the first quarter of 2018 and recorded a cumulative effect adjustment to the consolidated balance sheet, resulting in a reclass of approximately $91 million of tax benefits from accumulated other comprehensive loss to retained earnings as of January 1, 2018.

The following are accounting pronouncements which will be adopted in future periods:

- ***Leases*** In February 2016, the FASB issued an ASU which requires a lessee to recognize a lease liability and a right-of-use asset on its balance sheet for all leases, including operating leases, with a term greater than 12 months. Lease classification is still performed, with any lease classified as a finance lease reported as a financing transaction in the statement of income and the statement of cash flows. The ASU does not substantially change lessor accounting. Additionally, the ASU makes several other targeted amendments including a) revising the definition of lease payments to include fixed payments by the lessee to cover lessor costs related to ownership of the underlying asset such as for property taxes or insurance; b) requiring seller-lessees in a sale-leaseback transaction to recognize the entire gain from the sale of the underlying asset at the time of sale rather than over the leaseback term; and c) expanding disclosures to provide additional quantitative and qualitative information about lease transactions. The ASU is effective for all annual and interim periods beginning January 1, 2019 and is required to be applied at either the date of initial application or retrospectively to the earliest period presented at the date of initial application, with early adoption permitted. We have conducted a review of our existing lease contracts and service contracts which may contain embedded leases and currently expect a gross-up of our balance sheet as a result of recognizing lease liabilities and corresponding right of use assets for operating leases upon adoption. The adoption of this guidance will also require a cumulative effect adjustment to the consolidated balance sheet to recognize the previously deferred gain on the sale and leaseback of our 452 Fifth Avenue property, which will result in an increase in the opening balance of retained earnings at January 1, 2017. However, the adoption of this guidance is not expected to result in material changes to the recognition of operating lease expense. While early adoption is permitted, we currently do not expect to elect early adoption.

- ***Financial Instruments - Credit Impairment*** In June 2016, the FASB issued an ASU that significantly changes how entities will measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. The ASU requires entities to estimate and recognize an allowance for lifetime expected credit losses for loans (including TDR Loans), held-to-maturity debt securities, off-balance sheet credit exposures and certain other financial assets measured at amortized cost. The ASU also requires entities to recognize an allowance for credit losses on AFS debt securities and revises the accounting model for purchased credit impaired loans and debt securities. Additionally, existing disclosures will also be revised under the ASU. The ASU is effective for all annual and interim periods beginning January 1, 2020, with early adoption permitted beginning January 1, 2019, and is required to be applied by recording a cumulative effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. We have begun our implementation efforts, leveraging our participation in support of HSBC's implementation of IFRS 9 where feasible, to identify key interpretive issues and are assessing existing credit loss forecasting models and processes against the new guidance to determine what modifications may be required. While we continue to evaluate the impact the new guidance will have on our financial position and results of operations, we currently expect the new guidance will result in an increase to our allowance for credit losses given the change to estimated losses over the contractual life of the loan portfolio as well as the adoption of an allowance for debt securities. The amount of the increase to our allowance is still under review and will depend, in part, upon the composition of our loan and held-to-maturity securities portfolios at the adoption date as well as economic conditions and loss forecasts at that date. While early adoption is permitted beginning in the first quarter of 2019, we currently do not expect to elect early adoption.
- ***Goodwill Impairment Testing*** In January 2017, the FASB issued an ASU that simplifies the accounting for goodwill impairment by removing step two of the goodwill impairment test. Under step two, an entity was required to determine the fair value of individual assets and liabilities of a reporting unit (including unrecognized assets and liabilities) using the procedure for determining fair values in a business combination. Under the new guidance, goodwill impairment will now be measured at the amount by which a reporting unit’s carrying amount, including those with a zero or negative carrying amount, exceeds its fair value. Any resulting impairment is limited to the carrying amount of goodwill. An entity must also disclose the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount. The ASU is effective for all annual and interim periods beginning January 1, 2020 and is required to be applied prospectively with early adoption permitted. The adoption of this guidance is not expected to have a material impact on the results of our goodwill impairment testing, our financial position or results of operations.
- ***Premium Amortization on Purchased Callable Debt Securities*** In March 2017, the FASB issued an ASU that shortens the premium amortization period for purchased non-contingently callable debt securities by requiring the premium to be amortized to the earliest call date, rather than the contractual maturity date. After the earliest call date, if the call option is not exercised, the effective yield will be reset using the payment terms of the debt security. The new guidance does not change the discount amortization period for purchased debt securities. The discount continues to be amortized to the contractual maturity date. The ASU is effective for all annual and interim periods beginning January 1, 2019, with early adoption permitted, and is required to be applied by recording a cumulative effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The adoption of this guidance is not expected to have a material impact on our financial position or results of operations.
- ***Derivatives and Hedging - Targeted Improvements to Accounting for Hedging Activities*** In August 2017, the FASB issued an ASU amending its hedge accounting guidance to expand an entity’s ability to hedge nonfinancial and financial risk components, reduce complexity in fair value hedges of interest rate risk and ease the requirements for effectiveness testing and hedge documentation. The new guidance also eliminates the requirement to separately measure and report hedge ineffectiveness and generally requires the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item. Existing disclosures will also be revised. The ASU is effective for all annual and interim periods beginning January 1, 2019, with early adoption permitted, and is required to be applied by recording a cumulative effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The adoption of this guidance is not expected to have a material impact on our financial position or results of operations. While early adoption is permitted, we currently do not expect to elect early adoption.

There have been no additional accounting pronouncements issued that are expected to have or could have a material impact on our financial position or results of operations.

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

Forward-Looking Statements

Certain matters discussed throughout this Form 10-Q are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, we may make or approve certain statements in future filings with the United States Securities and Exchange Commission ("SEC"), in press releases, or oral or written presentations by representatives of HSBC USA Inc. ("HSBC USA" and, together with its subsidiaries, "HUSI") that are not statements of historical fact and may also constitute forward-looking statements. Words such as "may," "will," "should," "would," "could," "appears," "believe," "intends," "expects," "estimates," "targeted," "plans," "anticipates," "goal," and similar expressions are intended to identify forward-looking statements but should not be considered as the only means through which these statements may be made. These matters or statements will relate to our future 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:

- uncertain market and economic conditions in the United States and abroad, including but not limited to, a decline in housing prices, a decline in energy prices, unemployment levels, tighter credit conditions, changes in interest rates, the availability of 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 the outbreak of hostilities between countries and the decision by the United Kingdom ("U.K.") to exit the European Union ("EU");
- changes in laws and regulatory requirements;
- the potential impact of any legal, regulatory and policy changes effecting financial institutions and the global economy as a result of the current Administration in the U.S.;
- 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") 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 ("HSBC Bank USA") to fulfill the requirements imposed by our consent orders as well as 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, including exposure to Latin American corporate clients and the oil and gas markets;
- increases in our allowance for credit losses and changes in our assessment of our loan portfolios;
- the ability to implement our business strategies;
- 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 and retain customers and to attract and retain key employees;

- 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, global pandemics, 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;
- our ability to cross-sell our products to existing customers;
- changes in Financial Accounting Standards Board ("FASB") 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;
- continued heightened regulatory scrutiny with respect to existing and future residential mortgage servicing and foreclosure practices, with particular focus on loss mitigation, foreclosure prevention and outsourcing;
- possible negative impact of regulatory investigations and legal proceedings related to alleged foreign exchange manipulation;
- changes in the methodology for determining benchmark rates;
- 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;
- 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, 2017 ("2017 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 to grow during the first half of 2018. U.S. Gross Domestic Product ("GDP") grew at an estimated annual rate of 4.1 percent in the second quarter of 2018, higher than 2017's GDP annual growth rate, while inflation in the second quarter of 2018 averaged near the FRB's 2.0 percent target inflation rate. In June 2018, the FRB increased short-term interest rates by 25 basis points, the second such rate increase this year, and has indicated that it will increase short-term interest rates further during 2018. During the first half of 2018, the FRB also continued reducing its holdings of U.S. Treasury bonds and mortgage-backed securities. These actions by the FRB could cause longer term interest rates to continue to rise over time. The U.S. economy added over 1.2 million jobs during the first half of 2018 and the total unemployment rate fell to 4.0 percent at June 2018 as compared with 4.1 percent at December 2017.

Although the U.S. economy continued to grow, uncertainty concerning the future economic environment exists despite continued improvements in many segments of the global economy. The sustainability of the economic recovery will be determined by numerous other variables including consumer sentiment, energy prices, credit market volatility, employment levels and housing market conditions which will impact corporate earnings and the capital markets. Concerns over higher interest rates, inflation, U.S. trade policy and geopolitical events as well as the implications of those events on the markets in general further add to global uncertainty. Higher interest rates, 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 2018 and beyond.

Performance, Developments and Trends The following table sets forth selected financial highlights for HUSI for the three and six months ended June 30, 2018 and 2017 and at June 30, 2018 and December 31, 2017:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(dollars are in millions)			
Net income	**$ 269**	$ 204	**$ 31**	$ 500
Rate of return on average:				
Total assets	**.6%**	.4%	**—%**	.5%
Total risk-weighted assets	**.9**	.7	**.1**	.8
Total common equity	**5.0**	3.4	**(.1)**	4.8
Total equity	**5.5**	3.9	**.3**	4.9
Net interest margin	**1.41**	1.26	**1.39**	1.28
Efficiency ratio	**72.0**	74.5	**95.9**	71.6
Commercial net charge-off ratio[1]	**.13**	.39	**.10**	.22
Consumer net charge-off ratio[1]	**.14**	.08	**.11**	.14

(1) Excludes loans held for sale.

	June 30, 2018	December 31, 2017
	(dollars are in millions)	
Additional Select Ratios:		
Allowance as a percent of loans[1]	**.80%**	.94%
Commercial allowance as a percent of loans[1]	**.98**	1.15
Consumer allowance as a percent of loans[1]	**.38**	.37
Consumer two-months-and-over contractual delinquency	**2.09**	2.48
Loans to deposits ratios[2]	**69.73**	73.70
Common equity Tier 1 capital to risk-weighted assets	**13.8**	14.2
Tier 1 capital to risk-weighted assets	**14.8**	15.3
Total capital to risk-weighted assets	**17.6**	18.4
Tier 1 leverage ratio	**10.2**	9.9
Supplementary leverage ratio	**7.4**	7.3
Total equity to total assets	**11.1**	10.7
Select Balance Sheet Data:		
Cash and interest bearing deposits with banks	**$ 23,418**	$ 12,272
Trading assets	**25,559**	16,150
Securities available-for-sale	**31,028**	30,700
Loans:		
Commercial loans	**46,843**	53,035
Consumer loans	**19,556**	19,528
Total loans	**66,399**	72,563
Deposits	**114,355**	118,702

(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.

Net income was $269 million and $31 million during the three and six months ended June 30, 2018, respectively, compared with $204 million and $500 million during the three and six months ended June 30, 2017, respectively. Income before income tax was $351 million and $205 million during the three and six months ended June 30, 2018, respectively, compared with $312 million and $760 million during the three and six months ended June 30, 2017, respectively. Income before income tax increased during the three months ended June 30, 2018 as lower operating expenses and higher releases in the provision for credit losses were partially offset by lower net interest income and lower other revenues. In the year-to-date period, income before income tax decreased reflecting higher operating expenses driven primarily by higher expense for legal matters, lower other revenues and lower net interest income which were partially offset by higher releases in the provision for credit losses. Lower other revenues in both the three-month and year-to-date periods were driven by the non-recurrence of gains recorded in the prior year on sales of Visa Inc. ("Visa") Class B common shares ("Class B Shares").

Our reported results in all periods were impacted by certain items management believes to be significant, which distort 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 June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
	(in millions)			
Income before income tax, as reported	**$ 351**	$ 312	**$ 205**	$ 760
Expense related to certain legal matters	**16**	—	**507**	—
Costs to achieve[1]	**—**	69	**—**	108
Gains on sales of Visa Inc. Class B common shares to a third party[2]	**7**	(166)	**7**	(312)
Adjusted performance[3]	**$ 374**	$ 215	**$ 719**	$ 556

(1) Reflects transformation costs incurred through 2017 to deliver the cost reduction and productivity outcomes outlined in the HSBC Investor Update in June 2015. See "Results of Operations" for a more detailed discussion of these costs.

(2) In 2018, includes a loss of $7 million recorded during the second quarter related to a change in the Visa Class B Share conversion rate announced by Visa as a result of the outstanding litigation for which we retained the associated risk. See Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," in the accompanying consolidated financial statements for additional information.

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

Excluding the collective impact of the items in the table above, our adjusted performance during the three and six months ended June 30, 2018 increased $159 million and $163 million, respectively, compared with prior year periods due primarily to higher other revenues driven by higher trading revenue and higher releases in the provision for credit losses which were partially offset by lower net interest income while operating expenses remained relatively flat.

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.

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 and endorsed by the EU and, as a result, our segment results are prepared and presented using financial information prepared on the basis of HSBC Group's accounting and reporting policies ("Group Reporting Basis"). Because operating results on the Group Reporting Basis are used in managing our businesses and rewarding performance of employees, our management also separately monitors profit before tax under this basis of reporting. The following table reconciles our U.S. GAAP versus Group Reporting Basis profit before tax:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	**2017**	**2018**	**2017**
	(in millions)			
Profit before tax – U.S. GAAP basis	**$ 351**	$ 312	**$ 205**	$ 760
Adjustments:				
Expected credit losses / loan impairment	**118**	(10)	**71**	(23)
Loans held for sale	**(2)**	(10)	**(9)**	(121)
Litigation expense	**(2)**	(8)	**(4)**	8
Property	**(2)**	(2)	**(4)**	(7)
Pension and other postretirement benefit costs	**—**	2	**(2)**	7
Structured notes and deposits	**—**	26	**—**	(23)
Low income housing tax credit investments	**1**	1	**2**	3
Other	**8**	(1)	**10**	10
Profit before tax – Group Reporting Basis	**$ 472**	$ 310	**$ 269**	$ 614

The significant differences between U.S. GAAP and the Group Reporting Basis impacting our results presented in the table above are discussed in more detail within "Basis of Reporting" in our 2017 Form 10-K. Other than the changes discussed below, there have been no other significant changes since December 31, 2017 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

Expected credit losses / loan impairment - In January 2018, we adopted new accounting guidance under the Group Reporting Basis in conjunction with HSBC's adoption of the requirements of IFRS 9, "Financial Instruments" ("IFRS 9"), on January 1, 2018 with the exception of the provisions relating to the presentation of gains and losses on financial instruments designated at fair value which were previously adopted in 2017.

Under IFRS 9, expected credit losses ("ECL") are recognized for a) financial assets measured at amortized cost, including loans, securities purchased under agreements to resell and certain debt securities; b) financial assets measured at fair value with changes in fair value recorded through other comprehensive income (loss), primarily debt securities; and c) certain loan commitments and financial guarantee contracts. Financial assets which have not experienced a significant increase in credit risk since initial recognition are considered to be in 'stage 1'; financial assets which are considered to have experienced a significant increase in credit risk are in 'stage 2'; and financial assets for which there is objective evidence of impairment so are considered to be in default or otherwise credit-impaired are in 'stage 3'. At initial recognition and for financial assets that remain in stage 1, an allowance (or provision in the case of some loan commitments and financial guarantees) is required for ECL resulting from default events that are possible within the next 12 months ('12-month ECL'). In the event of a significant increase in credit risk, an allowance (or provision) is required for ECL resulting from all possible default events over the expected life of the financial instrument ('lifetime ECL') and financial assets are moved to stage 2 or stage 3.

The adoption of the new accounting guidance on January 1, 2018 on our customer loan portfolio resulted in an increase to our customer loan allowance for ECL of approximately $60 million with a corresponding charge to equity under the Group Reporting Basis. The impact of adoption on the allowance for other financial assets was not significant. The amounts shown in the table above represents the difference in credit loss provision for the periods presented. During the three and six months ended June 30, 2018, reserve releases under the Group Reporting Basis were higher than the reserve releases for U.S. GAAP. The higher reserve releases under the Group Reporting Basis were primarily due to releases associated with a single client relationship driven by improvements in credit conditions which resulted in reclassification from 'stage 2' (which requires a lifetime ECL estimate) to 'stage 1' (which requires a 12-month ECL estimate) and, in the year-to-date period, other modeling factors as well as a reduction of ECL associated with oil and gas customers. In addition, U.S. GAAP loan impairment charges in the year-to-date period reflect loss estimates for certain risk factors associated with geopolitical risks and market volatility inherent in certain segments of the portfolio. The impact of the lower expected losses under the Group Reporting Basis in the year-to-date period was partially offset by releases of loan impairment allowances under U.S. GAAP as a result of customer sales, pay-downs and pay-offs where existing allowances were higher under U.S. GAAP due to the longer loss emergence period.

Structured notes and deposits - Structured notes and deposits have historically been classified as trading liabilities under the Group Reporting Basis and carried at fair value with changes in fair value recorded in earnings. Beginning January 1, 2018, HSBC concluded that a change in accounting policy and presentation from trading liabilities to liabilities designated under the fair value option for structured notes and deposits under the Group Reporting Basis would be appropriate since it would better align with the presentation of similar financial instruments by peers under IFRSs and therefore provide more relevant information about the effect of these financial liabilities on reported financial position and performance. As a result, the fair value movement on structured notes and deposits attributable to our own credit spread is now being recorded in other comprehensive income (loss) under the Group Reporting Basis, consistent with U.S. GAAP.

Balance Sheet Review

We utilize deposits and borrowings from various sources to provide liquidity, fund our balance sheet, meet cash and capital needs, and fund investments in subsidiaries. The following table provides balance sheet totals at June 30, 2018 and increases (decreases) since December 31, 2017:

		Increase (Decrease) From December 31, 2017	
	June 30, 2018	**Amount**	**%**
		(dollars are in millions)	
Period end assets:			
Short-term investments	**$ 33,594**	$ (11,296)	(25.2)%
Loans, net	**65,868**	(6,014)	(8.4)
Loans held for sale	**213**	(502)	(70.2)
Trading assets	**25,559**	9,409	58.3
Securities	**46,180**	1,503	3.4
All other assets	**9,273**	352	3.9
	$ 180,687	$ (6,548)	(3.5)%
Period end liabilities and equity:			
Total deposits	**$ 114,355**	$ (4,347)	(3.7)%
Trading liabilities	**3,277**	(1,602)	(32.8)
Short-term borrowings	**6,391**	1,741	37.4
Long-term debt	**31,749**	(3,217)	(9.2)
Interest, taxes and other liabilities	**4,930**	986	25.0
Total equity	**19,985**	(109)	(.5)
	$ 180,687	$ (6,548)	(3.5)%

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 decreased compared with December 31, 2017 due to a redeployment of surplus liquidity in the short term to precious metal inventory positions which are included in trading assets, a decline in client deposits and the repayment of long-term debt that matured during the first half of 2018. These decreases were partially offset by the impact of a $5.0 billion overnight loan to an affiliate that was outstanding at year-end, as the wire process from the affiliate to settle daily activity failed. This loan was repaid in early January.

Loans, Net The following table summarizes our loan balances at June 30, 2018 and increases (decreases) since December 31, 2017:

		Increase (Decrease) From December 31, 2017	
	June 30, 2018	Amount	%
	(dollars are in millions)		
Commercial loans:			
Real estate, including construction	**$ 11,245**	$ 712	6.8 %
Business and corporate banking	**12,109**	(395)	(3.2)
Global banking[1]	**18,877**	(1,211)	(6.0)
Other commercial[2]	**4,612**	(5,298)	(53.5)
Total commercial	**46,843**	(6,192)	(11.7)
Consumer loans:			
Residential mortgages	**17,326**	53	.3
Home equity mortgages	**1,086**	(105)	(8.8)
Credit cards	**841**	120	16.6
Other consumer	**303**	(40)	(11.7)
Total consumer	**19,556**	28	.1
Total loans	**66,399**	(6,164)	(8.5)
Allowance for credit losses	**531**	(150)	(22.0)
Loans, net	**$ 65,868**	$ (6,014)	(8.4)%

(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 GB&M relationship managers.

(2) Includes loans to HSBC affiliates which totaled $1,895 million and $6,750 million at June 30, 2018 and December 31, 2017, respectively.

Commercial loans decreased as compared with December 31, 2017 largely reflecting the impact of a $5.0 billion overnight loan to an affiliate that was outstanding at year-end and was repaid in early January as discussed above and, to a lesser extent, paydowns, sales and maturities exceeding loan growth due to new business activity. The trend in commercial non-affiliate loans primarily reflects decreases in the diversified financial, pharmaceutical and energy industries, partially offset by growth in the real estate and telecommunication industries.

Consumer loans were flat compared with December 31, 2017 as increases in credit card receivables reflecting growth in customer activity driven by new product promotions and in residential mortgage loans which we continue to target towards our Premier and Advance customer relationships were largely offset by a continued decline in home equity mortgages due to net paydowns as our focus continues to shift towards residential mortgage loans and lower other consumer loans.

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

	LTV Ratios[1][2]			
	June 30, 2018		December 31, 2017	
	First Lien	Second Lien	First Lien	Second Lien
LTV < 80%	**98.1%**	**92.2%**	97.6%	89.8%
80% ≤ LTV < 90%	**1.2**	**5.3**	1.6	6.6
90% ≤ LTV < 100%	**.4**	**1.8**	.5	2.6
LTV ≥ 100%	**.3**	**.7**	.3	1.0
Average LTV for portfolio	**50.2**	**50.4**	51.0	52.4

(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 pricing index ("HPI") at either a Core Based Statistical Area or state level. The estimated value of the homes could differ from actual fair values due to changes in condition of the underlying property, variations in housing

price changes within metropolitan statistical areas and other factors. As a result, actual property values associated with loans that end in foreclosure may be significantly lower than the estimates used for purposes of this disclosure.

(2) Current estimated property values are calculated using the most current HPIs available and applied on an individual loan basis, which results in an approximate three month delay in the production of reportable statistics. Therefore, the information in the table above reflects current estimated property values using HPIs at March 31, 2018 and September 30, 2017, respectively.

Loans Held for Sale The following table summarizes loans held for sale at June 30, 2018 and increases (decreases) since December 31, 2017:

		Increase (Decrease) From December 31, 2017	
	June 30, 2018	**Amount**	**%**
	(dollars are in millions)		
Commercial loans:			
Real estate, including construction	**$ —**	$ (115)	(100.0)%
Global banking	**126**	(407)	(76.4)
Total commercial	**126**	(522)	(80.6)
Consumer loans:			
Residential mortgages	**31**	25	*
Other consumer	**56**	(5)	(8.2)
Total consumer	**87**	20	29.9
Total loans held for sale	**$ 213**	$ (502)	(70.2)%

* Percentage change is greater than 100 percent.

Commercial loans held for sale decreased compared with December 31, 2017. Commercial loans held for sale primarily consists of certain loans that we have elected to designate under the fair value option which include 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 $90 million and $471 million at June 30, 2018 and December 31, 2017, respectively. Balances will fluctuate from period to period depending on the volume and level of activity.

Commercial loans held for sale also includes certain loans that we no longer intend to hold for investment and transferred to held for sale which totaled $36 million and $62 million at June 30, 2018 and December 31, 2017, respectively.

Consumer loans held for sale increased compared with December 31, 2017. Prior to 2018 applications, we sold agency-eligible residential mortgage loan originations on a servicing released basis directly to PHH Mortgage Corporation ("PHH Mortgage"). Beginning with 2018 applications, PHH Mortgage is no longer obligated to purchase these loans from us directly upon origination and instead we currently intend to market these loans for sale to other third parties on a servicing retained basis. Gains and losses from the sale of these residential mortgage loans are reflected as a component of residential mortgage banking expense in the accompanying consolidated statement of income.

Other consumer loans held for sale reflects student loans which we no longer originate.

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 $3 million and $5 million at June 30, 2018 and December 31, 2017, respectively. The valuation allowance on commercial loans held for sale was $6 million and $10 million at June 30, 2018 and December 31, 2017, respectively.

Trading Assets and Liabilities The following table summarizes trading assets and liabilities at June 30, 2018 and increases (decreases) since December 31, 2017:

	June 30, 2018	Increase (Decrease) From December 31, 2017 Amount	%
		(dollars are in millions)	
Trading assets:			
Securities(1)	**$ 12,801**	$ 2,650	26.1 %
Precious metals	**9,212**	6,938	*
Derivatives, net(2)	**3,546**	(179)	(4.8)
	$ 25,559	$ 9,409	58.3 %
Trading liabilities:			
Securities sold, not yet purchased	**$ 982**	$ (740)	(43.0)%
Payables for precious metals	**—**	(524)	(100.0)
Derivatives, net(3)	**2,295**	(338)	(12.8)
	$ 3,277	$ (1,602)	(32.8)%

* Percentage change is greater than 100 percent.

(1) See Note 2, "Trading Assets and Liabilities," in the accompanying consolidated financial statements for a breakout of trading securities by category.

(2) At June 30, 2018 and December 31, 2017, the fair value of derivatives included in trading assets has been reduced by $2,472 million and $3,423 million, respectively, relating to amounts recognized for the obligation to return cash collateral received under master netting agreements with derivative counterparties.

(3) At June 30, 2018 and December 31, 2017, the fair value of derivatives included in trading liabilities has been reduced by $4,058 million and $3,680 million, respectively, relating to amounts recognized for the right to reclaim cash collateral paid under master netting agreements with derivative counterparties.

Trading securities balances increased compared with December 31, 2017 due to increases in foreign sovereign and U.S. Treasury positions. Trading securities positions are held as economic hedges of interest rate and credit derivative products issued to clients of domestic and emerging markets. Balances of securities sold, not yet purchased were lower compared with December 31, 2017 driven by a decrease in short U.S. Treasury positions related to economic hedges of derivatives in the interest rate trading portfolio.

Precious metals trading assets increased compared with December 31, 2017 due to increases in our own silver and gold inventory positions due primarily to a redeployment of surplus liquidity in the short term which is economically hedged with derivative positions to protect against changes in market pricing and, to a lesser extent, an increase in positions held as hedges for client activity. These increases were partially offset by lower spot prices. Payables for precious metals were lower reflecting a decline 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, 2017 mainly from market movements which resulted in lower valuations of interest rate derivatives, partially offset by higher valuations of foreign exchange and credit derivatives.

Securities Securities include securities available-for-sale and securities held-to-maturity. Securities balances were higher compared with December 31, 2017 driven by net purchases of foreign sovereign, U.S. Government sponsored mortgage-backed and U.S. Government agency mortgage-backed securities, partially offset by net sales of U.S. Treasury and other asset-backed securities as part of a continuing strategy to maximize returns while balancing the securities portfolio for risk management purposes based on the current interest rate environment and liquidity needs. In addition, as discussed more fully in Note 21, “New Accounting Pronouncements,” the adoption of new accounting guidance resulted in a reclassification of all equity investments to other assets as of January 1, 2018.

All Other Assets All other assets includes, among other items, properties and equipment, net and goodwill. All other assets increased compared with December 31, 2017 as the impacts of securities received associated with a security-for-security lending transaction and the adoption of new accounting guidance related to equity investments as discussed above as well as higher outstanding settlement balances related to security sales were largely offset by lower derivative balances associated with hedging activities. As it relates to the security-for-security lending transaction, we recognized the securities received as a component of other assets and the obligation to return those securities as a component of interest, taxes and other liabilities.

Deposits The following table summarizes deposit balances by major depositor categories at June 30, 2018 and increases (decreases) since December 31, 2017:

		Increase (Decrease) From December 31, 2017	
	June 30, 2018	Amount	%
	(dollars are in millions)		
Individuals, partnerships and corporations	**$ 100,827**	$ (3,342)	(3.2)%
Domestic and foreign banks	**10,565**	(306)	(2.8)
U.S. government and states and political subdivisions	**515**	(108)	(17.3)
Foreign governments and official institutions	**2,318**	(48)	(2.0)
Deposits held for sale[(1)]	**130**	(543)	(80.7)
Total deposits	**$ 114,355**	$ (4,347)	(3.7)%
Total core deposits[(2)]	**$ 94,761**	$ (3,739)	(3.8)%

(1) Represents deposits associated with the sale of a portion of our Private Banking business. No lower of cost or fair value adjustment was required as a result of the transfer to held for sale.

(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.

Total deposits decreased compared with December 31, 2017 due to lower commercial demand and savings deposits largely due to seasonality as clients managed their cash needs at year-end, a decline in retail savings deposits driven primarily by the attrition of balances associated with previous promotional rate campaigns, a decrease in Private Banking deposits reflecting the impact of the client referral agreement with UBS Wealth Management Americas ("UBS") and lower wholesale time deposits. These decreases were partially offset by higher deposits from affiliates. The strategy for our core retail banking business includes building relationship deposits across multiple markets, channels and segments. This strategy involves various initiatives, such as:

- HSBC Premier, a comprehensive banking and wealth management proposition for the internationally minded mass affluent customer with a dedicated premier relationship manager. Total Premier deposits decreased to $24,422 million at June 30, 2018 compared with $25,726 million at December 31, 2017 as new balance growth was more than offset by the attrition discussed above; and
- Expanding our existing customer relationships by needs-based sales of wealth, banking and mortgage products.

We continue to actively manage our balance sheet to increase profitability while maintaining adequate liquidity.

Short-Term Borrowings Short-term borrowings were higher compared with December 31, 2017 due to an increase in federal funds purchased, partially offset by a decrease in securities sold under repurchase agreements.

Long-Term Debt Long-term debt decreased compared with December 31, 2017 as the impact of debt issuances were more than offset by debt retirements. Debt issuances during the three and six months ended June 30, 2018 totaled $1,161 million and $2,678 million, respectively, of which $360 million and $510 million, respectively, was issued by HSBC Bank USA.

Incremental issuances from our shelf registration statement with the SEC totaled $2,167 million of senior structured notes during the six months ended June 30, 2018. Total long-term debt outstanding under this shelf was $18,564 million and $21,387 million at June 30, 2018 and December 31, 2017, respectively.

Incremental issuances from the HSBC Bank USA Global Bank Note Program totaled $510 million during the six months ended June 30, 2018. Total debt outstanding under this program was $4,406 million and $4,117 million at June 30, 2018 and December 31, 2017, respectively.

Borrowings from the Federal Home Loan Bank of New York ("FHLB") totaled $3,100 million at both June 30, 2018 and December 31, 2017.

Interest, Taxes and Other Liabilities Interest, taxes and other liabilities increased compared with December 31, 2017 due primarily to higher outstanding settlement balances related to security purchases, higher reserves for legal matters and the impact of a security-for-security lending transaction as discussed above. These increases were partially offset by declines in derivative balances associated with hedging activities, tax liabilities and accrued interest payable.

Results of Operations

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

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

Three Months Ended June 30,	2018	2018 Compared to 2017 Increase (Decrease) Volume	Rate	2017
		(dollars are in millions)		
Interest income:				
Short-term investments	**$ 157**	$ (111)	$ 87	$ 181
Trading securities	**53**	15	(20)	58
Securities	**278**	(19)	55	242
Commercial loans	**452**	(17)	97	372
Consumer loans	**185**	—	9	176
Other	**22**	7	2	13
Total interest income	**1,147**	(125)	230	1,042
Interest expense:				
Deposits	**258**	(12)	101	169
Short-term borrowings	**43**	(15)	26	32
Long-term debt	**283**	(45)	77	251
Tax liabilities and other	**8**	1	(1)	8
Total interest expense	**592**	(71)	203	460
Net interest income	**$ 555**	$ (54)	$ 27	$ 582
Yield on total interest earning assets	**2.91%**			2.25%
Cost of total interest bearing liabilities	**1.87**			1.28
Interest rate spread	**1.04**			.97
Benefit from net non-interest paying funds[1]	**.37**			.29
Net interest margin on average earning assets	**1.41%**			1.26%

Six Months Ended June 30,	2018	2018 Compared to 2017 Increase (Decrease) Volume	Rate	2017
		(dollars are in millions)		
Interest income:				
Short-term investments	**$ 315**	$ (144)	$ 147	$ 312
Trading securities	**102**	23	(37)	116
Securities	**531**	(49)	96	484
Commercial loans	**866**	(64)	176	754
Consumer loans	**369**	(7)	9	367
Other	**38**	12	2	24
Total interest income	**2,221**	(229)	393	2,057
Interest expense:				
Deposits	**480**	(26)	187	319
Short-term borrowings	**76**	(14)	35	55
Long-term debt	**540**	(75)	122	493
Tax liabilities and other	**18**	6	1	11
Total interest expense	**1,114**	(109)	345	878
Net interest income	**$1,107**	$ (120)	$ 48	$ 1,179
Yield on total interest earning assets	**2.78%**			2.24%
Cost of total interest bearing liabilities	**1.73**			1.23
Interest rate spread	**1.05**			1.01
Benefit from net non-interest paying funds(1)	**.34**			.27
Net interest margin on average earning assets	**1.39%**			1.28%

(1) Represents the benefit associated with interest earning assets in excess of interest bearing liabilities. Increased percentages reflect growth in this excess, while decreased percentages reflect a reduction in this excess.

During the three and six months ended June 30, 2018, net interest income decreased as the favorable net impact of higher market rates was more than offset by lower interest income from the impact of lower average short-term investment and loan balances. Higher market rates resulted in higher interest income from securities and loans, partially offset by higher deposit, short-term borrowings and long-term debt interest expense.

Short-term investments Interest income was lower during the three months ended June 30, 2018 and was relatively flat in the year-to-date period as lower average balances largely reflecting a redeployment of surplus liquidity in the short term to precious metal inventory positions during the first half of 2018 was partially offset in the three-month period and more than offset in the year-to-date period by higher yields earned on these investments.

Trading securities Lower interest income during the three and six months ended June 30, 2018 was due to a shift in mix driven by a decrease in higher yielding corporate bond positions and increases in lower yielding foreign sovereign and U.S. Treasury positions which was partially offset by higher average balances overall. Securities in the trading portfolio are managed as economic hedges against the derivative activity of our clients. As a result, interest income associated with trading securities was partially offset within trading revenue by the performance of the associated derivatives as discussed further below.

Securities Interest income increased during the three and six months ended June 30, 2018 driven by higher yields, partially offset by lower average balances. Lower average balances reflects net sales of U.S. Treasury and U.S. Government sponsored mortgage-backed securities, partially offset by net purchases of U.S. Government agency mortgage-backed and foreign sovereign securities.

Commercial loans Interest income was higher during the three and six months ended June 30, 2018 due to higher yields driven by rate increases on variable rate products, partially offset by lower average balances due to paydowns, sales and maturities exceeding loan growth from new business activity.

Consumer loans Interest income increased during the three months ended June 30, 2018 due primarily to higher yields on residential mortgages. In the year-to-date period, interest income was relatively flat as higher yields on residential mortgages was largely offset by lower average balances driven by the impact of residential mortgage loan sales in the prior year.

Other Higher interest income during the three and six months ended June 30, 2018 largely reflects higher average balances in cash collateral posted.

Deposits Interest expense increased during the three and six months ended June 30, 2018 due primarily to higher rates paid reflecting the impact of rate increases on wholesale deposits and promotional rates offered to our retail customers on savings accounts and certificates of deposits. This increase was partially offset by lower average interest-bearing deposit balances driven by lower deposits from affiliates, a decline in wholesale time deposits and lower deposits in Private Banking reflecting the impact of the client referral agreement with UBS.

Short-term borrowings Higher interest expense during the three and six months ended June 30, 2018 was due to higher rates paid on these borrowings, partially offset by lower average borrowings.

Long-term debt Interest expense was higher during the three and six months ended June 30, 2018 due primarily to higher rates paid reflecting the impact of rate increases on variable rate borrowings and new issuances, partially offset by lower average borrowings.

Tax liabilities and other Interest expense was flat during the three months ended June 30, 2018. In the year-to-date period, interest expense increased driven by higher average borrowings in securities sold, not yet repurchased.

Provision for Credit Losses The following table summarizes the provision for credit losses associated with our various loan portfolios:

			Increase (Decrease)	
Three Months Ended June 30,	**2018**	**2017**	**Amount**	**%**
		(dollars are in millions)		
Commercial:				
Real estate, including construction	**$ (4)**	$ (9)	$ 5	55.6 %
Business and corporate banking	**(27)**	(5)	(22)	*
Global banking	**(25)**	—	(25)	*
Other commercial	**—**	—	—	—
Total commercial	**(56)**	(14)	(42)	*
Consumer:				
Residential mortgages	**(4)**	(8)	4	50.0
Home equity mortgages	**—**	(4)	4	100.0
Credit cards	**13**	6	7	*
Other consumer	**2**	(1)	3	*
Total consumer	**11**	(7)	18	*
Total provision for credit losses	**$ (45)**	$ (21)	$ (24)	*
Provision as a percentage of average loans	**(.3)%**	(.1)%		

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
		(dollars are in millions)		
Commercial:				
Real estate, including construction	**$ 6**	$ (8)	$ 14	*
Business and corporate banking	**(61)**	(47)	(14)	(29.8)
Global banking	**(74)**	(39)	(35)	(89.7)
Other commercial	**1**	2	(1)	(50.0)
Total commercial	**(128)**	(92)	(36)	(39.1)
Consumer:				
Residential mortgages	**(14)**	(8)	(6)	(75.0)
Home equity mortgages	**(1)**	(6)	5	83.3
Credit cards	**25**	9	16	*
Other consumer	**2**	(1)	3	*
Total consumer	**12**	(6)	18	*
Total provision for credit losses	**$ (116)**	$ (98)	$ (18)	(18.4)%
Provision as a percentage of average loans	(.3)%	(.3)%		

* Percentage change is greater than 100 percent.

Our provision for credit losses reflected higher releases of $24 million and $18 million during the three and six months ended June 30, 2018, respectively, due to higher releases in the provision for credit losses in our commercial loan portfolio, partially offset by an increased provision for credit losses in our consumer loan portfolio. During the three and six months ended June 30, 2018, we decreased our allowance for credit losses as the provision for credit losses was lower than net charge-offs by $68 million and $150 million, respectively.

Releases in the commercial provision for credit losses were higher by $42 million and $36 million during the three and six months ended June 30, 2018, respectively, reflecting continued improvements in the credit quality of our portfolio driven by paydowns, sales and maturities as we continued to focus efforts on improving returns, including the sale of a single mining client relationship in the second quarter of 2018, as well as improvements in credit conditions associated with certain client relationships. The higher releases were partially offset by an update to the loss emergence period factors and, in the year-to-date period, higher provisions for risk factors associated with geopolitical risks and market volatility inherent in certain segments of the portfolio.

The provision for credit losses on residential mortgages and home equity mortgages increased $8 million during the three months ended June 30, 2018 as the positive impacts of continued improvements in economic and credit conditions, including lower dollars of delinquency on accounts less than 180 days contractually delinquent, were more pronounced in the prior year period. In the year-to-date period, the provision for credit losses on residential mortgages and home equity mortgages was flat.

The provision for credit losses associated with credit cards and other consumer loans increased $10 million and $19 million during the three and six months ended June 30, 2018, respectively, due primarily to a higher provision for credit losses in credit cards reflecting growth in customer activity driven by new product promotions.

Our methodology and accounting policies related to the allowance for credit losses are presented in our 2017 Form 10-K under the caption "Critical Accounting Policies and Estimates" and in Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements." See "Credit Quality" in this MD&A for additional discussion on the allowance for credit losses associated with our various loan portfolios.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
		(dollars are in millions)		
Credit card fees	**$ 15**	$ 14	$ 1	7.1
Trust and investment management fees	**34**	39	(5)	(12.8)
Other fees and commissions	**184**	163	21	12.9
Trading revenue	**192**	71	121	*
Other securities gains, net	**10**	19	(9)	(47.4)
Servicing and other fees from HSBC affiliates(1)	**87**	81	6	7.4
Residential mortgage banking expense	**(2)**	(2)	—	—
Gain (loss) on instruments designated at fair value and related derivatives	**4**	(1)	5	*
Other income:				
Valuation of loans held for sale	**1**	6	(5)	(83.3)
Insurance	**3**	3	—	—
Gains on sales of Visa Class B Shares to a third party	**—**	166	(166)	(100.0)
Miscellaneous income (expense)	**9**	(1)	10	*
Total other income	**13**	174	(161)	(92.5)
Total other revenues	**$ 537**	$ 558	$ (21)	(3.8)%

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
		(in millions)		
Credit card fees	**$ 26**	$ 25	$ 1	4.0 %
Trust and investment management fees	**72**	77	(5)	(6.5)
Other fees and commissions	**344**	325	19	5.8
Trading revenue	**355**	141	214	*
Other securities gains, net	**15**	24	(9)	(37.5)
Servicing and other fees from HSBC affiliates(1)	**186**	195	(9)	(4.6)
Residential mortgage banking expense	**(2)**	(4)	2	50.0
Gain (loss) on instruments designated at fair value and related derivatives	**34**	33	1	3.0
Other income:				
Valuation of loans held for sale	**4**	14	(10)	(71.4)
Insurance	**6**	7	(1)	(14.3)
Gains on sales of Visa Class B Shares to a third party	**—**	312	(312)	(100.0)
Miscellaneous income (expense)	**10**	2	8	*
Total other income	**20**	335	(315)	(94.0)
Total other revenues	**$ 1,050**	$ 1,151	$ (101)	(8.8)%

* Percentage change is greater than 100 percent.

(1) During the fourth quarter of 2017, we changed our presentation for certain cost reimbursements that were previously netted as an offset to affiliate expense and began presenting these reimbursements gross in affiliate income. As a result, we have reclassified prior period amounts in order to conform to the current year presentation. See Note 14, "Related Party Transactions," in the accompanying consolidated financial statements for additional information.

Credit card fees Credit card fees were flat during the three and six months ended June 30, 2018 as higher interchange fees were offset by higher cost estimates associated with our credit card rewards program.

Trust and investment management fees Trust and investment management fees decreased during the three and six months ended June 30, 2018 due to lower assets under management in Private Banking reflecting the impact of the client referral agreement with UBS and, to a lesser extent, a decrease in assets under management in retail fixed income funds.

Other fees and commissions Other fees and commissions increased during the three and six months ended June 30, 2018 due primarily to higher credit facilities fees driven by increased loan syndication fees and guarantee fees as well as higher other fee based income reflecting the recognition of residual income associated with the termination and payoff of an unconsolidated variable interest entity ("VIE") and, in the three-month period, an increase in account service fees. These increases were partially offset by lower custody fees. See Note 13, "Fee Income from Contracts with Customers," in the accompanying consolidated financial statements for additional information including a summary of the components of other fees and commissions.

Trading revenue Trading revenue is generated by participation in the foreign exchange, rates, credit, equities and precious metals markets. The following table presents trading revenue by business activity. Not included in the table below is the impact of net interest income related to trading securities which is an integral part of trading activities' overall performance. Net interest income related to trading activities is recorded in net interest income in the consolidated statement of income. Trading revenues related to the mortgage banking business are included in residential mortgage banking expense.

			Increase (Decrease)	
Three Months Ended June 30,	**2018**	**2017**	**Amount**	**%**
		(dollars are in millions)		
Business Activities:				
Derivatives[1]	**$ 33**	$ (26)	$ 59	*
Foreign Exchange	**59**	44	15	34.1
Metals	**94**	49	45	91.8
Balance Sheet Management	**5**	9	(4)	(44.4)
Global Banking	**(3)**	(3)	—	—
Other trading	**4**	(2)	6	*
Total trading revenue	**$ 192**	$ 71	$ 121	*

			Increase (Decrease)	
Six Months Ended June 30,	**2018**	**2017**	**Amount**	**%**
		(in millions)		
Business Activities:				
Derivatives[1]	**$ 59**	$ (51)	$ 110	*
Foreign Exchange	**117**	100	17	17.0
Metals	**166**	83	83	100.0
Balance Sheet Management	**13**	10	3	30.0
Global Banking	**(4)**	(1)	(3)	*
Other trading	**4**	—	4	*
Total trading revenue	**$ 355**	$ 141	$ 214	*

* Percentage change is greater than 100 percent.

(1) Includes derivative contracts related to the Credit, Rates and Equities business activities within Global Markets as well as our legacy structured credit products. Derivative contracts related to the Foreign Exchange and Metals business activities within Global Markets as well as derivative products related to Balance Sheet Management, Global Banking and other trading are reported separately within those respective business activities.

Trading revenue increased during the three and six months ended June 30, 2018 largely driven by the improved performance of Derivatives, Metals and Foreign Exchange.

Trading revenue from Derivatives improved during the three and six months ended June 30, 2018 due to the improved performance of emerging markets products, favorable debit valuation adjustments associated with movements in our own credit spreads and, in the year-to-date period, favorable valuation adjustments on our legacy structured credit products. These improvements were partially offset by the non-recurrence of a gain of approximately $11 million recorded during the second quarter of 2017 related to the unwind of one of our unconsolidated VIEs. Derivatives trading revenue does not reflect associated net interest income as certain derivatives, such as total return swaps, were economically hedged by holding the underlying interest bearing referenced assets.

Foreign Exchange trading revenue increased during the three and six months ended June 30, 2018 due to increased client trading activity.

Metals trading revenue increased during the three and six months ended June 30, 2018 due to increased client trading activity reflecting improved investor demand for this asset class and the impact of a redeployment of surplus liquidity in the short term to Metals.

Trading revenue related to Balance Sheet Management activities was lower during the three months ended June 30, 2018 and higher in the year-to-date period. While the performance of economic hedge positions used to manage interest rate risk improved in the year-to-date period, it resulted in lower revenue in the three-month period.

Global Banking trading revenue was flat during the three months ended June 30, 2018. In the year-to-date period, Global Banking trading revenue decreased due primarily to a higher valuation reserve on credit default swap economic hedge positions.

Other securities gains, net We maintain securities portfolios as part of our balance sheet diversification and risk management strategies. During the three and six months ended June 30, 2018, we sold $1,623 million and $2,610 million, respectively, of primarily U.S. Treasury, U.S. Government agency mortgage-backed and U.S. Government sponsored mortgage-backed securities compared with sales of $8,085 million and $10,334 million during the prior year periods as part of a continuing strategy to maximize returns while balancing the securities portfolio for risk management purposes based on the current interest rate environment and liquidity needs. Other securities gains, net decreased during the three and six months ended June 30, 2018 reflecting the impact of lower sales activity associated with balancing the securities portfolio for risk management purposes. The gross realized gains and losses from sales of securities, which is included as a component of other securities gains, net above, are summarized in Note 3, "Securities," in the accompanying consolidated financial statements.

Servicing and other fees from HSBC affiliates Servicing and other fees from HSBC affiliates increased during the three months ended June 30, 2018 and decreased in the year-to-date period. The increase in the three-month period was largely due to higher cost reimbursements associated with wealth management activities performed on behalf of HSBC Markets (USA) Inc. ("HMUS") and, to a lesser extent, higher cost reimbursements associated with trading activities performed on behalf of HSBC Bank plc. These increases were partially offset by lower fees due to the transfer of certain operational support staff from HSBC Bank USA to HSBC Technology & Services (USA) ("HTSU") support services as discussed below as well as the non-recurrence of fees received from HSBC Finance Corporation ("HSBC Finance") in the prior year associated with residential mortgage servicing activities performed prior to the completion of its receivable sales program. In the year-to-date period, a net increase from the items discussed above as well as approximately $10 million of cost reimbursements recorded in the current year related to costs we incurred in prior years reflecting the impact of entering into an agreement with HSBC in December 2017 under which they reimburse us for costs we have incurred associated with enhancing the HSBC Group's digital banking platform were more than offset by the non-recurrence of $28 million of loan prepayment fees received from HSBC Finance in the prior year.

Residential mortgage banking expense Residential mortgage banking expense was relatively flat during the three and six months ended June 30, 2018.

Gain (loss) on instruments designated at fair value and related derivatives We have elected to apply fair value option accounting to certain commercial loans held for sale, certain securities purchased and sold under resale and repurchase agreements, certain 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 liabilities for which fair value option accounting has been elected. Gain (loss) on instruments designated at fair value and related derivatives was higher during the three months ended June 30, 2018 and was flat in the year-to-date period. The increase in the three-month period was attributable to favorable movements related to the economic hedging of interest rate and other risks within our own debt. In the year-to-date period, favorable movements related to the economic hedging of interest rate and other risks within our own debt and favorable fair value adjustments on loans were offset by unfavorable movements related to the economic hedging of interest rate and other risks within our structured deposits and unfavorable fair value adjustments on securities purchased under resale agreements. See Note 10, "Fair Value Option," in the accompanying consolidated financial statements for additional information including a breakout of these amounts by individual component.

Other income Beginning in late 2016 and into 2017, we sold substantially all of our remaining Visa Class B Shares to a third party. The portions of these shares sold during the three and six months ended June 30, 2017 resulted in net pre-tax gains of approximately $166 million and $312 million, respectively. Excluding this item, other income increased during the three months ended June 30, 2018 and remained lower in the year-to-date period. The increase in the three-month period was primarily due to higher income associated with credit default swap protection which largely reflects the hedging of a single client exposure, fair value gains recorded on equity investments in the current year and higher income associated with fair value hedge ineffectiveness. These increases were partially offset by a loss of $7 million recorded during the second quarter of 2018 related to a change in the Visa Class B Share conversion rate announced by Visa as a result of the outstanding litigation for which we retained the associated risk, as well as lower valuation gains on loans held for sale. In the year-to-date period, a net increase from the items discussed above was more than offset by the non-recurrence of a $42 million net gain recorded from the sale of certain residential mortgages in the prior year.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Salaries and employee benefits	**$ 212**	$ 256	$ (44)	(17.2)%
Support services from HSBC affiliates:[1]				
Fees paid to HSBC Technology and Services (USA) ("HTSU")	**310**	302	8	2.6
Fees paid to HSBC Markets (USA) Inc. ("HMUS")	**25**	31	(6)	(19.4)
Fees paid to other HSBC affiliates	**70**	66	4	6.1
Total support services from HSBC affiliates	**405**	399	6	1.5
Occupancy expense, net[1]	**45**	61	(16)	(26.2)
Other expenses:				
Equipment and software	**16**	14	2	14.3
Marketing	**33**	16	17	*
Outside services	**16**	23	(7)	(30.4)
Professional fees	**23**	25	(2)	(8.0)
Off-balance sheet credit reserves	**(13)**	(9)	(4)	(44.4)
Federal Deposit Insurance Corporation ("FDIC") assessment fees	**29**	39	(10)	(25.6)
Expense related to legal matters	**16**	7	9	*
Miscellaneous	**4**	18	(14)	(77.8)
Total other expenses	**124**	133	(9)	(6.8)
Total operating expenses	**$ 786**	$ 849	$ (63)	(7.4)%
Personnel - average number	**4,757**	5,791		
Efficiency ratio	**72.0%**	74.5%		

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Salaries and employee benefits	**$ 419**	$ 521	$ (102)	(19.6)%
Support services from HSBC affiliates:[1]				
Fees paid to HTSU	**608**	595	13	2.2
Fees paid to HMUS	**56**	60	(4)	(6.7)
Fees paid to other HSBC affiliates	**152**	128	24	18.8
Total support services from HSBC affiliates	**816**	783	33	4.2
Occupancy expense, net[1]	**88**	102	(14)	(13.7)
Other expenses:				
Equipment and software	**27**	24	3	12.5
Marketing	**61**	29	32	*
Outside services	**32**	42	(10)	(23.8)
Professional fees	**45**	41	4	9.8
Off-balance sheet credit reserves	**(15)**	(20)	5	25.0
FDIC assessment fees	**62**	80	(18)	(22.5)
Expense related to legal matters	**510**	26	484	*
Miscellaneous	**23**	40	(17)	(42.5)
Total other expenses	**745**	262	483	*
Total operating expenses	**$ 2,068**	$ 1,668	$ 400	24.0 %
Personnel - average number	**4,768**	5,788		
Efficiency ratio	**95.9%**	71.6%		

* Percentage change is greater than 100 percent.

(1) During the fourth quarter of 2017, we changed our presentation for certain cost reimbursements that were previously netted as an offset to affiliate expense and began presenting these reimbursements gross in affiliate income. Separately, we also concluded that rental revenue we receive from our affiliates for rent on certain office space would be better presented as a reduction to occupancy expense as opposed to a reduction to affiliate expense. As a result, we have reclassified prior period amounts in order to conform to the current year presentation. See Note 14, "Related Party Transactions," in the accompanying consolidated financial statements for additional information.

Prior to 2018, costs to achieve, which reflected transformation costs to deliver the cost reduction and productivity outcomes outlined in the HSBC Investor Update in June 2015, were a significant component of total operating expenses. Costs to achieve primarily consisted of project cost support service charges from HTSU, lease termination and associated expenses, professional fees and severance costs. Excluding costs to achieve, total operating expenses increased $6 million and $508 million during the three and six months ended June 30, 2018, respectively. The following table presents costs to achieve by financial statement line item:

Three Months Ended June 30,	**2017**
	(in millions)
Salaries and employee benefits	$ 3
Support services from HSBC affiliates	39
Occupancy expense, net	17
Other expenses	10
Total operating expenses	$ 69

Six Months Ended June 30,	**2017**
	(in millions)
Salaries and employee benefits	$ 8
Support services from HSBC affiliates	67
Occupancy expense, net	17
Other expenses	16
Total operating expenses	$ 108

Salaries and employee benefits Salaries and employee benefits decreased during the three and six months ended June 30, 2018 due primarily to lower expense reflecting the impact of transferring certain operational support staff from HSBC Bank USA to HTSU support services in January 2018 in order to comply with certain banking reforms. The decrease in salaries and employees benefits also reflects lower pension expense driven primarily by the impact of the lump-sum settlement offer completed during the fourth quarter of 2017, the non-recurrence of costs to achieve recorded in the prior year periods as discussed above, the non-recurrence of expense recorded in the prior year periods related to staff performing residential mortgage serving activities on behalf of HSBC Finance prior to the completion of its receivable sales program and, in the year-to-date period, lower expense associated with long-term disability medical benefits. These decreases were partially offset by the impact of salaries expense related to the addition of personnel associated with growth initiatives in certain businesses.

Support services from HSBC affiliates Support services from HSBC affiliates increased during the three and six months ended June 30, 2018 due primarily to higher expense associated with certain operational support staff which were transferred from HSBC Bank USA to HTSU support services as discussed above as well as increased costs associated with our investment to improve and modernize our legacy business systems. These increases were partially offset by the favorable impact of cost management efforts in our technology and support service functions and the non-recurrence of costs to achieve recorded in the prior year periods as discussed above. A summary of the activities charged to us from various HSBC affiliates is included in Note 14, "Related Party Transactions," in the accompanying consolidated financial statements.

Occupancy expense, net Occupancy expense decreased during the three and six months ended June 30, 2018 due primarily to the non-recurrence of costs to achieve recorded in the prior year periods as discussed above and, to a lesser extent, lower depreciation expense. These decreases were partially offset by increased maintenance costs and, in the year-to-date period, the impact of extending the lease of our 452 Fifth Avenue property, including the 1 W. 39th Street building. The sale and leaseback of our 452 Fifth Avenue property in 2010 resulted in a gain which is deferred and was being recognized over the lease term (which was ten years) due to our continuing involvement. During the second quarter of 2017, we extended the lease for an additional five years as well as the amortization of the deferred gain to reflect the new lease term.

Other expenses Other expenses were lower during the three months ended June 30, 2018 and increased in the year-to-date period. The decrease in the three-month period reflects higher levels of expense capitalization related to internally developed software, lower deposit insurance assessment fees and the non-recurrence of costs to achieve recorded in the prior year period which were partially offset by higher marketing expense and higher expense related to certain legal matters. In the year-to-date period, higher expense related to certain legal matters and higher marketing expense more than offset the favorable impact associated with the items discussed above.

Efficiency ratio Our efficiency ratio was relatively flat during the three months ended June 30, 2018. In the year-to-date period, our efficiency ratio increased due to higher operating expenses, lower other revenues and lower net interest income as discussed in detail above.

Income tax expense The following table provides an analysis of the difference between effective rates based on the provision for income taxes attributable to pretax income and the statutory U.S. Federal income tax rate:

Three Months Ended June 30,	**2018**		**2017**	
	(dollars are in millions)			
Tax expense at the U.S. Federal statutory income tax rate	**$ 74**	**21.0%**	$ 109	35.0%
Increase (decrease) in rate resulting from:				
State and local taxes, net of Federal benefit	**13**	**3.7**	9	2.9
Non-deductible FDIC assessment fees	**7**	**2.0**	—	—
Other non-deductible / non-taxable items[1]	**5**	**1.4**	1	.3
Items affecting prior periods[2]	**(17)**	**(4.8)**	—	—
Low income housing and other tax credit investments	**(1)**	**(.3)**	(6)	(1.9)
Stock based compensation	**(1)**	**(.3)**	(7)	(2.2)
Other	**2**	**.7**	2	.6
Provision for income taxes	**$ 82**	**23.4%**	$ 108	34.6%

Six Months Ended June 30,	**2018**		**2017**	
	(dollars are in millions)			
Tax expense at the U.S. Federal statutory income tax rate	**$ 43**	**21.0%**	$ 266	35.0%
Increase (decrease) in rate resulting from:				
State and local taxes, net of Federal benefit	**25**	**12.2**	21	2.8
Non-deductible FDIC assessment fees	**19**	**9.3**	—	—
Other non-deductible / non-taxable items[1]	**105**	**51.2**	2	.3
Items affecting prior periods[2]	**(17)**	**(8.3)**	(9)	(1.2)
Low income housing and other tax credit investments	**(2)**	**(1.0)**	(12)	(1.6)
Stock based compensation	**(1)**	**(.5)**	(10)	(1.3)
Other	**2**	**1.0**	2	.3
Provision for income taxes	**$ 174**	**84.9%**	$ 260	34.2%

(1) For 2018, the amounts primarily relate to the accrual of non-deductible expense related to legal matters.

(2) For 2018, the amounts relate to revaluation of certain deferred tax assets due to tax return adjustments and the federal tax rate legislation change. For the six months ended June 30, 2017, the amount relates to the impact of State tax rate adjustments on deferred tax assets.

In December 2017, the Tax Cuts and Jobs Act ("Tax Legislation") was enacted which reduced the Federal corporate income tax rate from 35 percent to 21 percent effective January 1, 2018. The Tax Legislation also contained other complex provisions, such as the Base Erosion and Anti-Abuse Tax ("BEAT"), which may have a material impact in future periods on income tax expense and taxes payable for the HSBC North America consolidated tax group, of which we are a member. We are currently evaluating the BEAT provisions and their potential impact, which is currently uncertain and will depend on future tax regulatory guidance, actions HSBC North America or its affiliates may take as a result of the Tax Legislation and the future earnings of HUSI and other subsidiaries of HSBC North America. Although our analysis is ongoing and could change depending upon the factors discussed above, we currently do not anticipate a material impact on our financial position or results of operations from the BEAT.

Segment Results – Group Reporting Basis

We have five distinct business segments that are utilized for management reporting and analysis purposes which are aligned with HSBC's global business strategy: Retail Banking and Wealth Management ("RBWM"), Commercial Banking ("CMB"), Global Banking and Markets ("GB&M"), Private Banking ("PB") and a Corporate Center ("CC"). The segments, which are generally based upon customer groupings and global businesses, are described under Item 1, "Business," in our 2017 Form 10-K. There have been no changes in the basis of our segmentation as compared with the presentation in our 2017 Form 10-K.

We report financial information to our parent, HSBC, in accordance with HSBC Group accounting and reporting policies, which apply IFRS issued by the IASB and endorsed by the EU, and, 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.

As discussed more fully in "Basis of Reporting" in this MD&A, during the first quarter of 2018, we adopted new accounting guidance under the Group Reporting Basis for the requirements of IFRS 9 and we also implemented a change in accounting policy under the Group Reporting Basis to classify structured notes and deposits as liabilities designated under the fair value option. There have been no additional changes in the measurement of segment profit as compared with the presentation in our 2017 Form 10-K.

The significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in our 2017 Form 10-K in Note 22, "Business Segments," and under the caption "Basis of Reporting" in the MD&A section. In addition, see "Basis of Reporting" in this MD&A for a discussion of significant changes since December 31, 2017 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

Retail Banking and Wealth Management RBWM provides a range of banking and wealth products and services to individuals and certain small businesses, focusing on internationally minded customers in large metropolitan centers on the West and East coasts.

During the first half of 2018, we continued to direct resources towards the development and delivery of premium service. Particular focus has been placed on HSBC Premier, HSBC's global banking service which offers customers a seamless international service, and HSBC Advance, a proposition directed towards the emerging affluent customer in the initial stages of wealth accumulation. In addition, we have experienced higher credit card receivables reflecting growth in customer activity driven by new product promotions.

The following table summarizes the Group Reporting Basis results for our RBWM segment:

			Increase (Decrease)	
Three Months Ended June 30,	**2018**	**2017**	**Amount**	**%**
		(dollars are in millions)		
Net interest income	**$ 225**	$ 221	$ 4	1.8%
Other operating income[1]	**71**	238	(167)	(70.2)
Total operating income[2]	**296**	459	(163)	(35.5)
Expected credit losses / loan impairment charges	**3**	(3)	6	*
Net operating income	**293**	462	(169)	(36.6)
Operating expenses[1]	**341**	287	54	18.8
Profit (loss) before tax	**$ (48)**	$ 175	$ (223)	*

			Increase (Decrease)	
Six Months Ended June 30,	**2018**	**2017**	**Amount**	**%**
		(dollars are in millions)		
Net interest income	**$ 441**	$ 434	$ 7	1.6%
Other operating income[1]	**164**	386	(222)	(57.5)
Total operating income[2]	**605**	820	(215)	(26.2)
Expected credit losses / loan impairment charges	**6**	6	—	—
Net operating income	**599**	814	(215)	(26.4)
Operating expenses[1]	**666**	573	93	16.2
Profit (loss) before tax	**$ (67)**	$ 241	$ (308)	*

* Percentage change is greater than 100 percent.

(1) During the fourth quarter of 2017, we changed our presentation for certain cost reimbursements that were previously netted as an offset to affiliate expense and began presenting these reimbursements gross in affiliate income. As a result, we have reclassified prior period amounts in order to conform to the current year presentation, which increased both RBWM other operating income and RBWM operating expenses $13 million and $24 million during the three and six months ended June 30, 2017, respectively. See Note 14, "Related Party Transactions," for additional information.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Current accounts, savings and deposits	**$ 171**	$ 160	$ 11	6.9 %
Mortgages, credit cards and other personal lending	**58**	68	(10)	(14.7)
Wealth and asset management products	**28**	44	(16)	(36.4)
Retail business banking and other[3]	**39**	187	(148)	(79.1)
Total operating income	**$ 296**	$ 459	$ (163)	(35.5)%

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Current accounts, savings and deposits	**$ 343**	$ 299	$ 44	14.7 %
Mortgages, credit cards and other personal lending	**116**	146	(30)	(20.5)
Wealth and asset management products	**59**	88	(29)	(33.0)
Retail business banking and other[3]	**87**	287	(200)	(69.7)
Total operating income	**$ 605**	$ 820	$ (215)	(26.2)%

(3) During the three and six months ended June 30, 2017, retail business banking and other reflects gains on the sales of Visa Class B Shares of approximately $166 million and $312 million, respectively, and, in the year-to-date period, a loss on the sale of certain partially charged-off residential mortgages as discussed below.

Our RBWM segment reported a loss before tax during the three and six months ended June 30, 2018 compared with a profit before tax in the prior year periods due primarily to lower other operating income driven by the non-recurrence of net pre-tax gains of approximately $166 million and $312 million recorded from the sales of Visa Class B Shares during the three and six months ended June 30, 2017, respectively, as well as higher operating expenses.

Net interest income increased slightly during the three and six months ended June 30, 2018 driven by higher net interest income from deposits due to improved spreads, partially offset by lower net interest income from lending driven by the impact of loan sales in the prior year and a continued decline in home equity mortgages.

Excluding the gains on sales of Visa Class B Shares as discussed above, other operating income was flat during the three months ended June 30, 2018 and increased in the year-to-date period. The increase in the year-to-date period was driven by the non-recurrence of a loss of $73 million recorded during the first quarter of 2017 on the sale of certain partially charged-off residential mortgages, higher cost reimbursements associated with wealth management activities performed on behalf of HMUS and approximately $10 million of cost reimbursements recorded in the current year related to costs we incurred in prior years reflecting the impact of entering into an agreement with HSBC in December 2017 under which they reimburse us for costs we have incurred associated with enhancing the HSBC Group's digital banking platform. These increases were partially offset by a loss of $7 million recorded during the second quarter of 2018 related to a change in the Visa Class B Share conversion rate announced by Visa as a result of the outstanding litigation for which we retained the associated risk.

Expected credit losses increased during the three months ended June 30, 2018 and was relatively flat in the year-to-date period. The increase in the three-month period was driven by higher loss estimates in credit cards reflecting growth in customer activity driven by new product promotions. In addition, the current year periods reflect the impact of adopting IFRS 9.

Operating expenses increased during the three and six months ended June 30, 2018 due primarily to higher marketing expense largely driven by new product promotions in credit cards, higher expense related to the addition of personnel associated with growth initiatives and, in the year-to-date period, higher legal costs.

Commercial Banking CMB offers a full range of commercial financial services and tailored solutions to enable clients to grow their businesses, focusing on key markets with high concentrations of international connectivity.

Total quarter-to-date average loans outstanding, including loans held for sale, increased 3 percent as compared with the second quarter of 2017 as we focused efforts on improving returns while growing the business. Total quarter-to-date average deposits outstanding were 14 percent higher as compared with the second quarter of 2017.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 195**	$ 181	$ 14	7.7%
Other operating income	**58**	52	6	11.5
Total operating income[(1)]	**253**	233	20	8.6
Expected credit losses / loan impairment charges	**(36)**	(5)	(31)	*
Net operating income	**289**	238	51	21.4
Operating expenses	**139**	141	(2)	(1.4)
Profit before tax	**$ 150**	$ 97	$ 53	54.6%

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 381**	$ 361	$ 20	5.5%
Other operating income	**113**	104	9	8.7
Total operating income[(1)]	**494**	465	29	6.2
Expected credit losses / loan impairment charges	**(46)**	(41)	(5)	(12.2)
Net operating income	**540**	506	34	6.7
Operating expenses	**290**	280	10	3.6
Profit before tax	**$ 250**	$ 226	$ 24	10.6%

* Percentage change is greater than 100 percent.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Lending and Transaction Management	**$ 109**	$ 111	$ (2)	(1.8)%
Global Liquidity and Cash Management, current accounts and savings deposits	**116**	104	12	11.5
Global Trade and Receivables Finance	**12**	13	(1)	(7.7)
Investment banking products and other	**16**	5	11	*
Total operating income	**$ 253**	$ 233	$ 20	8.6 %

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Lending and Transaction Management	**$ 217**	$ 217	$ —	— %
Global Liquidity and Cash Management, current accounts and savings deposits	**225**	198	27	13.6
Global Trade and Receivables Finance	**24**	27	(3)	(11.1)
Investment banking products and other	**28**	23	5	21.7
Total operating income	**$ 494**	$ 465	$ 29	6.2 %

Our CMB segment reported higher profit before tax during the three and six months ended June 30, 2018 due primarily to higher net interest income, higher other operating income and higher releases in expected credit losses. These increases were partially offset in the year-to-date period by higher operating expenses.

Net interest income increased during the three and six months ended June 30, 2018 due to the favorable impact of higher deposit balances and improved spreads from rate increases.

Other operating income increased during the three and six months ended June 30, 2018 driven by higher loan fees and higher GB&M collaboration revenue.

Expected credit losses reflected higher releases during the three and six months ended June 30, 2018 due to continued improvements in the credit quality of our portfolio driven by paydowns, sales and maturities as well as improvements in credit conditions associated with certain client relationships. In addition, the current year periods reflect the impact of adopting IFRS 9.

Operating expenses decreased slightly during the three months ended June 30, 2018 and was higher in the year-to-date period as lower staff costs and deposit insurance assessment fees were more than offset in the year-to-date period by higher support service cost allocations from affiliates.

Global Banking and Markets GB&M provides tailored financial solutions to major government, corporate and institutional clients worldwide.

We continue to target U.S. companies with international banking requirements and foreign companies with banking needs in the Americas. Consistent with our global strategy, we are also focused on identifying opportunities to offer our products to CMB, PB and RBWM customers.

The following table summarizes the Group Reporting Basis results for our GB&M segment:

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 151**	$ 156	$ (5)	(3.2)%
Other operating income(1)	**252**	169	83	49.1
Total operating income(2)	**403**	325	78	24.0
Expected credit losses / loan impairment charges	**(143)**	(2)	(141)	*
Net operating income	**546**	327	219	67.0
Operating expenses(1)	**209**	248	(39)	(15.7)
Profit before tax	**$ 337**	$ 79	$ 258	*

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 300**	$ 308	$ (8)	(2.6)%
Other operating income(1)	**449**	311	138	44.4
Total operating income(2)	**749**	619	130	21.0
Expected credit losses / loan impairment charges	**(157)**	(37)	(120)	*
Net operating income	**906**	656	250	38.1
Operating expenses(1)	**425**	472	(47)	(10.0)
Profit before tax	**$ 481**	$ 184	$ 297	*

* Percentage change is greater than 100 percent.

(1) During the fourth quarter of 2017, we changed our presentation for certain cost reimbursements that were previously netted as an offset to affiliate expense and began presenting these reimbursements gross in affiliate income. As a result, we have reclassified prior period amounts in order to conform to the current year presentation, which increased both GB&M other operating income and GB&M operating expenses $16 million and $37 million during the three and six months ended June 30, 2017, respectively. See Note 14, "Related Party Transactions," for additional information.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	Increase (Decrease) %
	(dollars are in millions)			
Credit	**$ 12**	$ 2	$ 10	*
Rates	**20**	5	15	*
Foreign Exchange and Metals	**91**	59	32	54.2
Equities	**2**	2	—	—
Total Global Markets	**125**	68	57	83.8
Global Banking	**109**	76	33	43.4
Global Liquidity and Cash Management	**126**	130	(4)	(3.1)
Securities Services	**10**	14	(4)	(28.6)
Global Trade and Receivables Finance	**14**	13	1	7.7
Credit and funding valuation adjustments(3)	**(11)**	12	(23)	*
Other(4)	**30**	12	18	*
Total operating income	**$ 403**	$ 325	$ 78	24.0%

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	Increase (Decrease) %
	(dollars are in millions)			
Credit	**$ 22**	$ 10	$ 12	*
Rates	**18**	44	(26)	(59.1)
Foreign Exchange and Metals	**172**	136	36	26.5
Equities	**13**	14	(1)	(7.1)
Total Global Markets	**225**	204	21	10.3
Global Banking	**181**	132	49	37.1
Global Liquidity and Cash Management	**259**	248	11	4.4
Securities Services	**26**	23	3	13.0
Global Trade and Receivables Finance	**27**	25	2	8.0
Credit and funding valuation adjustments(3)	**(7)**	(36)	29	80.6
Other(4)	**38**	23	15	65.2
Total operating income	**$ 749**	$ 619	$ 130	21.0%

(3) During the three and six months ended June 30, 2017, credit and funding valuation adjustments included a gain of $26 million and a loss of $23 million, respectively, from the fair value movement on structured notes and deposits attributable to our own credit spread.

(4) Other includes cost reimbursements associated with activities performed on behalf of other HSBC affiliates, corporate funding charges and net interest income on capital held in the business and not assigned to products.

Our GB&M segment reported higher profit before tax during the three and six months ended June 30, 2018 due to higher other operating income, higher releases in expected credit losses and lower operating expenses, partially offset by lower net interest income.

Credit revenue increased during the three and six months ended June 30, 2018 due to higher revenue from collateralized financing related activity.

Revenue from Rates increased during the three months ended June 30, 2018 due to the improved performance of emerging markets products. In the year-to-date period, revenue from Rates decreased as the the improved performance of emerging markets products was more than offset by unfavorable movements related to the economic hedging of interest rate and other risks within our structured notes and deposits. In addition, while revenue from new deal activity on interest rate swaps was higher and contributed to the increase in the three-month period, it was lower and contributed to the decrease in the year-to-date period.

Foreign Exchange and Metals revenue increased during the three and six months ended June 30, 2018 driven by higher revenue in both Metals and Foreign Exchange from client related trading activity.

Equities revenue was relatively flat during the three and six months ended June 30, 2018.

Global Banking revenue increased during the three and six months ended June 30, 2018 due to higher loan syndication and other fees as well as higher income associated with credit default swap protection which largely reflects the hedging of a single client exposure. These increases were partially offset by lower net interest income driven by lower loan balances due to paydowns, sales and maturities exceeding loan growth as we focused efforts on improving returns.

Global Liquidity and Cash Management revenue decreased during the three months ended June 30, 2018 due to the reporting change for cost reimbursements associated with activities performed on behalf of other HSBC affiliates discussed further below. This decrease was more than offset in the year-to-date period by higher net interest income due to the favorable impact of higher short-term market rates, an increase in high quality deposit balances and higher clearing fees.

Securities Services revenue decreased during the three months ended June 30, 2018 due to the reporting change for cost reimbursements associated with activities performed on behalf of other HSBC affiliates as discussed further below. This decrease was more than offset in the year-to-date period by higher revenue from new direct custody and clearing client activity as well as higher net interest income due to the favorable impact of higher short-term market rates.

Global Trade and Receivables Finance revenue increased slightly during the three and six months ended June 30, 2018 due to higher fees on standby letters of credit.

Credit and funding valuation adjustments during the three and six months ended June 30, 2017 included a gain of $26 million and a loss of $23 million, respectively, from the fair value movement on structured notes and deposits attributable to our own credit spread. As discussed above, beginning January 1, 2018, the fair value movement on structured notes and deposits attributable to our own credit spread is now being recorded in other comprehensive income. Excluding this item, credit and funding valuation adjustments improved during the three and six months ended June 30, 2018 attributable primarily to movements in our own credit spreads within our derivative liability balances.

Other revenue increased during the three and six months ended June 30, 2018 reflecting higher net interest income on capital held in the business and not assigned to products, higher cost reimbursements associated with activities performed on behalf of other HSBC affiliates and, in the year-to-date period, the non-recurrence of an inducement fee paid to a third party in the first quarter of 2017 associated with the sale of a portion of our portfolio of residual interests in real estate mortgage investment conduits. These increases were partially offset by higher corporate funding and excess liquidity charges. In addition, during the second quarter of 2018 we began reporting cost reimbursements associated with activities performed on behalf of other HSBC affiliates in Other. As a result, we reported $16 million of cost reimbursements in Other during both the three and six months ended June 30, 2018 that previously would have been reported in Global Liquidity and Cash Management and Securities Services above.

Expected credit losses reflected higher releases during the three and six months ended June 30, 2018 due to continued improvements in the credit quality of our portfolio driven by paydowns, sales and maturities as we continued to focus efforts on improving returns, including the sale of a single mining client relationship in the second quarter of 2018, as well as improvements in credit conditions associated with certain client relationships, including the upgrade of a large oil and gas client relationship during the second quarter of 2018. In addition, the current year periods reflect the impact of adopting IFRS 9.

Operating expenses were lower during the three and six months ended June 30, 2018 due primarily to lower staff costs, lower deposit insurance assessment fees, lower legal costs and lower corporate function cost allocations from affiliates.

Private Banking PB serves high net worth and ultra-high net worth individuals and families with complex needs domestically and abroad.

In August 2017, our PB business entered into an agreement to refer parts of its Latin America portfolio, consisting primarily of clients based in areas where we do not have a corporate presence, including Central America and the Andean Pact, to UBS. Under the terms of the agreement, we facilitate the referral of these client relationships to UBS for a fee, including the transfer of client assets, consisting of client investments and deposits, as well as the transfer of the relationship managers and client service employees that support these clients. Loans associated with these client relationships were not included in the agreement. Total operating income associated with these client relationships was approximately $4 million and $12 million during the three and six months ended June 30, 2018, respectively, and $12 million and $25 million during the three and six months ended June 30, 2017, respectively.

Total client deposit levels decreased $2,020 million or 20 percent and total loans decreased by $318 million or 5 percent as compared with June 30, 2017. Overall period end client assets were $3,633 million lower than June 30, 2017.

The following table provides additional information regarding client assets during the six months ended June 30, 2018 and 2017:

Six Months Ended June 30,	2018	2017
	(in millions)	
Client assets at beginning of period	**$ 39,089**	$ 40,462
Net new money	**442**	129
Client transfers to UBS	**(1,116)**	—
Value change	**(42)**	1,416
Client assets at end of period	**$ 38,373**	$ 42,007

The following table summarizes the Group Reporting Basis results for our PB segment:

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 43**	$ 56	$ (13)	(23.2)%
Other operating income	**16**	21	(5)	(23.8)
Total operating income	**59**	77	(18)	(23.4)
Expected credit losses / loan impairment charges	**—**	1	(1)	(100.0)
Net operating income	**59**	76	(17)	(22.4)
Operating expenses	**61**	63	(2)	(3.2)
Profit (loss) before tax	**$ (2)**	$ 13	$ (15)	*

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 90**	$ 109	$ (19)	(17.4)%
Other operating income	**36**	42	(6)	(14.3)
Total operating income	**126**	151	(25)	(16.6)
Expected credit losses / loan impairment charges	**(3)**	3	(6)	*
Net operating income	**129**	148	(19)	(12.8)
Operating expenses	**122**	124	(2)	(1.6)
Profit (loss) before tax	**$ 7**	$ 24	$ (17)	(70.8)%

* Percentage change is greater than 100 percent.

Our PB segment reported a loss before tax during the three months ended June 30, 2018 compared with a profit before tax during the prior year quarter due to lower net interest income and lower operating income, partially offset by lower operating expenses. In the year to date period, our PB segment reported lower profit before tax due to lower net interest income and lower other operating income, partially offset by improved expected credit losses and lower operating expense.

Net interest income decreased during the three and six months ended June 30, 2018 reflecting the impact of lower deposit balances due primarily to the impact of the client referral agreement with UBS.

Other operating income decreased during the three and six months ended June 30, 2018 due to a $3 million loss recorded during the second quarter of 2018 as a result of a decline in the estimated fair value of the contingent consideration receivable associated with the sale discussed above as well as lower fees and commissions reflecting a decline in assets under management.

Expected credit losses were flat during the three months ended June 30, 2018. In the year-to-date period, expected credit losses improved driven by a recovery in the current year reflecting lower loss estimates in the mortgage portfolio. In addition, the current year periods reflect the impact of adopting IFRS 9.

Operating expenses were relatively flat during the three and six months ended June 30, 2018.

Corporate Center CC includes Balance Sheet Management, our legacy structured credit products, income and expense associated with certain affiliate transactions, certain corporate function costs, adjustments to the fair value of HSBC shares held for stock plans, interest expense associated with certain tax exposures, income associated with other tax related investments and changes in the fair value of certain debt issued for which fair value option accounting was elected and related derivatives (excluding the fair value movement on own fair value option debt attributable to our own credit spread which is recorded in other comprehensive income) and, for periods prior to 2018, costs to achieve and certain legacy residential mortgage loan and servicing activities.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income (expense)	**$ 18**	$ (7)	$ 25	*
Other operating income	**72**	78	(6)	(7.7)
Total operating income[1]	**90**	71	19	26.8
Expected credit losses / loan impairment charges	**1**	—	1	*
Net operating income	**89**	71	18	25.4
Operating expenses	**54**	125	(71)	(56.8)
Profit (loss) before tax	**$ 35**	$ (54)	$ 89	*

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income (expense)	**$ 33**	$ 1	$ 32	*
Other operating income	**155**	172	(17)	(9.9)
Total operating income[1]	**188**	173	15	8.7
Expected credit losses / loan impairment charges	**4**	(1)	5	*
Net operating income	**184**	174	10	5.7
Operating expenses	**586**	235	351	*
Profit (loss) before tax	**$ (402)**	$ (61)	$ (341)	*

* Percentage change is greater than 100 percent.

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

Three Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Balance Sheet Management[2]	**$ 78**	$ 55	$ 23	41.8%
Legacy structured credit products	**1**	21	(20)	(95.2)
Legacy residential mortgage activities[3]	**—**	6	(6)	(100.0)
Other	**11**	(11)	22	*
Total operating income	**$ 90**	$ 71	$ 19	26.8%

Six Months Ended June 30,	2018	2017	Increase (Decrease) Amount	%
	(dollars are in millions)			
Balance Sheet Management[2]	**$ 146**	$ 133	$ 13	9.8%
Legacy structured credit products	**18**	24	(6)	(25.0)
Legacy residential mortgage activities[3]	**—**	26	(26)	(100.0)
Other	**24**	(10)	34	*
Total operating income	**$ 188**	$ 173	$ 15	8.7%

(2) Balance Sheet Management includes gains on the sale of securities of $10 million and $15 million in the three and six months ended June 30, 2018, respectively, compared with $18 million and $21 million in the three and six months ended June 30, 2017, respectively.

(3) Reflected fees associated with residential mortgage servicing activities performed on behalf of HSBC Finance prior to the completion of its receivable sales program and revenue associated with certain residential mortgage loans that we previously purchased from HSBC Finance and sold during 2017.

Our CC segment reported a profit before tax during the three months ended June 30, 2018 compared with a loss before tax in the prior year quarter due to lower operating expenses and higher net interest income, partially offset by lower other operating income. In the year-to-date period, our CC segment reported a higher loss before tax due primarily to higher operating expenses driven by higher legal costs and lower other operating income, partially offset by higher net interest income.

Net interest income was higher during the three and six months ended June 30, 2018 driven by higher corporate funding charges to the businesses as the charges in the prior year were reduced due to the loan prepayment fees received from HSBC Finance as discussed below as well as higher net interest income in Balance Sheet Management reflecting the impact of favorable rates.

Other operating income decreased during the three and six months ended June 30, 2018 driven largely by the non-recurrence of revenue recorded in the prior year periods associated with legacy activities, including a gain of approximately $11 million associated with the unwind of one of our unconsolidated VIEs during the second quarter of 2017, $28 million of loan prepayment fees received from HSBC Finance during the first quarter of 2017 and a gain of $15 million recorded during the first quarter of 2017 from the sale of certain residential mortgages that we previously purchased from HSBC Finance. Also contributing to the decreases in both periods were lower gains from asset sales in Balance Sheet Management. These decreases were partially offset by favorable movements related to the economic hedging of interest rate and other risks within our own debt, the improved performance of economic hedge positions used to manage interest rate risk and, in the year-to-date period, favorable valuation adjustments on our legacy structured credit products.

Expected credit losses were higher during the three and six months ended June 30, 2018 reflecting the impact of recording expected credit losses on certain financial assets in the current year periods due to the adoption of IFRS 9.

Operating expenses were lower during the three months ended June 30, 2018 and higher in the year-to-date period as higher legal costs were more than offset in the three-month period and partially offset in the year-to-date period by the non-recurrence of costs to achieve of approximately $60 million and $89 million during the three and six months ended June 30, 2017, respectively, as well as higher levels of expense capitalization related to internally developed software and the non-recurrence of expense related to staff performing residential mortgage serving activities on behalf of HSBC Finance.

Reconciliation of Segment Results As previously discussed, segment results are reported on a Group Reporting Basis. For segment reporting purposes, inter-segment transactions have not been eliminated, and we generally account for transactions between segments as if they were with third parties. See Note 15, "Business Segments," in the accompanying consolidated financial statements for a reconciliation of our Group Reporting Basis segment results to U.S. GAAP consolidated totals.

Credit Quality

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

Our reported results under U.S. GAAP reflect the following methodologies for establishing the allowance for credit losses.

Allowance for Credit Losses Commercial loans are monitored on a continuous basis with a formal assessment completed, at a minimum, annually. As part of this process, a credit grade and loss given default are assigned and an allowance is established for these loans based on a probability of default estimate associated with each credit grade under the allowance for credit losses methodology. Credit Review, a function independent of the business, provides an ongoing assessment of lending activities that includes independently assessing credit grades and loss given default estimates for sampled credits across various portfolios. When it is deemed probable based upon known facts and circumstances that full interest and principal on an individual loan will not be collected in accordance with its contractual terms, the loan is considered impaired. An impairment reserve is then established based on the present value of expected future cash flows, discounted at the loan's original effective interest rate, or as a practical expedient, the loan's observable market price or the fair value of the collateral if the loan is collateral dependent. Updated appraisals for collateral dependent loans are generally obtained only when such loans are considered troubled and the frequency of such updates are generally based on management judgment under the specific circumstances on a case-by-case basis. In addition, loss reserves on commercial loans are maintained to reflect our judgment of portfolio risk factors which may not be fully reflected in the reserve calculations.

Our probability of default estimates for commercial loans are mapped to our credit grade master scale. These probability of default estimates are validated on an annual basis using back-testing of actual default rates and benchmarking of the internal ratings with external rating agency data like Standard and Poor's ("S&P") ratings and default rates. Substantially all appraisals in connection with commercial real estate loans are ordered by the independent real estate appraisal review unit at HSBC. The appraisal must be reviewed and accepted by this unit. For loans greater than $250,000, an appraisal is generally ordered when the loan is classified as Substandard as defined by the Office of the Comptroller of the Currency ("OCC"). On average, it takes approximately four weeks from the time the appraisal is ordered until it is completed and the values accepted by HSBC's independent appraisal review unit. Subsequent provisions or charge-offs are completed shortly thereafter, generally within the quarter in which the appraisal is received.

In situations where an external appraisal is not used to determine the fair value of the underlying collateral of impaired loans, current information such as rent rolls and operating statements of the subject property are reviewed and presented in a standardized format. Operating results such as net operating income and cash flows before and after debt service are established and reported with relevant ratios. Third-party market data is gathered and reviewed for relevance to the subject collateral. Data is also collected from similar properties within the portfolio. Actual sales levels of properties, operating income and expense figures and rental data on a square foot basis are derived from existing loans and, when appropriate, used as comparables for the subject property. Property specific data, augmented by market data research, is used to project a stabilized year of income and expense to create a 10-year cash flow model to be discounted at appropriate rates to present value. These valuations are then used to determine if any impairment on the underlying loans exists and an appropriate allowance is recorded when warranted.

For loans identified as troubled debt restructurings ("TDR Loans"), an allowance for credit losses is maintained based on the present value of expected future cash flows discounted at the loans' original effective interest rate or in the case of certain loans which are solely dependent on the collateral for repayment, the estimated fair value of the collateral less costs to sell. The circumstances in which we perform a loan modification involving a TDR Loan at a then current market interest rate for a borrower with similar credit risk would include other changes to the terms of the original loan made as part of the restructuring (e.g. principal reductions, collateral changes, etc.) in order for the loan to be classified as a TDR Loan.

For pools of homogeneous consumer loans and certain small business loans which do not qualify as TDR Loans, we estimate probable losses using a roll rate migration analysis that estimates the likelihood that a loan will progress through the various stages of delinquency, or buckets, and ultimately charge-off based upon recent historical performance experience of other loans in our portfolio. This migration analysis incorporates estimates of the period of time between a loss occurring and the confirming event of its charge-off. This analysis considers delinquency status, loss experience and severity and takes into account whether borrowers have filed for bankruptcy or have been subject to account management actions, such as the re-age or modification of accounts. We also take into consideration the loss severity expected based on the underlying collateral, if any, for the loan in the event of default based on historical and recent trends which are updated monthly based on a rolling average of several months' data using the most recently available information.

The roll rate methodology is a migration analysis based on contractual delinquency and rolling average historical loss experience which captures the increased likelihood of an account migrating to charge-off as the past due status of such account increases. The roll rate models used were developed by tracking the movement of delinquencies by age of delinquency by "bucket" over a specified time period. Each bucket represents a period of delinquency in 30-day increments. The roll from the last delinquency bucket results in charge-off. Contractual delinquency is a method for determining aging of past due accounts based on the status of payments under the loan. Average roll rates are developed to avoid temporary aberrations caused by seasonal trends in delinquency experienced by some product types. We have determined that a 12-month average roll rate balances the desire to avoid temporary aberrations, while at the same time analyzing recent historical data. The roll rate calculations are performed monthly and are done consistently from period to period. We regularly monitor our portfolio to evaluate the period of time utilized in our roll rate migration analysis and perform a formal review on an annual basis. In addition, loss reserves on consumer loans are maintained to reflect our judgment of portfolio risk factors which may not be fully reflected in the statistical roll rate calculation.

Our allowance for credit losses methodology and our accounting policies related to the allowance for credit losses are presented in further detail under the caption "Critical Accounting Policies and Estimates" and in Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2017 Form 10-K. Our approach toward credit risk management is summarized under the caption "Risk Management" in our 2017 Form 10-K. There have been no significant revisions to our policies or methodologies during the first half of 2018.

The following table sets forth the allowance for credit losses for the periods indicated:

	June 30, 2018	March 31, 2018	December 31, 2017
	(dollars are in millions)		
Allowance for credit losses	**$ 531**	$ 599	$ 681
Ratio of Allowance for credit losses to:			
Loans:(1)			
Commercial:			
Non-affiliates	**1.02%**	1.15%	1.31%
Affiliates	**—**	—	—
Total commercial	**.98**	1.11	1.15
Consumer:			
Residential mortgages	**.09**	.10	.14
Home equity mortgages	**.83**	.88	.92
Credit cards	**5.35**	4.94	4.44
Other consumer	**1.65**	1.10	1.46
Total consumer	**.38**	.36	.37
Total	**.80%**	.89%	.94%
Net charge-offs:(2)			
Commercial(3)	**993%**	1,889%	405%
Consumer	**336**	438	348
Total	**781%**	1,361%	398%
Nonperforming loans:(1)(4)			
Commercial	**131%**	96%	99%
Consumer	**15**	14	15
Total	**64%**	58%	61%

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

(2) Ratios at June 30, 2018 and March 31, 2018 reflect year-to-date net charge-offs, annualized. Ratio at December 31, 2017 reflects full year net charge-offs.

(3) Our commercial net charge-off coverage ratio for the year-to-date periods ended June 30, 2018 and March 31, 2018 and year ended December 31, 2017 was 119 months, 227 months and 49 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.

See Note 5, "Allowance for Credit Losses," in the accompanying consolidated financial statements for a rollforward of credit losses by general loan categories for the three and six months ended June 30, 2018 and 2017.

The allowance for credit losses at June 30, 2018 decreased $68 million or 11 percent as compared with March 31, 2018 and decreased $150 million or 22 percent as compared with December 31, 2017 due to lower loss estimates in our commercial loan portfolio.

Our commercial allowance for credit losses decreased $72 million or 14 percent as compared with March 31, 2018 and decreased $151 million or 25 percent as compared with December 31, 2017 reflecting continued improvements in the credit quality of our portfolio driven by paydowns, sales and maturities as we continued to focus efforts on improving returns, including the sale of a single mining client relationship in the second quarter of 2018, as well as improvements in credit conditions associated with certain client relationships. Compared with December 31, 2017, these decreases were partially offset by higher provisions for risk factors associated with geopolitical risks and market volatility inherent in certain segments of the portfolio.

Our consumer allowance for credit losses increased $4 million or 6 percent as compared with March 31, 2018 and increased $1 million or 1 percent as compared with December 31, 2017 due to a higher allowance for credit losses in credit cards reflecting growth in customer activity driven by new product promotions, partially offset by a lower allowance for credit losses in residential mortgages and home equity mortgages due to continued improvements in economic and credit conditions, including lower dollars of delinquency on accounts less than 180 days contractually delinquent.

Our residential mortgage loan allowance for credit losses in all periods reflects consideration of risk factors relating to trends such as recent portfolio performance as compared with average roll rates as well as housing market trends and second lien exposure.

The allowance for credit losses as a percentage of total loans held for investment at June 30, 2018 decreased compared with both March 31, 2018 and December 31, 2017, driven by a lower commercial allowance for credit losses for the reasons discussed above.

The allowance for credit losses as a percentage of net charge-offs decreased compared with March 31, 2018 due primarily to higher dollars of net charge-offs in our commercial loan portfolio driven by the sale of a single mining client relationship during the second quarter as well as a decrease in our overall allowance for credit losses for the reasons discussed above. As compared with December 31, 2017, the allowance for credit losses as a percentage of net charge-offs increased as a decrease in dollars of net charge-offs due to lower charge-offs in our commercial loan portfolio associated with the single mining client relationship and loan sales outpaced the decrease in our overall allowance for credit losses for the reasons discussed above.

The allowance for credit losses as a percentage of nonperforming loans held for investment at June 30, 2018 increased as compared with both March 31, 2018 and December 31, 2017 as a decrease in nonperforming loans driven largely by managed reductions in certain exposures in our commercial loan portfolio outpaced the decrease in our overall allowance for credit losses for the reasons discussed above.

The following table presents the allowance for credit losses by major loan categories, excluding loans held for sale:

	June 30, 2018		March 31, 2018		December 31, 2017	
	Amount	**% of Loans to Total Loans**	**Amount**	**% of Loans to Total Loans**	**Amount**	**% of Loans to Total Loans**
	(dollars are in millions)					
Commercial[1]	**$ 457**	**70.5%**	$ 529	70.9%	$ 608	73.1%
Consumer:						
Residential mortgages	**15**	**26.1**	18	25.7	25	23.8
Home equity mortgages	**9**	**1.6**	10	1.7	11	1.6
Credit cards	**45**	**1.3**	38	1.1	32	1.0
Other consumer	**5**	**.5**	4	.6	5	.5
Total consumer	**74**	**29.5**	70	29.1	73	26.9
Total	**$ 531**	**100.0%**	$ 599	100.0%	$ 681	100.0%

(1) See Note 5, "Allowance for Credit Losses," in the accompanying consolidated financial statements for components of the commercial allowance for credit losses.

Reserves for Off-Balance Sheet Credit Risk We also maintain a separate reserve for credit risk associated with certain commercial off-balance sheet exposures, including letters of credit, unused commitments to extend credit and financial guarantees. The following table summarizes this reserve, which is included in other liabilities on the consolidated balance sheet. The related provision is recorded as a component of other expense within operating expenses.

	June 30, 2018	**March 31, 2018**	**December 31, 2017**
		(in millions)	
Off-balance sheet credit risk reserve	**$ 92**	$ 105	$ 106

The decrease in off-balance sheet reserves at June 30, 2018 as compared with both March 31, 2018 and December 31, 2017 reflects managed reductions in certain exposures and improvements in credit conditions associated certain client relationships. Off-balance sheet exposures are summarized under the caption "Off-Balance Sheet Arrangements, Credit Derivatives and Other Contractual Obligations" in this MD&A.

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

	June 30, 2018	March 31, 2018	December 31, 2017
	(dollars are in millions)		
Delinquent loans:			
Commercial	**$ 16**	$ 19	$ 45
Consumer:			
Residential mortgages[1][2]	**356**	381	425
Home equity mortgages[1][2]	**32**	37	39
Credit cards	**15**	13	12
Other consumer	**8**	9	10
Total consumer	**411**	440	486
Total	**$ 427**	$ 459	$ 531
Delinquency ratio:			
Commercial	**.03%**	.04%	.08%
Consumer:			
Residential mortgages[1][2]	**2.05**	2.20	2.46
Home equity mortgages[1][2]	**2.95**	3.25	3.27
Credit cards	**1.78**	1.69	1.66
Other consumer	**2.23**	2.13	2.48
Total consumer	**2.09**	2.24	2.48
Total	**.64%**	.68%	.72%

(1) At June 30, 2018, March 31, 2018 and December 31, 2017, consumer mortgage loan delinquency includes $285 million, $318 million and $342 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less costs to sell, including $1 million, $1 million and $1 million, respectively, relating to loans held for sale.

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

	June 30, 2018	March 31, 2018	December 31, 2017
	(dollars are in millions)		
Dollars of delinquent loans:			
Interest-only loans	**$ 12**	$ 11	$ 10
ARM loans	**133**	145	142
Delinquency ratio:			
Interest-only loans	**.37%**	.33%	.29%
ARM loans	**1.11**	1.20	1.19

Compared with March 31, 2018 and December 31, 2017, our two-months-and-over contractual delinquency ratio decreased 4 basis points and 8 basis points, respectively, due to lower dollars of delinquency in both our commercial and consumer loan portfolios. The decreases in both periods were partially offset by lower outstanding loan balances driven by a decrease in the commercial loan portfolio.

Compared with March 31, 2018 and December 31, 2017, our commercial loan two-months-and-over contractual delinquency ratio decreased 1 basis point and 5 basis points, respectively, due to lower dollars of delinquency largely driven by improved collections, including the collection of a large global banking loan in the first quarter, partially offset by lower outstanding loan balances.

Our consumer loan two-month-and-over contractual delinquency ratio decreased 15 basis points and 39 basis points from March 31, 2018 and December 31, 2017, respectively, due primarily to lower dollars of residential mortgage delinquency driven by continued improvements in economic and credit conditions.

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

	June 30, 2018	March 31, 2018	June 30, 2017
	(dollars are in millions)		
Net Charge-off Dollars:			
Commercial:			
Real estate, including construction	**$ —**	$ —	$ 2
Business and corporate banking	**(16)**	3	—
Global banking	**32**	4	45
Other commercial	**—**	—	1
Total commercial	**16**	7	48
Consumer:			
Residential mortgages	**(1)**	(3)	(4)
Home equity mortgages	**1**	—	1
Credit cards	**6**	6	7
Other consumer	**1**	1	—
Total consumer	**7**	4	4
Total	**$ 23**	$ 11	$ 52
Net Charge-off Ratio:			
Commercial:			
Real estate, including construction	**—%**	—%	.08%
Business and corporate banking	**(.51)**	.10	—
Global banking	**.65**	.08	.81
Other commercial	**—**	—	.10
Total commercial	**.13**	.06	.39
Consumer:			
Residential mortgages	**(.02)**	(.07)	(.09)
Home equity mortgages	**.36**	—	.30
Credit cards	**2.97**	3.26	4.34
Other consumer	**1.18**	1.13	—
Total consumer	**.14**	.08	.08
Total	**.14%**	.07%	.30%

Our net charge-off ratio as a percentage of average loans for the quarter ended June 30, 2018 increased 7 basis points compared with the quarter ended March 31, 2018 due primarily to higher levels of net charge-offs in our commercial loan portfolio driven by the sale of a single mining client relationship during the second quarter and, to a lesser extent, higher levels of net charge-offs in our consumer loan portfolio due primarily to lower recoveries in residential mortgages as the positive impacts of continued improvements in economic and credit conditions were more pronounced in the first quarter.

Compared with the quarter ended June 30, 2017, our net charge-off ratio as a percentage of average loans decreased 16 basis points due primarily to lower levels of net charge-offs in our commercial loan portfolio driven by loan sales, including recoveries associated with two business and corporate banking clients in the current year quarter. This decrease was partially offset by higher levels of net charge-offs in our consumer loan portfolio due primarily to lower recoveries in residential mortgages as the positive impacts of continued improvements in economic and credit conditions were more pronounced in the prior year quarter.

Nonperforming Assets Nonperforming assets consisted of the following:

	June 30, 2018	March 31, 2018	December 31, 2017
		(in millions)	
Nonaccrual loans:			
Commercial:			
Real estate, including construction	**$ 13**	$ 13	$ 12
Business and corporate banking	**218**	258	215
Global banking	**117**	279	385
Other commercial	**—**	—	1
Commercial nonaccrual loans held for sale	**—**	31	—
Total commercial	**348**	581	613
Consumer:			
Residential mortgages(1)(2)(3)	**405**	408	414
Home equity mortgages(1)(2)	**63**	66	67
Consumer nonaccrual loans held for sale	**1**	1	1
Total consumer	**469**	475	482
Total nonaccruing loans	**817**	1,056	1,095
Accruing loans contractually past due 90 days or more:			
Commercial:			
Business and corporate banking	**1**	1	1
Total commercial	**1**	1	1
Consumer:			
Credit cards	**11**	8	9
Other consumer	**5**	6	8
Total consumer	**16**	14	17
Total accruing loans contractually past due 90 days or more	**17**	15	18
Total nonperforming loans	**834**	1,071	1,113
Other real estate owned(4)	**12**	12	11
Total nonperforming assets	**$ 846**	$ 1,083	$ 1,124

(1) At June 30, 2018, March 31, 2018 and December 31, 2017, nonaccrual consumer mortgage loans held for investment include $348 million, $362 million and $360 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 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.

(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 customer loan portfolio.

(4) Includes $1 million or less of commercial other real estate owned at June 30, 2018, March 31, 2018 and December 31, 2017.

Nonaccrual loans at June 30, 2018 decreased as compared with both March 31, 2018 and December 31, 2017 due primarily to lower levels of nonaccrual loans in our commercial loan portfolio driven by managed reductions in certain exposures, including the sale of a single mining client relationship during the second quarter. Nonaccrual loans in our consumer loan portfolio were also lower compared with both March 31, 2018 and December 31, 2017 reflecting continued improvements in economic and credit conditions. Accruing loans past due 90 days or more remained flat compared with both March 31, 2018 and December 31, 2017.

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 2017 Form 10-K.

Impaired Commercial Loans See Note 4, "Loans," in the accompanying consolidated financial statements for information regarding impaired loans, including TDR Loans as well as certain other commercial credit quality indicators. Commercial impaired loans decreased as compared with both March 31, 2018 and December 31, 2017 largely due to lower nonaccrual loans for the reasons discussed above.

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.

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, including certain loans held for sale, at June 30, 2018 and December 31, 2017. Each category is not mutually exclusive and loans may appear in more than one category below.

	June 30, 2018	December 31, 2017
	(in millions)	
Interest-only residential mortgage and home equity mortgage loans	**$ 3,275**	$ 3,424
ARM loans[(1)]	**12,032**	11,976

(1) During the remainder of 2018 and during 2019, approximately $276 million and $637 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. Amounts in the table exclude residential mortgage loans held for sale of $31 million and $6 million at June 30, 2018 and December 31, 2017, respectively.

	June 30, 2018	December 31, 2017
	(in millions)	
Closed end:		
First lien	**$ 17,326**	$ 17,273
Second lien	**45**	49
Revolving[(1)]	**1,041**	1,142
Total	**$ 18,412**	$ 18,464

(1) A majority of revolving are second lien mortgages.

Geographic Concentrations The following table reflects regional exposure at June 30, 2018 and December 31, 2017 for our real estate secured loan portfolios:

	Commercial Real Estate, including Construction Loans	Residential Mortgages and Home Equity Mortgages
June 30, 2018		
New York State	**31.4%**	**32.1%**
California	**22.5**	**42.8**
North Central United States	**3.9**	**2.2**
North Eastern United States, excluding New York State	**4.8**	**8.0**
Southern United States	**30.1**	**10.4**
Western United States, excluding California	**7.3**	**4.5**
Total	**100.0%**	**100.0%**
December 31, 2017		
New York State	34.0%	31.9%
California	22.0	42.6
North Central United States	3.2	2.3
North Eastern United States, excluding New York State	6.8	8.1
Southern United States	26.2	10.6
Western United States, excluding California	6.7	4.5
Mexico	1.1	—
Total	100.0%	100.0%

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

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

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

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

	June 30, 2018	December 31, 2017
	(in millions)	
Risk associated with derivative contracts:		
Total credit risk exposure	**$ 31,377**	$ 30,737
Less: collateral held against exposure	**5,807**	7,213
Net credit risk exposure	**$ 25,570**	$ 23,524

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. See "Risk Management" in this MD&A for further discussion of our approach towards liquidity risk management, including information regarding the key measures employed to define, monitor and control our liquidity and funding risk. During the first half of 2018, marketplace liquidity continued to remain available for most sources of funding.

Interest Bearing Deposits with Banks totaled $22,078 million and $11,157 million at June 30, 2018 and December 31, 2017, respectively, of which $21,400 million and $10,338 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 $10,176 million and $32,618 million at June 30, 2018 and December 31, 2017, 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 $12,801 million and $10,151 million at June 30, 2018 and December 31, 2017, 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 $46,180 million and $44,677 million at June 30, 2018 and December 31, 2017, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on trends.

Short-Term Borrowings totaled $6,391 million and $4,650 million at June 30, 2018 and December 31, 2017, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on short-term borrowing trends.

Deposits totaled $114,355 million and $118,702 million at June 30, 2018 and December 31, 2017, respectively, which included $94,761 million and $98,500 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 $31,749 million at June 30, 2018 from $34,966 million at December 31, 2017. The following table presents the maturities of long-term debt at June 30, 2018:

		(in millions)
2018	$	**4,703**
2019		**5,464**
2020		**7,095**
2021		**3,932**
2022		**1,545**
Thereafter		**9,010**
Total	$	**31,749**

The following table summarizes issuances and retirements of long-term debt during the six months ended June 30, 2018 and 2017:

Six Months Ended June 30,	2018	2017
	(in millions)	
Long-term debt issued	**$ 2,678**	$ 2,828
Long-term debt repaid	**(5,220)**	(3,688)
Net long-term debt repaid	**$ (2,542)**	$ (860)

See "Balance Sheet Review" in this MD&A for further analysis and discussion on long-term debt trends, including additional information on debt issued and repaid during the six months ended June 30, 2018.

Under our shelf registration statement on file with the SEC, we may issue certain securities including debt securities and preferred stock. We satisfy the eligibility requirements for designation as a "well-known seasoned issuer," which allows us to file a registration statement that does not have a limit on issuance capacity. The ability to issue under the registration statement is limited by the authority granted by the Board of Directors. At June 30, 2018, we were authorized to issue up to $36 billion, of which $17,436 million was available. HSBC Bank USA has a $40 billion Global Bank Note Program that provides for the issuance of subordinated and senior notes, of which $14,890 million was available at June 30, 2018. 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 June 30, 2018, long-term debt included $3,100 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 $14,891 million.

Preferred Equity See Note 17, "Preferred Stock," in our 2017 Form 10-K for information regarding all outstanding preferred share issues.

Common Equity During the six months ended June 30, 2018, 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 fully phased-in capital ratios calculated as of June 30, 2018 and December 31, 2017:

	June 30, 2018	December 31, 2017
Common equity Tier 1 capital to risk-weighted assets	**13.8%**	14.1%
Tier 1 capital to risk-weighted assets	**14.8**	15.2
Total capital to risk-weighted assets	**17.6**	18.1
Tier 1 leverage ratio(1)	**10.2**	9.9
Supplementary leverage ratio(2)	**7.4**	7.3

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

(2) Beginning January 1, 2018, HSBC USA is required to maintain the regulatory minimum SLR of 3 percent. Total leverage exposure, the SLR denominator, includes adjusted quarterly average assets plus certain off-balance sheet exposures.

HSBC USA manages 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 or unavailable, we will rely on capital support from our parent in accordance with HSBC's capital management policy. HSBC has indicated that they are fully committed and have the capacity to provide capital as needed to run operations and maintain sufficient regulatory capital ratios. 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.

In 2013, U.S. banking regulators issued a final rule implementing the Basel III capital framework in the United States (the "Basel III rule") which, for banking organizations such as HSBC North America and HSBC Bank USA, became effective in 2014 with certain provisions being phased in over time through the beginning of 2019. The Basel III rule established an integrated regulatory capital framework to improve the quality and quantity of regulatory capital, though the latter is still being modified given the recent finalization of revisions in December 2017 as discussed below. In addition to phasing in a complete replacement to the general risk-based capital rules for determining risk-weighted assets (the "Standardized Approach") and the leverage exposure, the Basel III rule builds on the advanced internal ratings approach for credit risk and advanced measurement approach for operational risk (taken together, the "Advanced Approaches"). For additional discussion of the Basel III final rule requirements, including fully phased-in required minimum capital ratios, see Part I, "Regulation and Competition - Regulatory Capital and Liquidity Requirements," in our 2017 Form 10-K. As previously disclosed, in accordance with FRB rules, HSBC North America and HSBC Bank USA received regulatory approval to opt out of the Advanced Approaches and are calculating their risk-based capital requirements solely under the Standardized Approach. HSBC Bank USA submits an annual statement to the OCC to maintain this opt out.

In December 2017, the Basel Committee adopted a package of revisions to the Basel III framework that aim to increase consistency in risk-weighted asset calculations and improve the comparability of bank capital ratios (the "Basel IV Revisions"). The Basel IV Revisions include changes to the Standardized Approach and internal ratings-based approach to determining credit risk, revisions to the operational risk framework, a leverage ratio surcharge for G-SIBs and an aggregate capital output floor. The Basel IV Revisions are not currently applicable to any U.S. banking organization and must first be implemented by the federal banking agencies. The agencies are expected to act before the January 1, 2022 implementation deadline agreed by the Basel Committee, but it is unclear whether they will deviate significantly from the Basel IV Revisions in the direction of greater conservatism as they did with respect to the Basel III framework. For further discussion of the requirements of the Basel IV Revisions see Part I, "Regulation and Competition - Regulatory Capital and Liquidity Requirements," in our 2017 Form 10-K.

In April 2018, the FRB issued a proposal that would, among other things, replace the current fixed 2.5 percent capital conservation buffer with a dynamic, institution-specific risk-based stress capital buffer ("SCB"). The proposal would also introduce a stress Tier 1 leverage buffer requirement ("SLB") for IHCs and bank holding companies ("BHCs") that are subject to the FRB's CCAR program, including HSBC North America. It is expected that both the SCB and SLB will vary in size throughout the economic cycle depending on a firm's risk exposures and the severity of the stress scenarios. Under the proposal, the SCB and SLB would be recalibrated annually based on the sum of (i) HSBC North America's projected losses under the severely adverse scenario in the FRB's supervisory stress tests and (ii) four quarters of HSBC North America's planned future dividends. If HSBC North America's risk-based capital and Tier 1 leverage ratios were to fall to levels within the SCB or SLB, respectively, it would become subject to increasing restrictions on its capital distributions and discretionary bonus payments. The proposal would also eliminate the quantitative objection component of CCAR, and instead rely on the capital rule's automatic restrictions on capital distributions that are triggered if a firm breaches its buffer requirements. However, the proposal would not change CCAR's qualitative review process or objections based on qualitative deficiencies for large and complex firms, including HSBC North America. Although an initial impact study performed by the FRB anticipates a decrease in required capital for non G-SIBs subject to CCAR, the study did not include all IHCs, hence may not have considered the business model differences between IHCs and BHCs. The proposed rule was subject to a 60-day comment period, with all comments due on June 25, 2018. The proposal would be effective on December 31, 2018, with the first SCB and SLB requirements generally effective on October 1, 2019.

As a result of the adoption of the final rules by the U.S. banking regulators implementing the Basel III regulatory capital and liquidity reforms from the Basel Committee, together with the impact of similar implementation by U.K. banking regulators, the future implementation of the Basel IV Revisions and the FRB's proposal to establish SCB and SLB requirements, we continue to review the composition of our capital structure and capital buffers.

In 2015, the Financial Stability Board ("FSB") issued its final standards for TLAC requirements for G-SIBs. In 2016, the FRB adopted final rules implementing the FSB's TLAC standard in the United States. The rules require, among other things, the U.S. IHCs of non U.S. G-SIBs, including HSBC North America, to maintain minimum amounts of TLAC which would include minimum levels of Tier 1 capital and long-term debt satisfying certain eligibility criteria, and a related TLAC buffer commencing January 1, 2019, without the benefit of a phase-in period. The TLAC rules also include 'clean holding company requirements' that impose limitations on the types of financial transactions that HSBC North America could engage in. The FSB's TLAC standard and the FRB's TLAC rules represent a significant expansion of the current regulatory capital framework. To support compliance when the TLAC rules become effective, HSBC North America will be required in future periods to issue additional long-term debt that is TLAC compliant and modify the terms of existing long-term debt in order for that debt to be TLAC compliant.

In April 2018, the FRB issued a proposal to align the calculation of TLAC for U.S. IHCs of non U.S. G-SIBs with the calculation methodology used by G-SIBs beginning on January 1, 2019. The proposal seeks to modify the leverage requirements related to TLAC and could also translate to a marginal benefit in the way total TLAC (inclusive of buffers) is calculated for HSBC North America. The comment period for the proposal closed on June 25, 2018.

Resolution Planning HSBC is required to submit annually a resolution plan to the FRB and the FDIC under the Dodd-Frank Act (the Systemically Important Financial Institution Plan or "SIFI Plan") and HSBC Bank USA is required to submit an annual resolution plan under the Federal Deposit Insurance Act (the Insured Depository Institution Plan or "IDI Plan"). In July 2018, HSBC Bank USA submitted its latest annual IDI Plan. HSBC has been advised that the next submission date for the SIFI Plan is extended to December 31, 2018.

Capital Planning and Stress Testing U.S. bank holding companies with $50 billion or more in total consolidated assets, including HSBC North America, are required 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 the semi-annual company-run stress tests as required under DFAST. As part of the CCAR process, the FRB undertakes a supervisory assessment of bank holding companies on their capital adequacy, internal capital adequacy assessment process and plans for capital distributions. Per current capital plan and stress test rules, the FRB can object to a capital plan for qualitative or quantitative reasons, in which case the company cannot make capital distributions (with the exception of those that may have already received a non-objection in the previous year) without specific FRB approval. HSBC North America participates in the CCAR and DFAST programs of the FRB and submitted its latest CCAR capital plan and annual company-run DFAST results in April 2018. HSBC Bank USA is subject to the OCC's DFAST requirements, which require certain banks to conduct annual company-run stress tests, and submitted its latest annual DFAST results in April 2018. The company-run stress tests are forward looking exercises to assess the impact of hypothetical macroeconomic baseline, adverse and severely adverse scenarios provided by the FRB and the OCC for the annual exercise, and internally developed scenarios for both the annual and mid-cycle exercises, on the financial condition and capital adequacy of a bank-holding company or bank over a nine quarter planning horizon. In January 2017, the FRB announced that so-called "large and noncomplex" firms, which are firms with less than $250 billion in total consolidated assets and less than $75 billion in total nonbanking assets, are exempt from the CCAR qualitative assessment. HSBC North America does not currently fall into the category of "large and noncomplex" and, therefore, remained subject to the qualitative review in the 2018 CCAR cycle. As discussed above, the FRB expects to remove the quantitative objection component of CCAR beginning December 31, 2018.

In June 2018, the FRB publicly disclosed its own DFAST and CCAR results and informed HSBC North America, our parent company, that it did not object to HSBC North America's capital plan or the planned capital distributions included in its 2018 CCAR submission.

HSBC North America and HSBC Bank USA are required to disclose the results of their annual DFAST under the FRB and OCC’s severely adverse stress scenario and HSBC North America is required to disclose the results of its mid-cycle DFAST under its internally developed severely adverse stress scenario. In July 2018, HSBC North America and HSBC Bank USA publicly disclosed their most recent annual DFAST results.

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 or HSBC Bank USA. Capital planning and stress testing for HSBC North America or HSBC Bank USA may impact our future capital and liquidity. See Part I, "Regulation and Competition - Regulatory Capital and Liquidity Requirements," in our 2017 Form 10-K for further discussion on capital planning and stress testing, including additional detail regarding the FRB's supervisory assessment as part of the CCAR process.

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

In December 2017, the FRB finalized changes to the CCAR program that requires certain IHCs of foreign banking organizations, including HSBC North America, to provide information about the effects of a hypothetical global market shock on trading and counterparty exposures as part of their supervisory adverse and severely adverse stress testing scenarios. For the 2018 CCAR cycle, HSBC North America was subject to an interim, simplified global market shock designed to assess its potential losses and capital impact associated with market and counterparty credit risk. Beginning with the 2019 CCAR cycle, HSBC North America will be subject to the full global market shock, potentially causing additional projected stress losses under such tests.

In May 2018, Congress passed legislation that, in addition to other changes applicable to smaller, community banks, would remove the requirements for HSBC North America to perform mid-cycle DFAST and run an adverse scenario as part of DFAST. The legislation still needs to be formally adopted into U.S. rule-making by the FRB, but is indicative of greater stress testing relief and more tailored regulations for U.S. BHCs and IHCs of varying size and complexity.

Other Regulatory Developments In May 2018, the five federal agencies responsible for administration of the Volcker Rule (FRB, SEC, FDIC, OCC, and Commodity Futures Trading Commission) jointly issued a proposal to simplify and tailor compliance requirements related to the Volcker Rule, which generally prohibits banking entities from engaging in proprietary trading and from owning or controlling hedge funds or private equity funds. Given that HSBC North America has more than $10 billion in trading assets and liabilities, it would still be subject to the highest expectations under the Volcker Rule.

In June 2018, the FRB finalized a rule, consistent with the Dodd-Frank Act, to limit credit exposures to single counterparties for large BHCs, including HSBC North America. As a result of the rule, HSBC North America, together with its subsidiaries, will be prohibited from having net credit exposure to a single unaffiliated counterparty in excess of 25 percent of HSBC North America's Tier 1 capital beginning July 1, 2020. In addition, HSBC North America, together with its subsidiaries, could become subject to a separate limit on its exposures to certain unaffiliated systemically important counterparties if its parent, HSBC, cannot certify its compliance with a large exposure regime in the United Kingdom that is consistent with the Basel large exposure framework by January 1, 2020. We continue to evaluate the potential effects of this rule on our operations.

2018 Funding Strategy Our current estimate for funding needs and sources for 2018 are summarized in the following table:

	Actual January 1 through June 30, 2018	Estimated July 1 through December 31, 2018	Estimated Full Year 2018
		(in billions)	
Increase (decrease) in funding needs:			
Net change in loans	$ (7)	$ 5	$ (2)
Net change in short-term investments and securities	(9)	11	2
Net change in trading and other assets	9	(13)	(4)
Total funding needs	$ (7)	$ 3	$ (4)
Increase (decrease) in funding sources:			
Net change in deposits	$ (5)	$ 4	$ (1)
Net change in trading and other short-term liabilities	1	1	2
Net change in long-term debt	(3)	(2)	(5)
Total funding sources	$ (7)	$ 3	$ (4)

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 intend to continue to sell new agency-eligible mortgage loan originations to third parties.

HSBC Bank USA is subject to significant restrictions imposed by federal law on extensions of credit to, and certain other "covered transactions" with HSBC USA and other affiliates. Covered transactions include loans and other extensions of credit, investments and asset purchases, and certain other transactions involving the transfer of value from a subsidiary bank to an affiliate or for the benefit of an affiliate. A bank's credit exposure to an affiliate as a result of a derivative, securities lending/borrowing or repurchase transaction is also subject to these restrictions. A bank's transactions with its non-bank affiliates are also required to be on arm's length terms. Certain Edge Act subsidiaries of HSBC Bank USA are limited in the amount of funds they can provide to other affiliates including their parent. Amounts above their level of invested capital have to be secured with U.S. government securities.

For further discussion relating to our sources of liquidity and contingency funding plan, see the caption "Risk Management" in this MD&A.

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. As a result, we believe that the contractual amount is not representative of the actual future credit exposure or funding requirements.

	Balance at June 30, 2018				
	One Year or less	**Over One through Five Years**	**Over Five Years**	**Total**	**Balance at December 31, 2017**
			(in millions)		
Standby letters of credit, net of participations[(1)]	**$ 7,198**	**$ 1,774**	**$ 113**	**$ 9,085**	$ 8,708
Commercial letters of credit	**307**	**2**	**—**	**309**	234
Credit derivatives[(2)]	**7,157**	**34,073**	**1,313**	**42,543**	42,328
Other commitments to extend credit:					
Commercial[(3)]	**19,479**	**63,781**	**2,757**	**86,017**	78,787
Consumer	**7,759**	**—**	**—**	**7,759**	7,443
Total	**$ 41,900**	**$ 99,630**	**$ 4,183**	**$ 145,713**	$ 137,500

(1) Includes $1,194 million and $1,264 million issued for the benefit of HSBC affiliates at June 30, 2018 and December 31, 2017, respectively.

(2) Includes $23,033 million and $25,639 million issued for the benefit of HSBC affiliates at June 30, 2018 and December 31, 2017, respectively.

(3) Includes $1,045 million and $400 million issued for the benefit of HSBC affiliates at June 30, 2018 and December 31, 2017, 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. Consumer commitments are comprised of 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. Commercial commitments comprise primarily those related to secured and unsecured loans and lines of credit.

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

Control Over Valuation Process and Procedures We have established a control framework which is designed to ensure that fair values are either determined or validated by a function independent of the risk-taker. See Note 19, "Fair Value Measurements," in the accompanying consolidated financial statements for further details on our valuation control framework.

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, certain derivative contracts, asset-backed securities, obligations of U.S. states and political subdivisions, corporate debt, certain foreign government-backed debt, preferred securities, securities purchased and sold under resale and repurchase agreements, precious metals, certain commercial loans held for sale, 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 met the fair value objective. Where significant differences arise among the independent pricing quotes and the internally determined fair value, we investigate and reconcile the differences. If the investigation results in a significant adjustment to the fair value, the instrument will be classified as Level 3 within the fair value hierarchy. In general, we have observed that there is a correlation between the credit standing and the market liquidity of a non-derivative instrument.

Level 2 derivative instruments are generally valued based on discounted future cash flows or an option pricing model adjusted for counterparty credit risk and market liquidity. The fair value of certain derivative products is determined using valuation techniques based on inputs derived from observable indices traded in the OTC market. Appropriate control processes and procedures have been applied to ensure that the derived inputs are applied to value only those instruments that share similar risks to the relevant benchmark indices and therefore demonstrate a similar response to market factors.

Level 3 inputs are unobservable estimates that management expects market participants would use to determine the fair value of the asset or liability. That is, Level 3 inputs incorporate market participants' assumptions about risk and the risk premium required by market participants in order to bear that risk. We develop Level 3 inputs based on the best information available in the circumstances. At June 30, 2018 and December 31, 2017, our Level 3 measurements included the following: collateralized debt obligations ("CDOs") for which there is a lack of pricing transparency due to market illiquidity, certain structured deposits and structured notes for which the embedded credit, foreign exchange or equity derivatives have significant unobservable inputs (e.g., volatility or default correlations), asset-backed credit default swaps with certain inputs which are unobservable, certain subprime residential mortgage loans held for sale, certain corporate debt securities, certain asset-backed securities, impaired commercial loans, derivatives referenced to illiquid assets of less desirable credit quality, swap agreements entered into in conjunction with the sales of certain Visa Class B Shares for which the fair value is dependent upon the final resolution of the related litigation and a contingent consideration receivable associated with the sale of a portion of our Private Banking business.

See Note 19, "Fair Value Measurements," in the accompanying consolidated financial statements for additional information on Level 3 inputs as well as a discussion of transfers between Level 1 and Level 2 measurements during the three and six months ended June 30, 2018 and 2017.

Level 3 Measurements The following table provides information about Level 3 assets/liabilities in relation to total assets/liabilities measured at fair value at June 30, 2018 and December 31, 2017:

	June 30, 2018	December 31, 2017
	(dollars are in millions)	
Level 3 assets[(1)(2)]	**$ 2,463**	$ 2,650
Total assets measured at fair value[(1)(3)]	**87,966**	89,368
Level 3 liabilities[(1)]	**1,626**	1,690
Total liabilities measured at fair value[(1)]	**55,931**	68,270
Level 3 assets as a percent of total assets measured at fair value	**2.8%**	3.0%
Level 3 liabilities as a percent of total liabilities measured at fair value	**2.9%**	2.5%

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

(2) Includes $2,306 million of recurring Level 3 assets and $157 million of non-recurring Level 3 assets at June 30, 2018. Includes $2,359 million of recurring Level 3 assets and $291 million of non-recurring Level 3 assets at December 31, 2017.

(3) Includes $87,757 million of assets measured on a recurring basis and $209 million of assets measured on a non-recurring basis at June 30, 2018. Includes $88,988 million of assets measured on a recurring basis and $380 million of assets measured on a non-recurring basis at December 31, 2017.

Significant Changes in Fair Value for Level 3 Assets and Liabilities We have entered into credit default swaps with a monoline insurer to hedge our credit exposure in certain asset-backed securities and synthetic CDOs. We made $1 million and $6 million positive credit risk adjustments to the fair value of our credit default swap contracts during the three and six months ended June 30, 2018, respectively, compared with positive adjustments of $9 million and $5 million during the three and six months ended June 30, 2017, respectively. These adjustments to fair value are recorded in trading revenue in the consolidated statement of income. We have recorded a cumulative credit adjustment reserve of $6 million and $12 million against our monoline exposure at June 30, 2018 and December 31, 2017, respectively. The fair value of our monoline exposure net of cumulative credit adjustment reserves equaled $72 million and $105 million at June 30, 2018 and December 31, 2017, respectively.

See Note 19, "Fair Value Measurements," in the accompanying consolidated financial statements for information on additions to and transfers into (out of) Level 3 measurements during the three and six months ended June 30, 2018 and 2017 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 $76 million or a decrease of the overall fair value measurement of approximately $16 million at June 30, 2018. The effect of changes in significant unobservable input parameters are primarily driven by the uncertainty in determining the fair value of credit derivatives executed against certain insurers as well as credit default swaps with a certain monoline insurer and certain asset-backed securities including CDOs.

Assets Underlying Asset-backed Securities The following tables summarize the types of assets underlying our asset-backed securities as well as certain collateralized debt obligations held at June 30, 2018:

		Total
		(in millions)
Rating of securities:[1]	Collateral type:	
A	Residential mortgages - Alt A	2
	Home equity - Alt A	47
	Student loans	92
	Other	49
	Total A	190
BBB	Collateralized debt obligations	131
	Other	58
	Total BBB	189
CCC	Residential mortgages - Subprime	17
		$ 396

(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. Ratings for collateralized debt obligations represent the ratings associated with the underlying collateral.

Risk Management

Overview Managing risk effectively is fundamental to the delivery of our strategic priorities. We use a comprehensive risk management framework that is applied at all levels of the organization and across all risk types with effective governance and corresponding risk management tools to help ensure it is appropriately implemented. This framework fosters the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions. It is designed to ensure that we have a robust and consistent approach to risk management across all of our activities. Our risk management framework has been designed to provide robust controls and ongoing monitoring of our principal risks.

Our Board of Directors and its committees, principally the Audit, Risk, and Compliance and Conduct Committees, have oversight responsibility for the effective management of risk and approves our risk appetite. The Risk Committee advises the Board of Directors on risk appetite and its alignment with our strategy, risk governance and internal controls as well as high-level risk related matters.

The principal risks associated with our operations include the following:

- *Credit risk* is the potential that a borrower or counterparty will default on a credit obligation, as well as the impact on the value of credit instruments due to changes in the probability of borrower default. Credit risk includes risk associated with cross-border exposures;
- *Liquidity risk* is the potential that an institution will be unable to meet its obligations as they become due or fund its customers because of inadequate cash flow or the inability to liquidate assets or obtain funding itself;
- *Interest rate risk* is the potential reduction of net interest income due to mismatched pricing between assets and liabilities as well as losses in value due to interest rate movements;
- *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;
- *Operational risk* is the risk of loss resulting from inadequate or failed internal processes, people, or systems, or from external events (including legal risk);
- *Regulatory compliance risk* is the risk that we fail to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice causing us to incur fines, penalties and damage to our business and reputation;
- *Financial crime risk* is the risk that we knowingly or unknowingly help parties to commit or to further potentially illegal activity through the HSBC Group. It arises from day to day banking operations;
- *Fiduciary risk* is the risk of breaching fiduciary duties where we act in a fiduciary capacity as trustee, investment manager or as mandated by law or regulation;

- *Reputational risk* is the risk arising from failure to meet stakeholder expectations as a result of any event, behavior, action or inaction, either by us, our employees, the HSBC Group or those with whom it is associated, that may cause stakeholders to form a negative view of us. This might also result in financial or non-financial impacts, loss of confidence or other consequences;
- *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;
- *Security risk* is the risk to the business from terrorism, information security, incidents/disasters, cyber attacks, insider risk and groups hostile to HSBC interests;
- *Model risk* is the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports. This occurs primarily for two reasons: 1) the model may produce inaccurate outputs when compared with the intended business use and design objective; and 2) the model could be used incorrectly;
- *Pension risk* is the risk of increased costs from the post-employment benefit plans that we have established for our employees;
- *Sustainability risk* is the risk that financial services provided to customers indirectly result in unacceptable impacts on people or on the environment.

Our risk management process involves the use of various simulation models. We believe that the assumptions used in these models are reasonable, but actual events may unfold differently than what is assumed in the models. Consequently, model results may be considered reasonable estimates, with the understanding that actual results may differ significantly from model projections.

See "Risk Management" in MD&A in our 2017 Form 10-K for a more complete discussion of the objectives of our risk management system as well as our risk management policies and practices. There have been no material changes to our approach to risk management since December 31, 2017.

Liquidity Risk Management Liquidity risk is the risk that an institution will be unable to meet its obligations as they become due or fund its customers because of an inability to liquidate assets or obtain adequate funding. There have been no material changes to our approach towards liquidity risk management since December 31, 2017. See "Risk Management" in MD&A in our 2017 Form 10-K for a more complete discussion of our approach to liquidity risk. Although our overall approach to liquidity risk management has not changed, we continuously monitor the impact of market events on our liquidity positions and will continue to adapt our liquidity framework to reflect market events and the evolving regulatory landscape and view as to best practices.

As part of our approach towards liquidity 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 June 30, 2018 and December 31, 2017, HSBC USA's LCR under the EU LCR rule 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.

The European 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 European calibration and further implementation guidance from regulators. At both June 30, 2018 and December 31, 2017, 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 2014, the FRB, the OCC and the FDIC issued final regulations to implement the LCR in the United States, applicable to certain large banking institutions, including HSBC North America and HSBC Bank USA. The U.S. LCR rule is generally consistent with the Basel Committee guidelines, but is more stringent in several areas including the range of assets that qualify as HQLA and the assumed rate of outflows of certain kinds of funding. Under the U.S. rule, U.S. institutions, including HSBC North America and HSBC Bank USA, have been required to maintain a minimum LCR of 100 percent since January 1, 2017, two years ahead of the Basel Committee's timeframe for compliance by January 1, 2019, and report LCR to U.S. regulators on a daily basis. During the six months ended June 30, 2018 and year ended December 31, 2017, HSBC Bank USA's LCR under the U.S. LCR rule remained above the 100 percent minimum requirement. The U.S. LCR rule does not address the U.S. NSFR requirement, which is currently under review by U.S. banking regulators and the Basel Committee. Based on the results of their review, the Basel Committee and U.S. banking regulators may make further changes to the NSFR. In April 2016, U.S. regulators issued for public comment a proposal to implement the NSFR in the United States, applicable to certain large banking organizations, including HSBC North America and HSBC Bank USA. The U.S. NSFR proposal is generally consistent with the Basel Committee guidelines, but similar to the U.S. LCR rule, is more stringent in several areas including the required stable funding factors applied to certain assets such as mortgage-backed securities. At both June 30, 2018 and December 31, 2017, HSBC Bank USA's estimated NSFR, based on our current interpretation and understanding of the proposed U.S. NSFR rule, exceeded 100 percent.

HSBC North America and HSBC Bank USA have adjusted their liquidity profiles to support compliance with these rules. HSBC North America and HSBC Bank USA may need to make further changes to their liquidity profiles to support compliance with any future final rules.

Our liquidity 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, current regulatory initiatives 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 June 30, 2018:

	Moody's	S&P	Fitch
HSBC USA:			
Short-term borrowings	**P-1**	**A-1**	**F1+**
Long-term/senior debt	**A2**	**A**	**AA-**
HSBC Bank USA:			
Short-term borrowings	**P-1**	**A-1+**	**F1+**
Long-term/senior debt	**Aa3**(1)	**AA-**	**AA-**

(1) Moody's long-term deposit rating for HSBC Bank USA was Aa2 at June 30, 2018.

Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices and legal matters, all of which could lead to adverse ratings actions.

Although we closely monitor and strive to manage factors influencing our credit ratings, there is no assurance that our credit ratings will not change in the future. At June 30, 2018, there were no pending actions in terms of changes to ratings on the debt of HSBC USA or HSBC Bank USA from any of the rating agencies.

Interest Rate Risk Management Interest rate risk is the potential reduction of net interest income due to mismatched pricing between assets and liabilities as well as losses in value due to interest rate movements. Various techniques are utilized to quantify and monitor risks associated with the repricing characteristics of our assets, liabilities and derivative contracts. There have been no material changes to our approach towards interest rate risk management since December 31, 2017. See "Risk Management" in MD&A in our 2017 Form 10-K for a more complete discussion of our approach to interest rate risk.

Economic value of equity ("EVE") EVE represents the present value of the banking book cash flows that could be provided to our equity holder under a managed run-off scenario. An EVE sensitivity represents the change in EVE due to a defined movement in interest rates. We manage to an immediate parallel upward shock of 200 basis points and an immediate parallel downward shock of 200 basis points to the market implied interest rates. At both June 30, 2018 and December 31, 2017, our economic value of equity remains higher than our book value of equity under the base case, up 200 basis points and down 200 basis points 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 as much as 200 basis points, as well as scenarios in which rates gradually rise by as much as 200 basis point or fall by as much as 100 basis points over a twelve month period. In the gradual scenarios, 25 percent of the interest rate movement occurs at the beginning of each quarter. The following table reflects the impact on our projected net interest income of the scenarios utilized by these modeling techniques:

	June 30, 2018		December 31, 2017	
	Amount	**%**	**Amount**	**%**
	(dollars are in millions)			
Estimated increase (decrease) in projected net interest income (reflects projected rate movements on July 1, 2018 and January 1, 2018, respectively):				
Resulting from a gradual 100 basis point increase in the yield curve	**$ 89**	**3%**	$ 148	6%
Resulting from a gradual 100 basis point decrease in the yield curve	**(49)**	**(2)**	(138)	(5)
Resulting from a gradual 200 basis point increase in the yield curve	**136**	**5**	243	9
Other significant scenarios monitored (reflects projected rate movements on July 1, 2018 and January 1, 2018, respectively):				
Resulting from an immediate 50 basis point decrease in the yield curve	**(38)**	**(1)**	(116)	(5)
Resulting from an immediate 100 basis point increase in the yield curve	**121**	**4**	216	8
Resulting from an immediate 100 basis point decrease in the yield curve	**(148)**	**(5)**	(323)	(13)
Resulting from an immediate 200 basis point increase in the yield curve	**177**	**6**	350	14

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.

Capital risk/sensitivity of other comprehensive loss Large movements of interest rates could directly affect some reported capital balances and ratios. The mark-to-market valuation of available-for-sale securities is recorded on a tax effected basis to accumulated other comprehensive loss. This valuation mark is included in two important accounting based capital ratios: common equity Tier 1 capital to risk-weighted assets and total equity to total assets. Under the final rule adopting the Basel III regulatory capital reforms, the valuation mark was being phased into common equity Tier 1 capital over five years beginning in 2014. At June 30, 2018, we had an available-for-sale securities portfolio of approximately $31,028 million with a negative mark-to-market adjustment of $642 million. An increase of 25 basis points in interest rates of all maturities would lower the mark-to-market by approximately $312 million to a net loss of $954 million with the following results on our capital ratios:

	June 30, 2018		December 31, 2017	
	Actual	**Proforma(1)**	**Actual**	**Proforma(1)**
Common equity Tier 1 capital to risk-weighted assets	**13.8%**	**13.6%**	14.2%	14.1%
Total equity to total assets	**11.1**	**10.9**	10.7	10.7

(1) Proforma percentages reflect a 25 basis point increase in interest rates.

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

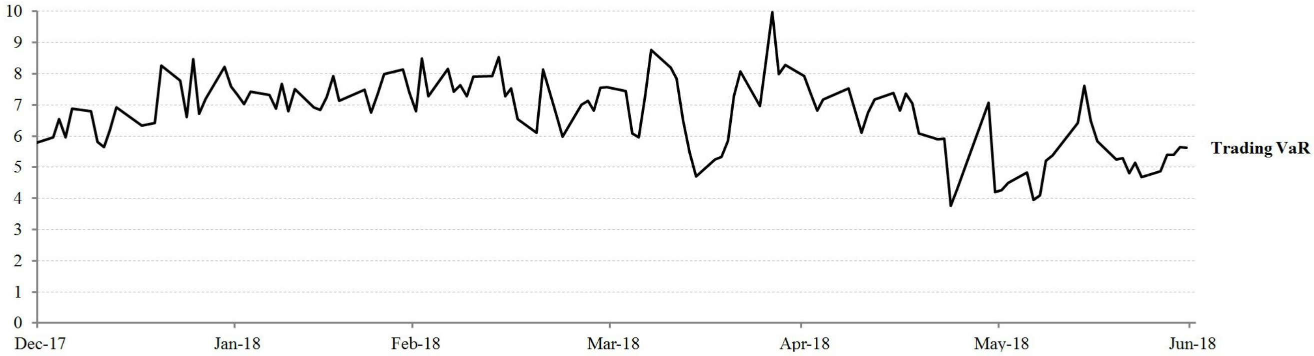
- *Trading portfolios* comprise positions arising from market-making and warehousing of client-derived positions.
- *Non-trading portfolios* comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities and financial investments classified as available-for-sale and held-to-maturity.

There have been no material changes to our approach towards market risk management since December 31, 2017. See "Risk Management" in MD&A in our 2017 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 at a 99 percent confidence level and use a one-day holding period.

Trading Portfolios Trading VaR generates from the Global Markets unit of the GB&M business segment. Portfolios are mainly comprised of foreign exchange products, interest rate swaps and precious metals (i.e., gold, silver, platinum) in both North America and emerging markets.

Daily VaR (trading portfolios), 99 percent 1 day (in millions):



The following table summarizes our trading VaR for the six months ended June 30, 2018:

	Foreign exchange and commodity	Interest rate	Credit Spread	Portfolio diversification(1)	Total(2)
			(in millions)		
At June 30, 2018	**$ 4**	**$ 5**	**$ 1**	**$ (4)**	**$ 6**
Six Months Ended June 30, 2018					
Average	**2**	**6**	**1**	**(2)**	**7**
Maximum	**5**	**11**	**2**		**10**
Minimum	**1**	**3**	**—**		**4**
At December 31, 2017	$ 2	$ 5	$ 1	$ (2)	$ 6

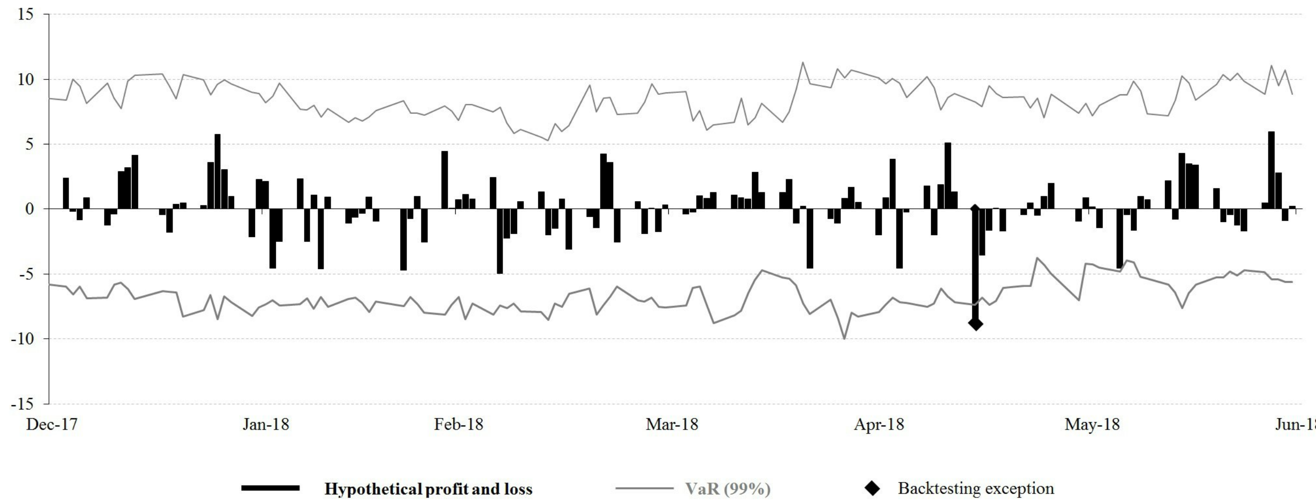
(1) Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, foreign exchange, interest rate and credit spread, 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, on average, to see two or three profits and two or three losses in excess of VaR at the 99 percent confident level over a one-year period. The actual number of profits or losses in excess of VaR over this period can therefore be used to gauge how well the models are performing. To ensure a conservative approach to calculating our risk exposures, it is important to note that profits in excess of VaR are only considered when back-testing the accuracy of models and are not used for capital purposes.

During the first half of 2018, we experienced one back-testing exception. The loss exception occurred in May and was driven by an overall sell off in emerging markets, which was exacerbated due to specific macroeconomic conditions in Argentina.

Back-testing of trading VaR against our hypothetical profit and loss (in millions):



Non-trading Portfolios Non-trading VaR predominantly relates to Balance Sheet Management 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 are mainly comprised of 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, mortgage spreads, and asset swap spreads.

The following table summarizes our non-trading VaR for the six months ended June 30, 2018:

	Interest rate	Credit Spread	Portfolio diversification[(1)]	Total[(1)]
		(in millions)		
At June 30, 2018	**$ 53**	**$ 19**	**$ (15)**	**$ 57**
Six Months Ended June 30, 2018				
Average	**62**	**20**	**(19)**	**63**
Maximum	**80**	**22**		**79**
Minimum	**38**	**17**		**47**
At December 31, 2017	$ 39	$ 18	$ (12)	$ 45

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

Non-trading VaR also includes the interest rate risk of non-trading financial assets and liabilities held by the global businesses and transfer priced into Balance Sheet Management which has the mandate to centrally manage and hedge it. For a broader discussion on how interest rate risk is managed, please refer to the "Risk Management - Interest Rate Risk Management" section in MD&A in our 2017 Form 10-K.

CONSOLIDATED AVERAGE BALANCES AND INTEREST RATES

The following table summarizes the quarter-to-date and year-to-date average daily balances of the principal components of assets, liabilities and equity together with their respective interest amounts and rates earned or paid. Net interest margin is calculated by dividing net interest income by the average interest earning assets from which interest income is earned. Loan interest for the three and six months ended June 30, 2018 included fees of $18 million and $36 million, respectively, compared with fees of $22 million and $46 million during the three and six months ended June 30, 2017, respectively.

Three Months Ended June 30,	2018			2017		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets						
Interest bearing deposits with banks	**$ 20,904**	**$ 100**	**1.92%**	$ 46,981	$ 127	1.08%
Federal funds sold and securities purchased under resale agreements	**6,978**	**57**	**3.28**	6,583	54	3.29
Trading securities	**12,520**	**53**	**1.70**	9,639	58	2.41
Securities	**45,484**	**278**	**2.45**	49,197	242	1.97
Loans:						
Commercial	**48,114**	**452**	**3.77**	50,385	372	2.96
Consumer:						
Residential mortgages	**17,371**	**150**	**3.46**	17,286	141	3.27
Home equity mortgages	**1,112**	**13**	**4.69**	1,314	12	3.66
Credit cards	**809**	**15**	**7.44**	645	17	10.57
Other consumer	**397**	**7**	**7.07**	451	6	5.34
Total consumer	**19,689**	**185**	**3.77**	19,696	176	3.58
Total loans	**67,803**	**637**	**3.77**	70,081	548	3.14
Other	**4,428**	**22**	**1.99**	2,986	13	1.75
Total interest earning assets	**$ 158,117**	**$ 1,147**	**2.91%**	$ 185,467	$ 1,042	2.25%
Allowance for credit losses	**(578)**			(911)		
Cash and due from banks	**1,138**			1,184		
Other assets	**22,813**			18,101		
Total assets	**$ 181,490**			$ 203,841		
Liabilities and Equity						
Domestic deposits:						
Savings deposits	**$ 49,568**	**$ 80**	**.65%**	$ 49,246	$ 56	.46%
Time deposits	**21,666**	**135**	**2.50**	22,612	84	1.49
Other interest bearing deposits	**10,184**	**34**	**1.34**	10,394	9	.35
Foreign deposits:						
Foreign banks deposits	**4,329**	**4**	**.37**	6,801	12	.71
Other interest bearing deposits	**1,568**	**5**	**1.28**	4,659	8	.69
Deposits held for sale	**160**	**—**	**.52**	—	—	—
Total interest bearing deposits	**87,475**	**258**	**1.18**	93,712	169	.72
Short-term borrowings	**6,827**	**43**	**2.53**	10,635	32	1.21
Long-term debt	**31,838**	**283**	**3.57**	38,011	251	2.65
Total interest bearing deposits and debt	**126,140**	**584**	**1.86**	142,358	452	1.27
Tax liabilities and other	**1,104**	**8**	**2.91**	1,022	8	3.14
Total interest bearing liabilities	**$ 127,244**	**$ 592**	**1.87%**	$ 143,380	$ 460	1.28%
Net interest income/Interest rate spread		**$ 555**	**1.04%**		$ 582	.97%
Noninterest bearing deposits	**25,603**			32,229		
Other liabilities	**8,890**			7,472		
Total equity	**19,753**			20,760		
Total liabilities and equity	**$ 181,490**			$ 203,841		
Net interest margin on average earning assets			**1.41%**			1.26%
Net interest income to average total assets			**1.23%**			1.15%

Six Months Ended June 30,	2018			2017		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets						
Interest bearing deposits with banks	**$ 23,980**	**$ 210**	**1.77%**	$ 41,806	$ 204	.98%
Federal funds sold and securities purchased under resale agreements	**7,295**	**105**	**2.90**	8,132	108	2.68
Trading securities	**12,646**	**102**	**1.63**	10,341	116	2.26
Securities	**45,003**	**531**	**2.38**	49,751	484	1.96
Loans:						
Commercial	**48,198**	**866**	**3.62**	52,393	754	2.90
Consumer:						
Residential mortgages	**17,355**	**297**	**3.45**	17,582	295	3.38
Home equity mortgages	**1,137**	**25**	**4.43**	1,346	25	3.75
Credit cards	**773**	**33**	**8.61**	651	34	10.53
Other consumer	**399**	**14**	**7.08**	456	13	5.75
Total consumer	**19,664**	**369**	**3.78**	20,035	367	3.69
Total loans	**67,862**	**1,235**	**3.67**	72,428	1,121	3.12
Other	**4,173**	**38**	**1.84**	2,864	24	1.69
Total interest earning assets	**$ 160,959**	**$ 2,221**	**2.78%**	$ 185,322	$ 2,057	2.24%
Allowance for credit losses	**(615)**			(961)		
Cash and due from banks	**968**			1,112		
Other assets	**21,994**			16,944		
Total assets	**$ 183,306**			$ 202,417		
Liabilities and Equity						
Domestic deposits:						
Savings deposits	**$ 49,937**	**$ 151**	**.61%**	$ 49,843	$ 104	.42%
Time deposits	**22,067**	**248**	**2.27**	23,024	162	1.42
Other interest bearing deposits	**10,622**	**64**	**1.22**	11,670	16	.28
Foreign deposits:						
Foreign banks deposits	**4,519**	**9**	**.40**	7,427	25	.68
Other interest bearing deposits	**1,430**	**7**	**.99**	4,147	12	.58
Deposits held for sale	**263**	**1**	**.59**	—	—	—
Total interest bearing deposits	**88,838**	**480**	**1.09**	96,111	319	.67
Short-term borrowings	**6,669**	**76**	**2.30**	8,589	55	1.29
Long-term debt	**32,665**	**540**	**3.33**	37,918	493	2.62
Total interest bearing deposits and debt	**128,172**	**1,096**	**1.72**	142,618	867	1.23
Tax liabilities and other	**1,463**	**18**	**2.48**	968	11	2.29
Total interest bearing liabilities	**$ 129,635**	**$ 1,114**	**1.73%**	$ 143,586	$ 878	1.23%
Net interest income/Interest rate spread		**$ 1,107**	**1.05%**		$ 1,179	1.01%
Noninterest bearing deposits	**26,393**			31,012		
Other liabilities	**7,407**			7,200		
Total equity	**19,871**			20,619		
Total liabilities and equity	**$ 183,306**			$ 202,417		
Net interest margin on average earning assets			**1.39%**			1.28%
Net interest income to average total assets			**1.22%**			1.17%

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 "Interest Rate Risk Management" and "Market Risk Management."

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures We maintain a system of internal and 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 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 June 30, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II

Item 1. Legal Proceedings

See Note 20, "Litigation and Regulatory Matters," in the accompanying consolidated financial statements for our legal proceedings disclosure, which is incorporated herein by reference.

Item 5. Other Information

Disclosures pursuant to Section 13(r) of the Securities Exchange Act Section 13(r) of the Securities Exchange Act requires each issuer registered with the SEC to disclose in its annual or quarterly reports whether it or any of its affiliates have knowingly engaged in specified activities or transactions with persons or entities targeted by U.S. sanctions programs relating to Iran, terrorism, or the proliferation of weapons of mass destruction, even if those activities are not prohibited by U.S. law and are conducted outside the U.S. by non-U.S. affiliates in compliance with local laws and regulations.

To comply with this requirement, HSBC has requested relevant information from its affiliates globally. During the period covered by this Form 10-Q, HUSI did not engage in activities or transactions requiring disclosure pursuant to Section 13(r) other than those activities related to frozen accounts and transactions permitted under relevant U.S. sanction programs described under "Frozen Accounts and Transactions" below. The following activities conducted by our affiliates are disclosed in response to Section 13(r):

Loans in repayment Between 2001 and 2005, the Project and Export Finance division of the HSBC Group arranged or participated in a portfolio of loans to Iranian energy companies and banks. All of these loans were guaranteed by European and Asian export credit agencies and have varied maturity dates with final maturity in 2018. The HSBC Group continued to seek repayment in accordance with its obligations to the supporting export credit agencies.

During the second quarter of 2018, the remaining four loans all matured. These loans were supported by the official export credit agencies of the United Kingdom, South Korea, and Japan. The HSBC Group does not currently intend to extend any new loans. The HSBC Group generated the equivalent of approximately $4,400 of gross revenue and net profit from the loans maturing during the second quarter of 2018.

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 in support of guarantees issued by Iranian banks as the Iranian beneficiaries of the guarantees required that they be backed directly by Iranian banks. The Iranian banks to which the HSBC Group provided counter indemnities included Bank Tejarat, Bank Melli, and the Bank of Industry and Mine.

There was no measurable gross revenue in the second quarter of 2018 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. None were cancelled in the second quarter of 2018 and approximately 19 remain outstanding.

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

- The HSBC Group maintains an account in the United Kingdom for an Iranian-owned, U.K.-regulated financial institution. This account is generally no longer restricted under U.K. law, though HSBC maintains restrictions on the account as a matter of policy. The HSBC Group is seeking to exit this account and has begun transferring the funds to the client's accounts at other financial institutions. Estimated gross revenue in the second quarter of 2018 on this account, which includes fees and/or commissions, was approximately $33,000.
- The HSBC Group acts as the trustee and administrator for a pension scheme involving nine 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 second quarter of 2018 was approximately $175.

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 activity discussed in this section, to the extent legally permissible, and not enter into any new such activity.

Activity related to U.S. Executive Order 13382 The HSBC Group maintained an account for an individual customer who is designated under Executive Order 13382. The customer used an HSBC credit card to make twelve payments during the second quarter of 2018. The account was subsequently closed and exited during the second quarter of 2018. There was no measurable gross revenue or net profit generated from these transactions during the second quarter of 2018.

Other Activity The HSBC Group has an insurance company customer in the United Arab Emirates that, during the second quarter of 2018, made three payments for the reimbursement of medical treatment to a hospital located in the United Arab Emirates and owned by the Government of Iran. HSBC processed all three payments to the hospital made by its customer.

The HSBC Group maintains an account for an individual customer that has used an HSBC credit card to make a payment to an Iranian embassy during the second quarter of 2018.

For the activity in this section, there was no measurable gross revenue or net profit to the HSBC Group during the second quarter of 2018.

Frozen accounts and transactions The HSBC Group and HSBC Bank USA (a subsidiary of HUSI) maintain several accounts that are frozen as a result of relevant sanctions programs, and safekeeping boxes and other similar custodial relationships, for which no activity, except as licensed or otherwise authorized, took place during the second quarter of 2018. There was no measurable gross revenue or net profit to the HSBC Group during the second quarter of 2018 relating to these frozen accounts.

Item 6. Exhibits

3(i)	Articles of Incorporation and amendments and supplements thereto (incorporated by reference to Exhibit 3(a) to HSBC USA Inc.'s Annual Report on Form 10-K for the year ended December 31, 1999, Exhibit 3 to HSBC USA Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2000, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed April 4, 2005, Exhibit 3.3 to HSBC USA Inc.'s Current Report on Form 8-K filed April 4, 2005, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed October 14, 2005, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed May 22, 2006 and Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed on May 31, 2016).
3(ii)	Bylaws of HSBC USA Inc., as Amended and Restated effective July 24, 2018 (incorporated by reference to Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed July 26, 2018).
12	Computation of Ratio of Earnings to Fixed Charges.
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	XBRL Instance Document(1)
101.SCH	XBRL Taxonomy Extension Schema Document(1)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document(1)
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document(1)
101.LAB	XBRL Taxonomy Extension Label Linkbase Document(1)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document(1)

(1) Pursuant to Rule 405 of Regulation S-T, includes the following financial information included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, formatted in eXtensible Business Reporting Language ("XBRL") interactive data files: (i) the Consolidated Statement of Income for the three and six months ended June 30, 2018 and 2017, (ii) the Consolidated Statement of Comprehensive Income (Loss) for the three and six months ended June 30, 2018 and 2017, (iii) the Consolidated Balance Sheet at June 30, 2018 and December 31, 2017, (iv) the Consolidated Statement of Changes in Equity for the six months ended June 30, 2018 and 2017, (v) the Consolidated Statement of Cash Flows for the six months ended June 30, 2018 and 2017, and (vi) the Notes to Consolidated Financial Statements.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, HSBC USA Inc. has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 6, 2018

HSBC USA INC.

By: /s/ MARK A. ZAESKE

Mark A. Zaeske
Senior Executive Vice President and
Chief Financial Officer

EXHIBIT 12

HSBC USA INC.
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES AND EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

	Six Months Ended June 30,	
	2018	**2017**
	(dollars are in millions)	
Ratios excluding interest on deposits:		
Net income	**$ 31**	$ 500
Income tax expense	**174**	260
Fixed charges:		
Interest on:		
Short-term borrowings	**76**	55
Long-term debt	**540**	493
Others	**18**	11
One third of rents, net of income from subleases	**16**	16
Total fixed charges, excluding interest on deposits	**650**	575
Earnings before taxes and fixed charges, excluding interest on deposits	**$ 855**	$ 1,335
Ratio of earnings to fixed charges, excluding interest on deposits	**1.32**	2.32
Preferred stock dividends[1]	**$ 50**	$ 61
Fixed charges, including preferred stock dividends	**$ 700**	$ 636
Ratio of earnings to fixed charges, including preferred stock dividends	**1.22**	2.10
Ratios including interest on deposits:		
Total fixed charges, excluding interest on deposits	**$ 650**	$ 575
Add: Interest on deposits	**480**	319
Total fixed charges, including interest on deposits	**1,130**	894
Earnings before taxes and fixed charges, excluding interest on deposits	**855**	1,335
Add: Interest on deposits	**480**	319
Earnings before taxes and fixed charges, including interest on deposits	**$ 1,335**	$ 1,654
Ratio of earnings to fixed charges, including interest on deposits	**1.18**	1.85
Fixed charges, including preferred stock dividends	**$ 700**	$ 636
Add: Interest on deposits	**480**	319
Fixed charges, including interest on deposits and preferred stock dividends	**$ 1,180**	$ 955
Ratio of earnings to fixed charges, including interest on deposits and preferred stock dividends	**1.13**	1.73

(1) Preferred stock dividends are grossed up to their pretax equivalents.

EXHIBIT 31

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

Certification of Chief Executive Officer

I, Patrick J. Burke, certify that:

1. I have reviewed this report on Form 10-Q of HSBC USA Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 6, 2018

/s/ PATRICK J. BURKE

Patrick J. Burke
Chairman of the Board, President
and Chief Executive Officer

Certification of Chief Financial Officer

I, Mark A. Zaeske, certify that:

1. I have reviewed this report on Form 10-Q of HSBC USA Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2018

/s/ MARK A. ZAESKE

Mark A. Zaeske
Senior Executive Vice President and
Chief Financial Officer

EXHIBIT 32

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

The certification set forth below is being submitted in connection with the HSBC USA Inc. (the "Company") Quarterly Report on Form 10-Q for the period ending June 30, 2018 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, Patrick J. Burke, certify that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of HSBC USA Inc.

Date: August 6, 2018

/s/ PATRICK J. BURKE
Patrick J. Burke
Chairman of the Board, President
and Chief Executive Officer

This certification accompanies each Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by HSBC USA Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

The signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to HSBC USA Inc. and will be retained by HSBC USA Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Certification pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

The certification set forth below is being submitted in connection with the HSBC USA Inc. (the “Company”) Quarterly Report on Form 10-Q for the period ending June 30, 2018 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, Mark A. Zaeske, certify that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of HSBC USA Inc.

Date: August 6, 2018

/s/ MARK A. ZAESKE

Mark A. Zaeske
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.