UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2017

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)**

(212) 525-5000

Registrant's telephone number, including area code

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 October 27, 2017, there were 714 shares of the registrant's common stock outstanding, all of which are owned by HSBC North America Holdings Inc.

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PART I

Item 1. Financial Statements

CONSOLIDATED STATEMENT OF INCOME (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(in millions)			
Interest income:				
Loans	**$ 552**	$ 568	**$ 1,673**	$ 1,709
Securities	**231**	234	**715**	721
Trading securities	**47**	52	**163**	197
Short-term investments	**203**	100	**515**	268
Other	**14**	12	**38**	31
Total interest income	**1,047**	966	**3,104**	2,926
Interest expense:				
Deposits	**188**	122	**507**	344
Short-term borrowings	**39**	22	**94**	61
Long-term debt	**256**	213	**749**	613
Other	**4**	5	**15**	12
Total interest expense	**487**	362	**1,365**	1,030
Net interest income	**560**	604	**1,739**	1,896
Provision for credit losses	**(22)**	62	**(120)**	353
Net interest income after provision for credit losses	**582**	542	**1,859**	1,543
Other revenues:				
Credit card fees	**12**	12	**37**	39
Trust and investment management fees	**39**	40	**116**	118
Other fees and commissions	**167**	215	**492**	557
Trading revenue	**81**	120	**222**	185
Other securities gains, net	**5**	16	**29**	81
Servicing and other fees from HSBC affiliates	**52**	50	**186**	155
Residential mortgage banking revenue (expense)	**(4)**	(3)	**(8)**	24
Gain (loss) on instruments designated at fair value and related derivatives	**7**	(88)	**40**	90
Other income (loss)	**9**	(42)	**344**	(174)
Total other revenues	**368**	320	**1,458**	1,075
Operating expenses:				
Salaries and employee benefits	**268**	235	**789**	718
Support services from HSBC affiliates	**340**	354	**1,034**	1,029
Occupancy expense, net	**63**	57	**193**	173
Other expenses	**124**	157	**386**	432
Total operating expenses	**795**	803	**2,402**	2,352
Income before income tax	**155**	59	**915**	266
Income tax expense	**61**	26	**321**	100
Net income	**$ 94**	$ 33	**$ 594**	$ 166

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(in millions)			
Net income	**$ 94**	$ 33	**$ 594**	$ 166
Net change in unrealized gains (losses), net of tax:				
Investment securities	**22**	(112)	**239**	374
Fair value option liabilities attributable to our own credit spread	**(45)**	—	**(133)**	—
Derivatives designated as cash flow hedges	**2**	9	**—**	(47)
Total other comprehensive income (loss)	**(21)**	(103)	**106**	327
Comprehensive income (loss)	**$ 73**	$ (70)	**$ 700**	$ 493

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

CONSOLIDATED BALANCE SHEET (UNAUDITED)

	September 30, 2017	December 31, 2016
	(in millions, except share data)	
Assets[(1)]		
Cash and due from banks	**$ 986**	$ 1,235
Interest bearing deposits with banks	**23,103**	20,238
Federal funds sold and securities purchased under agreements to resell (includes $1.3 billion and $770 million designated under fair value option at September 30, 2017 and December 31, 2016, respectively)	**17,136**	30,023
Trading assets	**33,520**	16,850
Securities available-for-sale	**31,693**	36,910
Securities held-to-maturity (fair value of $14.4 billion and $12.8 billion at September 30, 2017 and December 31, 2016, respectively)	**14,361**	12,809
Loans	**67,593**	73,875
Less – allowance for credit losses	**799**	1,017
Loans, net	**66,794**	72,858
Loans held for sale (includes $375 million and $725 million designated under fair value option at September 30, 2017 and December 31, 2016, respectively)	**507**	1,809
Properties and equipment, net	**175**	202
Goodwill	**1,607**	1,612
Other assets	**8,004**	6,755
Total assets	**$ 197,886**	$ 201,301
Liabilities[(1)]		
Debt:		
Domestic deposits:		
Noninterest bearing	**$ 27,423**	$ 26,932
Interest bearing (includes $7.6 billion and $7.5 billion designated under fair value option at September 30, 2017 and December 31, 2016, respectively)	**85,898**	86,389
Foreign deposits:		
Noninterest bearing	**563**	741
Interest bearing	**6,926**	15,186
Deposits held for sale	**1,030**	—
Total deposits	**121,840**	129,248
Short-term borrowings (includes $3.6 billion and $2.7 billion designated under fair value option at September 30, 2017 and December 31, 2016, respectively)	**7,973**	5,101
Long-term debt (includes $12.4 billion and $10.4 billion designated under fair value option at September 30, 2017 and December 31, 2016, respectively)	**37,376**	37,739
Total debt	**167,189**	172,088
Trading liabilities	**4,084**	4,908
Interest, taxes and other liabilities	**5,615**	3,950
Total liabilities	**176,888**	180,946
Equity		
Preferred stock (no par value; 40,999,000 shares authorized; 1,265 shares issued and outstanding at both September 30, 2017 and December 31, 2016)	**1,265**	1,265
Common equity:		
Common stock ($5 par; 150,000,000 shares authorized; 714 shares issued and outstanding at both September 30, 2017 and December 31, 2016)	**—**	—
Additional paid-in capital	**18,129**	18,148
Retained earnings	**1,942**	1,560
Accumulated other comprehensive loss	**(338)**	(618)
Total common equity	**19,733**	19,090
Total equity	**20,998**	20,355
Total liabilities and equity	**$ 197,886**	$ 201,301

(1) The following table summarizes assets and liabilities related to our consolidated variable interest entities ("VIEs") at September 30, 2017 and December 31, 2016 which are consolidated on our balance sheet. Assets and liabilities exclude intercompany balances that eliminate in consolidation. See Note 16, "Variable Interest Entities," for additional information.

	September 30, 2017	December 31, 2016
	(in millions)	
Assets		
Other assets	**$ 208**	$ 231
Total assets	**$ 208**	$ 231
Liabilities		
Long-term debt	**$ 73**	$ 79
Interest, taxes and other liabilities	**58**	60
Total liabilities	**$ 131**	$ 139

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)

Nine Months Ended September 30,	2017	2016
	(in millions)	
Preferred stock		
Balance at beginning of period	**$ 1,265**	$ 1,265
Preferred stock issuance	**—**	1,265
Preferred stock redemption	**—**	(1,265)
Balance at 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	**18,148**	18,169
Employee benefit plans	**(19)**	(12)
Balance at end of period	**18,129**	18,157
Retained earnings		
Balance at beginning of period, as previously reported	**1,560**	1,498
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	**1,386**	1,498
Net income	**594**	166
Cash dividends declared on preferred stock	**(38)**	(29)
Balance at end of period	**1,942**	1,635
Accumulated other comprehensive income (loss)		
Balance at beginning of period, as previously reported	**(618)**	(407)
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	**(444)**	(407)
Other comprehensive income, net of tax	**106**	327
Balance at end of period	**(338)**	(80)
Total common equity	**19,733**	19,712
Total equity	**$ 20,998**	$ 20,977

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

CONSOLIDATED STATEMENT OF CASH FLOWS (UNAUDITED)

Nine Months Ended September 30,	2017	2016
	(in millions)	
Cash flows from operating activities		
Net income	**$ 594**	$ 166
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**(75)**	(29)
Provision for credit losses	**(120)**	353
Net realized gains on securities available-for-sale	**(29)**	(81)
Net change in other assets and liabilities	**504**	1,010
Net change in loans held for sale:		
Originations and purchases of loans held for sale	**(1,664)**	(1,733)
Sales and collections of loans held for sale	**2,025**	2,051
Net change in trading assets and liabilities	**(17,494)**	(2,419)
Lower of amortized cost or fair value adjustments on loans held for sale	**(17)**	82
Gain on instruments designated at fair value and related derivatives	**(40)**	(90)
Net cash provided by (used in) operating activities	**(16,316)**	(690)
Cash flows from investing activities		
Net change in interest bearing deposits with banks	**(2,865)**	(9,661)
Net change in federal funds sold and securities purchased under agreements to resell	**12,893**	(10,866)
Securities available-for-sale:		
Purchases of securities available-for-sale	**(7,973)**	(18,364)
Proceeds from sales of securities available-for-sale	**12,620**	13,697
Proceeds from maturities of securities available-for-sale	**1,168**	1,315
Securities held-to-maturity:		
Purchases of securities held-to-maturity	**(3,455)**	(1,311)
Proceeds from maturities of securities held-to-maturity	**1,872**	1,871
Change in loans:		
Collections, net of originations	**5,125**	3,697
Loans sold to third parties	**2,088**	1,458
Net cash used for acquisitions of properties and equipment	**(14)**	(17)
Other, net	**463**	(60)
Net cash provided by (used in) investing activities	**21,922**	(18,241)
Cash flows from financing activities		
Net change in deposits	**(7,461)**	12,285
Debt:		
Net change in short-term borrowings	**2,875**	1,069
Issuance of long-term debt	**3,886**	7,675
Repayment of long-term debt	**(5,098)**	(2,122)
Preferred stock issuance	**—**	1,265
Preferred stock redemption	**—**	(1,265)
Other increases (decreases) in capital surplus	**(19)**	(12)
Dividends paid	**(38)**	(29)
Net cash provided by (used in) financing activities	**(5,855)**	18,866
Net change in cash and due from banks	**(249)**	(65)
Cash and due from banks at beginning of period	**1,235**	968
Cash and due from banks at end of period	**$ 986**	$ 903

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, 2016 (the "2016 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. During the three and nine months ended September 30, 2017, our results were impacted by an out of period adjustment to our estimated liability associated with certain medical benefits provided to employees on long-term disability which increased salaries and employee benefits expense by $7 million. In addition, for the nine months ended September 30, 2017, our income tax expense was impacted by an out of period adjustment to our deferred tax asset balance which decreased tax expense by $9 million.

2. Trading Assets and Liabilities

Trading assets and liabilities consisted of the following:

	September 30, 2017	December 31, 2016
	(in millions)	
Trading assets:		
U.S. Treasury	**$ 4,250**	$ 3,560
U.S. Government agency issued or guaranteed	**125**	24
U.S. Government sponsored enterprises	**213**	222
Asset-backed securities	**288**	365
Corporate and foreign bonds	**6,130**	6,481
Other securities	**12**	15
Precious metals	**19,124**	1,772
Derivatives, net	**3,378**	4,411
Total trading assets	**$ 33,520**	$ 16,850
Trading liabilities:		
Securities sold, not yet purchased	**$ 1,474**	$ 1,060
Payables for precious metals	**—**	62
Derivatives, net	**2,610**	3,786
Total trading liabilities	**$ 4,084**	$ 4,908

At September 30, 2017 and December 31, 2016, the fair value of derivatives included in trading assets is net of $3,628 million and $4,462 million, respectively, relating to amounts recognized for the obligation to return cash collateral received under master netting agreements with derivative counterparties.

At September 30, 2017 and December 31, 2016, the fair value of derivatives included in trading liabilities is net of $3,195 million and $3,826 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:

September 30, 2017	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in millions)			
Securities available-for-sale:				
U.S. Treasury	$ 16,069	$ 147	$ (331)	$ 15,885
U.S. Government sponsored enterprises:				
Mortgage-backed securities	3,384	5	(64)	3,325
Collateralized mortgage obligations	648	—	(24)	624
Direct agency obligations	3,356	99	(1)	3,454
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	5,430	9	(64)	5,375
Collateralized mortgage obligations	999	2	(12)	989
Direct agency obligations	423	11	—	434
Asset-backed securities collateralized by:				
Home equity	58	—	(3)	55
Other	507	2	—	509
Foreign debt securities(1)	890	—	(1)	889
Equity securities	159	—	(5)	154
Total available-for-sale securities	$ 31,923	$ 275	$ (505)	$ 31,693
Securities held-to-maturity:				
U.S. Government sponsored enterprises:				
Mortgage-backed securities	$ 2,186	$ 17	$ (4)	$ 2,199
Collateralized mortgage obligations	1,351	49	(10)	1,390
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	2,603	11	(6)	2,608
Collateralized mortgage obligations	8,203	31	(49)	8,185
Obligations of U.S. states and political subdivisions	14	1	—	15
Asset-backed securities collateralized by residential mortgages	4	—	—	4
Total held-to-maturity securities	$ 14,361	$ 109	$ (69)	$ 14,401

December 31, 2016	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
		(in millions)		
Securities available-for-sale:				
U.S. Treasury	$ 21,366	$ 102	$ (559)	$ 20,909
U.S. Government sponsored enterprises:				
Mortgage-backed securities	4,535	4	(122)	4,417
Collateralized mortgage obligations	2,139	—	(36)	2,103
Direct agency obligations	3,709	118	(10)	3,817
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	3,102	2	(58)	3,046
Collateralized mortgage obligations	1,370	2	(15)	1,357
Direct agency obligations	423	1	(4)	420
Asset-backed securities collateralized by:				
Home equity	69	—	(8)	61
Other	108	—	(3)	105
Foreign debt securities[1]	522	—	(1)	521
Equity securities	159	—	(5)	154
Total available-for-sale securities	$ 37,502	$ 229	$ (821)	$ 36,910
Securities held-to-maturity:				
U.S. Government sponsored enterprises:				
Mortgage-backed securities	$ 2,465	$ 11	$ (9)	$ 2,467
Collateralized mortgage obligations	1,591	59	(12)	1,638
U.S. Government agency issued or guaranteed:				
Mortgage-backed securities	2,557	11	(10)	2,558
Collateralized mortgage obligations	6,176	34	(56)	6,154
Obligations of U.S. states and political subdivisions	15	1	—	16
Asset-backed securities collateralized by residential mortgages	5	—	—	5
Total held-to-maturity securities	$ 12,809	$ 116	$ (87)	$ 12,838

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

Net unrealized losses decreased within the available-for-sale portfolio in the nine months ended September 30, 2017 due primarily to decreasing yields as well as favorable movements associated with fair value hedged U.S. Treasury securities.

The following table summarizes gross unrealized losses and related fair values at September 30, 2017 and December 31, 2016 classified as to the length of time the losses have existed:

	One Year or Less			Greater Than One Year		
September 30, 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	**28**	**$ (214)**	**$ 7,433**	**29**	**$ (117)**	**$ 3,675**
U.S. Government sponsored enterprises	**84**	**(80)**	**3,291**	**15**	**(9)**	**259**
U.S. Government agency issued or guaranteed	**42**	**(70)**	**1,858**	**6**	**(6)**	**73**
Asset-backed securities	**—**	**—**	**—**	**5**	**(3)**	**54**
Foreign debt securities	**8**	**—**	**672**	**1**	**(1)**	**168**
Equity securities	**—**	**—**	**—**	**1**	**(5)**	**154**
Securities available-for-sale	**162**	**$ (364)**	**$ 13,254**	**57**	**$ (141)**	**$ 4,383**
Securities held-to-maturity:						
U.S. Government sponsored enterprises	**253**	**$ (13)**	**$ 1,156**	**51**	**$ (1)**	**$ 16**
U.S. Government agency issued or guaranteed	**125**	**(43)**	**5,052**	**467**	**(12)**	**776**
Obligations of U.S. states and political subdivisions	**—**	**—**	**—**	**2**	**—**	**—**
Securities held-to-maturity	**378**	**$ (56)**	**$ 6,208**	**520**	**$ (13)**	**$ 792**

	One Year or Less			Greater Than One Year		
December 31, 2016	**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	40	$ (378)	$ 13,707	32	$ (181)	$ 3,908
U.S. Government sponsored enterprises	316	(155)	6,474	18	(13)	427
U.S. Government agency issued or guaranteed	57	(66)	3,941	7	(11)	252
Asset-backed securities	—	—	—	8	(11)	166
Foreign debt securities	7	—	343	1	(1)	178
Equity securities	1	(5)	154	—	—	—
Securities available-for-sale	421	$ (604)	$ 24,619	66	$ (217)	$ 4,931
Securities held-to-maturity:						
U.S. Government sponsored enterprises	434	$ (21)	$ 2,013	45	$ —	$ 21
U.S. Government agency issued or guaranteed	179	(65)	4,734	503	(1)	112
Obligations of U.S. states and political subdivisions	1	—	—	3	—	—
Securities held-to-maturity	614	$ (86)	$ 6,747	551	$ (1)	$ 133

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 September 30, 2017 and December 31, 2016, 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 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 2016 Form 10-K. There have been no material changes in our process for assessing impairment during 2017.

During the three and nine months ended September 30, 2017 and 2016, 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 September 30,		Nine Months Ended September 30,	
	2017	2016	**2017**	2016
	(in millions)			
Gross realized gains	**$ 9**	$ 25	**$ 42**	$ 112
Gross realized losses	**(4)**	(9)	**(13)**	(31)
Net realized gains	**$ 5**	$ 16	**$ 29**	$ 81

Contractual Maturities and Yields The following table summarizes the amortized cost and fair values of securities available-for-sale and securities held-to-maturity at September 30, 2017 by contractual maturity. Expected maturities differ from contractual maturities because borrowers have the right to prepay obligations without prepayment penalties in certain cases. Securities available-for-sale amounts exclude equity securities as they do not have stated maturities. The table below also reflects the distribution of maturities of debt securities held at September 30, 2017, 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 September 30, 2017. 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	$ —	—%	$ 3,215	2.12%	$ 8,893	1.97%	$ 3,961	2.84%
U.S. Government sponsored enterprises	99	3.26	2,921	3.00	1,502	2.52	2,866	2.70
U.S. Government agency issued or guaranteed	1	3.49	183	2.56	20	3.91	6,648	2.57
Asset-backed securities	400	2.56	—	—	—	—	165	3.85
Foreign debt securities	602	.00	288	1.18	—	—	—	—
Total amortized cost	$ 1,102	1.23%	$ 6,607	2.48%	$ 10,415	2.06%	$ 13,640	2.69%
Total fair value	$ 1,103		$ 6,727		$ 10,233		$ 13,476	
Held-to-maturity:								
U.S. Government sponsored enterprises	$ —	—%	$ 310	2.36%	$ 339	2.77%	$ 2,888	2.86%
U.S. Government agency issued or guaranteed	—	—	26	3.78	29	2.47	10,751	2.35
Obligations of U.S. states and political subdivisions	2	4.17	4	3.51	6	4.15	2	4.16
Asset-backed securities	—	—	—	—	—	—	4	7.11
Total amortized cost	$ 2	4.17%	$ 340	2.48%	$ 374	2.77%	$ 13,645	2.46%
Total fair value	$ 2		$ 342		$ 379		$ 13,678	

Investments in Federal Home Loan Bank stock and Federal Reserve Bank stock of $282 million and $631 million, respectively, at September 30, 2017 and $338 million and $631 million, respectively, at December 31, 2016 were included in other assets.

4. Loans

Loans consisted of the following:

	September 30, 2017	December 31, 2016
	(in millions)	
Commercial loans:		
Real estate, including construction	**$ 10,442**	$ 10,890
Business and corporate banking	**13,328**	14,080
Global banking[(1)(2)]	**19,950**	23,481
Other commercial[(2)]	**4,408**	5,765
Total commercial	**48,128**	54,216
Consumer loans:		
Residential mortgages	**17,196**	17,181
Home equity mortgages	**1,234**	1,408
Credit cards	**656**	688
Other consumer	**379**	382
Total consumer	**19,465**	19,659
Total loans	**$ 67,593**	$ 73,875

(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) During the first quarter of 2017, in conjunction with the creation of the new Corporate Center segment as discussed further in Note 14, "Business Segments," we reclassified loans to HSBC affiliates from global banking to other commercial and revised the prior period to conform with the current year presentation. As a result, other commercial includes loans to HSBC affiliates which totaled $1,820 million and $3,274 million at September 30, 2017 and December 31, 2016, respectively. All tables below have been restated to reflect this reclassification, as applicable. See Note 13, "Related Party Transactions," for additional information regarding loans to HSBC affiliates.

Net deferred origination fees totaled $23 million and $48 million at September 30, 2017 and December 31, 2016, respectively. At September 30, 2017 and December 31, 2016, we had a net unamortized premium (discount) on our loans of $6 million and $(5) 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 September 30, 2017 and December 31, 2016. 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 September 30, 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	**$ 7**	**$ 12**	**$ 19**	**$ 10,423**	**$ 10,442**
Business and corporate banking	**94**	**2**	**96**	**13,232**	**13,328**
Global banking	**—**	**56**	**56**	**19,894**	**19,950**
Other commercial	**1**	**—**	**1**	**4,407**	**4,408**
Total commercial	**102**	**70**	**172**	**47,956**	**48,128**
Consumer loans:					
Residential mortgages	**368**	**331**	**699**	**16,497**	**17,196**
Home equity mortgages	**10**	**34**	**44**	**1,190**	**1,234**
Credit cards	**8**	**8**	**16**	**640**	**656**
Other consumer	**6**	**6**	**12**	**367**	**379**
Total consumer	**392**	**379**	**771**	**18,694**	**19,465**
Total loans	**$ 494**	**$ 449**	**$ 943**	**$ 66,650**	**$ 67,593**

	Past Due				
At December 31, 2016	**30 - 89 Days**	**90+ Days**	**Total Past Due 30 Days or More**	**Current[(1)]**	**Total Loans**
			(in millions)		
Commercial loans:					
Real estate, including construction	$ 17	$ 6	$ 23	$ 10,867	$ 10,890
Business and corporate banking	35	9	44	14,036	14,080
Global banking	1	64	65	23,416	23,481
Other commercial	4	7	11	5,754	5,765
Total commercial	57	86	143	54,073	54,216
Consumer loans:					
Residential mortgages	402	317	719	16,462	17,181
Home equity mortgages	10	43	53	1,355	1,408
Credit cards	9	10	19	669	688
Other consumer	7	7	14	368	382
Total consumer	428	377	805	18,854	19,659
Total loans	$ 485	$ 463	$ 948	$ 72,927	$ 73,875

(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:

	September 30, 2017	December 31, 2016
	(in millions)	
Nonaccrual loans:		
Commercial:		
Real estate, including construction	**$ 18**	$ 56
Business and corporate banking	**244**	187
Global banking	**469**	546
Other commercial	**—**	1
Commercial nonaccrual loans held for sale	**—**	11
Total commercial	**731**	801
Consumer:		
Residential mortgages[1][2][3]	**435**	435
Home equity mortgages[1][2]	**69**	75
Consumer nonaccrual loans held for sale	**3**	369
Total consumer	**507**	879
Total nonaccruing loans	**1,238**	1,680
Accruing loans contractually past due 90 days or more:		
Commercial:		
Business and corporate banking	**5**	1
Total commercial	**5**	1
Consumer:		
Credit cards	**8**	10
Other consumer	**6**	7
Total consumer	**14**	17
Total accruing loans contractually past due 90 days or more	**19**	18
Total nonperforming loans	**$ 1,257**	$ 1,698

(1) At September 30, 2017 and December 31, 2016, nonaccrual consumer mortgage loans held for investment include $378 million and $382 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 are 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 September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(in millions)			
Interest income that would have been recorded if the nonaccrual loans had been current in accordance with contractual terms during the period	**$ 15**	$ 23	**$ 53**	$ 67
Interest income that was recorded on nonaccrual loans and included in interest income during the period	**3**	5	**16**	14

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 either 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 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 nine months ended September 30, 2017 and 2016 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 nine months ended September 30, 2017 and 2016 and as a result of this action became classified as TDR Loans:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
		(in millions)		
Commercial loans:				
Business and corporate banking	**$ —**	$ —	**$ 24**	$ 304
Global banking	**—**	—	**86**	—
Total commercial	**—**	—	**110**	304
Consumer loans:				
Residential mortgages	**11**	12	**27**	55
Home equity mortgages	**2**	2	**6**	7
Credit cards	**1**	1	**3**	3
Total consumer	**14**	15	**36**	65
Total	**$ 14**	$ 15	**$ 146**	$ 369

The weighted-average contractual rate reduction for consumer loans which became classified as TDR Loans during the three and nine months ended September 30, 2017 was 2.41 percent and 1.98 percent, respectively, compared with 1.41 percent and 1.61 percent during the three and nine months ended September 30, 2016, 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:

	September 30, 2017		December 31, 2016	
	Carrying Value	Unpaid Principal Balance	Carrying Value	Unpaid Principal Balance
	(in millions)			
TDR Loans:[1][2]				
Commercial loans:				
Real estate, including construction	**$ —**	**$ —**	$ 32	$ 33
Business and corporate banking	**244**	**320**	300	363
Global banking	**119**	**123**	150	152
Total commercial[3]	**363**	**443**	482	548
Consumer loans:				
Residential mortgages[4]	**693**	**789**	708	797
Home equity mortgages[4]	**31**	**64**	27	59
Credit cards	**4**	**4**	5	5
Total consumer	**728**	**857**	740	861
Total TDR Loans[5]	**$ 1,091**	**$ 1,300**	$ 1,222	$ 1,409
Allowance for credit losses for TDR Loans:[6]				
Commercial loans:				
Real estate, including construction	**$ —**		$ —	
Business and corporate banking	**24**		37	
Global banking	**—**		—	
Total commercial	**24**		37	
Consumer loans:				
Residential mortgages	**7**		9	
Home equity mortgages	**1**		1	
Credit cards	**1**		1	
Total consumer	**9**		11	
Total allowance for credit losses for TDR Loans	**$ 33**		$ 48	

(1) TDR Loans are considered to be impaired loans. For consumer loans, all such loans are considered impaired loans regardless of accrual status. For commercial loans, impaired loans include other loans in addition to TDR Loans which totaled $490 million and $571 million at September 30, 2017 and December 31, 2016, respectively.

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

(3) Additional commitments to lend to commercial borrowers whose loans have been modified in TDR Loans totaled $223 million and $184 million at September 30, 2017 and December 31, 2016, respectively.

(4) At September 30, 2017 and December 31, 2016, the carrying value of consumer mortgage TDR Loans held for investment includes $662 million and $672 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 September 30, 2017 and December 31, 2016, the carrying value of TDR Loans includes $514 million and $645 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 September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
		(in millions)		
Average balance of TDR Loans:				
Commercial loans:				
Real estate, including construction	**$ 15**	$ 63	**$ 23**	$ 78
Business and corporate banking	**248**	380	**259**	290
Global banking	**164**	116	**149**	113
Total commercial	**427**	559	**431**	481
Consumer loans:				
Residential mortgages	**705**	917	**709**	966
Home equity mortgages	**31**	27	**30**	25
Credit cards	**4**	5	**4**	5
Total consumer	**740**	949	**743**	996
Total average balance of TDR Loans	**$ 1,167**	$ 1,508	**$ 1,174**	$ 1,477
Interest income recognized on TDR Loans:				
Commercial loans:				
Real estate, including construction	**$ —**	$ 2	**$ —**	$ 3
Business and corporate banking	**1**	3	**5**	7
Global banking	**1**	—	**2**	—
Total commercial	**2**	5	**7**	10
Consumer loans:				
Residential mortgages	**7**	10	**21**	29
Home equity mortgages	**—**	—	**1**	1
Total consumer	**7**	10	**22**	30
Total interest income recognized on TDR Loans	**$ 9**	$ 15	**$ 29**	$ 40

The following table presents consumer loans which were classified as TDR Loans during the previous 12 months which subsequently became 60 days or greater contractually delinquent during the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
		(in millions)		
Consumer loans:				
Residential mortgages	**$ 2**	$ 6	**$ 7**	$ 21
Home equity mortgages	**$ 1**	$ —	**1**	—
Total consumer	**$ 3**	$ 6	**$ 8**	$ 21

During the three and nine months ended September 30, 2017 and 2016, 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 September 30, 2017					
Real estate, including construction	**$ 1**	**$ 16**	**$ 17**	**$ 1**	**$ 17**
Business and corporate banking	**183**	**137**	**320**	**51**	**384**
Global banking	**372**	**144**	**516**	**162**	**530**
Other commercial	**—**	**—**	**—**	**—**	**—**
Total commercial	**$ 556**	**$ 297**	**$ 853**	**$ 214**	**$ 931**
At December 31, 2016					
Real estate, including construction	$ 2	$ 41	$ 43	$ 1	$ 45
Business and corporate banking	176	166	342	55	397
Global banking	417	244	661	251	674
Other commercial	1	6	7	1	7
Total commercial	$ 596	$ 457	$ 1,053	$ 308	$ 1,123

(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 any premiums or discounts on purchased loans.

(2) Includes impaired commercial loans that are also considered TDR Loans which totaled $363 million and $482 million at September 30, 2017 and December 31, 2016, respectively.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
		(in millions)		
Average balance of impaired commercial loans:				
Real estate, including construction	**$ 30**	$ 79	**$ 37**	$ 93
Business and corporate banking	**302**	428	**318**	345
Global banking	**559**	679	**583**	443
Other commercial	**3**	8	**5**	7
Total average balance of impaired commercial loans	**$ 894**	$ 1,194	**$ 943**	$ 888
Interest income recognized on impaired commercial loans:				
Real estate, including construction	**$ —**	$ 2	**$ —**	$ 3
Business and corporate banking	**1**	3	**6**	8
Global banking	**1**	—	**2**	—
Total interest income recognized on impaired commercial loans	**$ 2**	$ 5	**$ 8**	$ 11

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 September 30, 2017				
Real estate, including construction	**$ 502**	**$ 58**	**$ 7**	**$ 567**
Business and corporate banking	**558**	**594**	**49**	**1,201**
Global banking	**537**	**2,206**	**158**	**2,901**
Other commercial	**11**	**—**	**—**	**11**
Total commercial	**$ 1,608**	**$ 2,858**	**$ 214**	**$ 4,680**
At December 31, 2016				
Real estate, including construction	$ 445	$ 152	$ 1	$ 598
Business and corporate banking	597	803	58	1,458
Global banking	899	2,478	298	3,675
Other commercial	—	6	1	7
Total commercial	$ 1,941	$ 3,439	$ 358	$ 5,738

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 September 30, 2017				
Real estate, including construction	**$ 10,424**	**$ 18**	**$ —**	**$ 10,442**
Business and corporate banking	**13,079**	**244**	**5**	**13,328**
Global banking	**19,481**	**469**	**—**	**19,950**
Other commercial	**4,408**	**—**	**—**	**4,408**
Total commercial	**$ 47,392**	**$ 731**	**$ 5**	**$ 48,128**
At December 31, 2016				
Real estate, including construction	$ 10,834	$ 56	$ —	$ 10,890
Business and corporate banking	13,892	187	1	14,080
Global banking	22,935	546	—	23,481
Other commercial	5,764	1	—	5,765
Total commercial	$ 53,425	$ 790	$ 1	$ 54,216

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 September 30, 2017			
Real estate, including construction	**$ 7,264**	**$ 3,178**	**$ 10,442**
Business and corporate banking	**6,113**	**7,215**	**13,328**
Global banking	**13,543**	**6,407**	**19,950**
Other commercial	**3,195**	**1,213**	**4,408**
Total commercial	**$ 30,115**	**$ 18,013**	**$ 48,128**
At December 31, 2016			
Real estate, including construction	$ 7,857	$ 3,033	$ 10,890
Business and corporate banking	6,348	7,732	14,080
Global banking	14,205	9,276	23,481
Other commercial	4,473	1,292	5,765
Total commercial	$ 32,883	$ 21,333	$ 54,216

(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:

	September 30, 2017		December 31, 2016	
	Delinquent Loans	Delinquency Ratio	Delinquent Loans	Delinquency Ratio
		(dollars are in millions)		
Residential mortgages(1)(2)	**$ 406**	**2.36%**	$ 765	4.23%
Home equity mortgages(1)(2)	**36**	**2.92**	46	3.26
Credit cards	**11**	**1.68**	14	2.03
Other consumer	**10**	**2.26**	11	2.43
Total consumer	**$ 463**	**2.37%**	$ 836	4.05%

(1) At September 30, 2017 and December 31, 2016, consumer mortgage loan delinquency includes $328 million and $711 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less cost to sell, including $3 million and $358 million, respectively, relating to loans held for sale.

(2) At September 30, 2017 and December 31, 2016, consumer mortgage loans and loans held for sale include $168 million and $474 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 September 30, 2017				
Residential mortgages	**$ 16,761**	**$ 435**	**$ —**	**$ 17,196**
Home equity mortgages	**1,165**	**69**	**—**	**1,234**
Credit cards	**648**	**—**	**8**	**656**
Other consumer	**373**	**—**	**6**	**379**
Total consumer	**$ 18,947**	**$ 504**	**$ 14**	**$ 19,465**
At December 31, 2016				
Residential mortgages	$ 16,746	$ 435	$ —	$ 17,181
Home equity mortgages	1,333	75	—	1,408
Credit cards	678	—	10	688
Other consumer	375	—	7	382
Total consumer	$ 19,132	$ 510	$ 17	$ 19,659

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

Concentration of Credit Risk At September 30, 2017 and December 31, 2016, our loan portfolios included interest-only residential mortgage and home equity mortgage loans totaling $3,472 million and $3,589 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 nine months ended September 30, 2017 and 2016:

	Commercial				Consumer				
	Real Estate, including Construction	Business and Corporate Banking[1]	Global Banking[1]	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	Total
	(in millions)								
Three Months Ended September 30, 2017									
Allowance for credit losses – beginning of period	**$ 81**	**$ 261**	**$ 425**	**$ 14**	**$ 20**	**$ 12**	**$ 30**	**$ 5**	**$ 848**
Provision charged (credited) to income	**(1)**	**(9)**	**(21)**	**(1)**	**4**	**(2)**	**8**	**—**	**(22)**
Charge-offs	**(4)**	**(7)**	**(14)**	**—**	**—**	**(1)**	**(8)**	**(1)**	**(35)**
Recoveries	**—**	**2**	**—**	**—**	**2**	**1**	**2**	**1**	**8**
Net (charge-offs) recoveries	**(4)**	**(5)**	**(14)**	**—**	**2**	**—**	**(6)**	**—**	**(27)**
Allowance for credit losses – end of period	**$ 76**	**$ 247**	**$ 390**	**$ 13**	**$ 26**	**$ 10**	**$ 32**	**$ 5**	**$ 799**
Three Months Ended September 30, 2016									
Allowance for credit losses – beginning of period	$ 92	$ 331	$ 515	$ 15	$ 50	$ 19	$ 33	$ 8	$ 1,063
Provision charged (credited) to income[2]	(8)	13	38	(1)	11	1	7	1	62
Charge-offs[2][3]	—	(26)	(7)	—	(34)	(4)	(7)	(1)	(79)
Recoveries	6	3	—	—	3	1	1	—	14
Net (charge-offs) recoveries	6	(23)	(7)	—	(31)	(3)	(6)	(1)	(65)
Allowance for credit losses – end of period	$ 90	$ 321	$ 546	$ 14	$ 30	$ 17	$ 34	$ 8	$ 1,060
Nine Months Ended September 30, 2017									
Allowance for credit losses – beginning of period	**$ 92**	**$ 317**	**$ 508**	**$ 13**	**$ 26**	**$ 20**	**$ 34**	**$ 7**	**$ 1,017**
Provision charged (credited) to income	**(9)**	**(56)**	**(60)**	**1**	**(4)**	**(8)**	**17**	**(1)**	**(120)**
Charge-offs	**(7)**	**(30)**	**(59)**	**(1)**	**(3)**	**(5)**	**(24)**	**(3)**	**(132)**
Recoveries	**—**	**16**	**1**	**—**	**7**	**3**	**5**	**2**	**34**
Net (charge-offs) recoveries	**(7)**	**(14)**	**(58)**	**(1)**	**4**	**(2)**	**(19)**	**(1)**	**(98)**
Allowance for credit losses – end of period	**$ 76**	**$ 247**	**$ 390**	**$ 13**	**$ 26**	**$ 10**	**$ 32**	**$ 5**	**$ 799**
Ending balance: collectively evaluated for impairment	**$ 75**	**$ 196**	**$ 228**	**$ 13**	**$ 19**	**$ 9**	**$ 31**	**$ 5**	**$ 576**
Ending balance: individually evaluated for impairment	**1**	**51**	**162**	**—**	**7**	**1**	**1**	**—**	**223**
Total allowance for credit losses	**$ 76**	**$ 247**	**$ 390**	**$ 13**	**$ 26**	**$ 10**	**$ 32**	**$ 5**	**$ 799**
Loans:									
Collectively evaluated for impairment[4]	**$ 10,425**	**$ 13,008**	**$ 19,434**	**$ 4,408**	**$ 16,207**	**$ 1,164**	**$ 652**	**$ 379**	**$ 65,677**
Individually evaluated for impairment[5]	**17**	**320**	**516**	**—**	**59**	**3**	**4**	**—**	**919**
Loans carried at lower of amortized cost or fair value less cost to sell	**—**	**—**	**—**	**—**	**930**	**67**	**—**	**—**	**997**
Total loans	**$ 10,442**	**$ 13,328**	**$ 19,950**	**$ 4,408**	**$ 17,196**	**$ 1,234**	**$ 656**	**$ 379**	**$ 67,593**

	Commercial				Consumer				
	Real Estate, including Construction	Business and Corporate Banking[1]	Global Banking[1]	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	Total
	(in millions)								
Nine Months Ended September 30, 2016									
Allowance for credit losses – beginning of period	$ 86	$ 407	$ 267	$ 19	$ 68	$ 24	$ 32	$ 9	$ 912
Provision charged (credited) to income[2]	(2)	(29)	371	(5)	(5)	(2)	21	4	353
Charge-offs[2][3]	—	(65)	(92)	—	(43)	(9)	(23)	(6)	(238)
Recoveries	6	8	—	—	10	4	4	1	33
Net (charge-offs) recoveries	6	(57)	(92)	—	(33)	(5)	(19)	(5)	(205)
Allowance for credit losses – end of period	$ 90	$ 321	$ 546	$ 14	$ 30	$ 17	$ 34	$ 8	$ 1,060
Ending balance: collectively evaluated for impairment	$ 88	$ 253	$ 275	$ 13	$ 20	$ 16	$ 33	$ 8	$ 706
Ending balance: individually evaluated for impairment	2	68	271	1	10	1	1	—	354
Total allowance for credit losses	$ 90	$ 321	$ 546	$ 14	$ 30	$ 17	$ 34	$ 8	$ 1,060
Loans:									
Collectively evaluated for impairment[4]	$ 10,899	$ 13,658	$ 24,889	$ 7,451	$ 16,121	$ 1,378	$ 663	$ 380	$ 75,439
Individually evaluated for impairment[5]	59	399	670	7	62	4	5	—	1,206
Loans carried at lower of amortized cost or fair value less cost to sell	—	—	—	—	908	72	—	—	980
Total loans	$ 10,958	$ 14,057	$ 25,559	$ 7,458	$ 17,091	$ 1,454	$ 668	$ 380	$ 77,625

(1) During the fourth quarter of 2016, we transferred certain client relationships from Commercial Banking to Global Banking and Markets as discussed further in Note 14, "Business Segments." As a result, we reclassified $3.6 billion of loans and $21 million of allowance for credit losses from business and corporate banking to global banking at September 30, 2016 to conform with the current year presentation.

(2) The provision for credit losses and charge-offs for residential mortgage loans during both the three and nine months ended September 30, 2016 includes $11 million related to the lower of amortized cost or fair value adjustment attributable to credit factors for loans transferred to held for sale. See Note 6, "Loans Held for Sale," for additional information.

(3) For collateral dependent loans that are transferred to held for sale, the existing allowance for credit losses at the time of transfer are recognized as a charge-off. We transferred to held for sale certain residential mortgage loans during the three and nine months ended September 30, 2016 and, accordingly, we recognized the existing allowance for credit losses on these loans as additional charge-off totaling $20 million and $22 million during the three and nine months ended September 30, 2016, respectively.

(4) During the first quarter of 2017, in conjunction with the creation of the new Corporate Center segment as discussed further in Note 14, "Business Segments," we reclassified loans to HSBC affiliates from global banking to other commercial and revised the prior period to conform with the current year presentation. As a result, other commercial includes loans to HSBC affiliates totaling $1,820 million and $4,463 million at September 30, 2017 and 2016, respectively, for which we do not carry an associated allowance for credit losses.

(5) 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 $662 million at both September 30, 2017 and September 30, 2016.

6. *Loans Held for Sale*

Loans held for sale consisted of the following:

	September 30, 2017	December 31, 2016
	(in millions)	
Commercial loans:		
Real estate, including construction	**$ 7**	$ 17
Global banking	**424**	827
Total commercial	**431**	844
Consumer loans:		
Residential mortgages	**12**	890
Home equity mortgages	**—**	4
Other consumer	**64**	71
Total consumer	**76**	965
Total loans held for sale	**$ 507**	$ 1,809

Commercial Loans Commercial loans held for sale primarily consists of certain global banking 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 $375 million and $725 million at September 30, 2017 and December 31, 2016, 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 $49 million and $102 million at September 30, 2017 and December 31, 2016, respectively. During the three and nine months ended September 30, 2017, we reversed $4 million and $5 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 (loss) in the consolidated statement of income as a result of an increase in fair value due to improved pricing compared with recording $7 million and $37 million of lower of amortized cost or fair value adjustments associated with the write-down of commercial loans held for sale during the three and nine months ended September 30, 2016, respectively.

Consumer Loans As previously disclosed, during the first quarter of 2016, we determined we no longer have the intent to hold for investment certain residential mortgage loans which had been written down to the lower of amortized cost or fair value of the collateral less cost to sell (generally 180 days past due) in accordance with our existing charge-off policies. These loans were largely originated by us prior to the implementation of our Premier strategy. As a result of this decision, during 2016, we transferred residential mortgage loans to held for sale with a total unpaid principal balance of approximately $568 million at the time of transfer. The carrying value of these loans prior to transfer, after considering the fair value of the property less costs to sell, was approximately $473 million, including related escrow advances. During the three and nine months ended September 30, 2016, we recorded an initial lower of amortized cost or fair value adjustment of $4 million and $42 million, respectively, associated with newly transferred loans, all of which was attributed to non-credit factors and recorded as a component of other income (loss) in the consolidated statement of income. During the three and nine months ended September 30, 2016, we recorded $2 million and $8 million, respectively, of additional lower of amortized cost or fair value adjustment on these loans held for sale as a component of other income (loss) in the consolidated statement of income as a result of a reduction in the estimated pricing on specific pools of loans.

In March 2017, we completed the sale of these residential mortgage loans to a third party. These residential mortgage loans had an unpaid principal balance of $364 million (aggregate carrying value of $276 million) at the time of sale and we recognized a loss on sale of approximately $2 million, largely reflecting transaction costs. During the three months ended March 31, 2017, we reversed $5 million of the lower of amortized cost or fair value adjustment previously recorded on these loans as a component of other income (loss) in the consolidated statement of income as a result of an increase in fair value due to improved pricing.

In addition to the residential mortgage loans discussed above, during the third quarter of 2016, we determined we no longer have the intent to hold for investment a portfolio of residential mortgage loans that we previously purchased from HSBC Finance Corporation ("HSBC Finance"), along with any home equity mortgage balances associated with these loans and, as a result, transferred residential mortgage and home equity mortgage loans with a total unpaid principal balance of approximately $648 million at the time of transfer to held for sale. The carrying value of these loans prior to transfer, after considering the fair value of the property less costs to sell, as applicable, was approximately $628 million, including accrued interest. During the third quarter of 2016, we recorded an initial lower of cost or fair value adjustment of $11 million associated with the newly transferred loans, all of which was attributed to credit factors and recorded as a component of the provision for credit losses in the consolidated statement of income.

During the three and nine months ended September 30, 2017, we completed the sale of substantially all of this portfolio of residential mortgage loans to third parties. These residential mortgage loans had an unpaid principal balance of $84 million (aggregate carrying value of $68 million) and $579 million (aggregate carrying value of $535 million), respectively, at the time of sale and we recognized gains on sale of approximately $6 million and $50 million, respectively, including transaction costs. During the nine months ended September 30, 2017, we reversed $2 million of the lower of amortized cost or fair value adjustment previously recorded on this portfolio of loans as a component of other income (loss) in the consolidated statement of income as a result of an increase in fair value due to improved pricing.

We also continue to sell all our agency eligible residential mortgage loan originations servicing released directly to PHH Mortgage Corporation ("PHH Mortgage"). Gains and losses from the sale of these residential mortgage loans are reflected as a component of residential mortgage banking revenue (expense) in the accompanying consolidated statement of income. Residential mortgage loans held for sale also includes subprime residential mortgage loans with a fair value of $2 million and $3 million at September 30, 2017 and December 31, 2016, respectively, which were previously acquired from unaffiliated third parties and from HSBC Finance with the intent of securitizing or selling the loans to third parties.

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. PHH Mortgage is obligated to purchase agency eligible loans from us as of the earlier of when the customer locks the mortgage loan pricing or when the mortgage loan application is approved. As such, we retain none of the risk of market changes in mortgage rates for these loans purchased by PHH Mortgage.

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

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 $7 million and $57 million at September 30, 2017 and December 31, 2016, respectively. The valuation allowance on commercial loans held for sale was $8 million and $55 million at September 30, 2017 and December 31, 2016, respectively.

7. Goodwill

Goodwill was $1,607 million and $1,612 million at September 30, 2017 and December 31, 2016, respectively. Goodwill for these periods reflects accumulated impairment losses of $670 million, which were recognized in prior periods. During the third quarter of 2017, $5 million of goodwill was allocated to the portion of our Private Banking business sold to UBS. See Note 8, “Sale of Certain Private Banking Client Relationships,” for further discussion.

During the third quarter of 2017, we completed our annual impairment test of goodwill and determined that the fair value of all of our reporting units exceeded their 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"). Our Private Banking business has made a decision to no longer service clients based in those markets and renew its focus on clients and prospects based in markets where we can leverage HSBC's global connectivity, including the United States, Argentina, Brazil, Chile and Mexico. These markets are consistent with HSBC's global strategy and allow us to better serve clients through collaboration with other HSBC businesses based in these markets.

Under the terms of the agreement, we will 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 are not reported on our balance sheet) and $1.7 billion in client deposits (which are 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 (the maximum of which could be as high as $26 million based on total clients assets at the time the agreement was signed) 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 (loss) during the third quarter of 2017. The fair value of the contingent consideration was estimated using a discounted cash flow methodology and changes in fair value in future periods will be recognized in other income (loss). In addition, we have estimated the amount of client deposits that we expect will be transferred to UBS, which was approximately $1.0 billion at September 30, 2017, and have classified them as held for sale in our consolidated balance sheet. An additional $0.7 billion of deposits at September 30, 2017 could be transferred in the event all client deposits associated with these client relationships were to be transferred. No lower of cost or fair value adjustment was required as a result of the transfer to held for sale.

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 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.

	September 30, 2017		December 31, 2016	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	(in millions)			
Derivatives accounted for as fair value hedges[1]				
OTC-cleared[2]	**$ 98**	**$ 401**	$ 142	$ 341
Bilateral OTC[2]	**—**	**141**	—	196
Interest rate contracts	**98**	**542**	142	537
Derivatives accounted for as cash flow hedges[1]				
Foreign exchange contracts - bilateral OTC[2]	**16**	**—**	12	—
OTC-cleared[2]	**—**	**61**	6	57
Bilateral OTC[2]	**—**	**24**	—	94
Interest rate contracts	**—**	**85**	6	151
Total derivatives accounted for as hedges	**114**	**627**	160	688
Trading derivatives not accounted for as hedges[3]				
Exchange-traded[2]	**62**	**105**	35	84
OTC-cleared[2]	**10,280**	**8,941**	15,248	14,189
Bilateral OTC[2]	**12,204**	**13,445**	16,045	17,480
Interest rate contracts	**22,546**	**22,491**	31,328	31,753
Exchange-traded[2]	**43**	**36**	24	6
Bilateral OTC[2]	**15,568**	**14,749**	24,020	22,645
Foreign exchange contracts	**15,611**	**14,785**	24,044	22,651
Equity contracts - bilateral OTC[2]	**2,289**	**2,277**	1,658	1,653
Exchange-traded[2]	**99**	**33**	81	13
Bilateral OTC[2]	**980**	**481**	1,038	867
Precious metals contracts	**1,079**	**514**	1,119	880
OTC-cleared[2]	**44**	**247**	227	289
Bilateral OTC[2]	**946**	**703**	1,291	1,076
Credit contracts	**990**	**950**	1,518	1,365
Other non-qualifying derivatives not accounted for as hedges[1]				
OTC-cleared[2]	**338**	**66**	287	41
Bilateral OTC[2]	**378**	**140**	437	170
Interest rate contracts	**716**	**206**	724	211
Foreign exchange contracts - bilateral OTC[2]	**3**	**8**	—	31
Equity contracts - bilateral OTC[2]	**1,117**	**115**	672	222
Precious metals contracts - bilateral OTC[2]	**—**	**2**	—	—
Credit contracts - bilateral OTC[2]	**—**	**18**	32	4
Other contracts - bilateral OTC[2][4]	**7**	**52**	5	14
Total derivatives	**44,472**	**42,045**	61,260	59,472
Less: Gross amounts of receivable / payable subject to enforceable master netting agreements[5][7]	**35,791**	**35,791**	51,111	51,111
Less: Gross amounts of cash collateral received / posted subject to enforceable master netting agreements[6][7]	**4,808**	**3,195**	5,145	3,826
Net amounts of derivative assets / liabilities presented in the balance sheet	**3,873**	**3,059**	5,004	4,535
Less: Gross amounts of financial instrument collateral received / posted subject to enforceable master netting agreements but not offset in the consolidated balance sheet	**710**	**367**	787	1,050
Net amounts of derivative assets / liabilities	**$ 3,163**	**$ 2,692**	$ 4,217	$ 3,485

(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 master netting agreements and obtaining collateral. 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 both of the original counterparties. Exchange traded derivatives are executed directly on an organized exchange that provides pre-trade price transparency. Credit risk is minimized for OTC-cleared derivatives and exchange traded derivatives through daily margining required by central clearing counterparties.

(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 attempted to allocate netting to the different types of derivative instruments shown in the table above.

See Note 17, "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 the effect on earnings 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 $91 million and $104 million at September 30, 2017 and December 31, 2016, respectively. During the three and nine months ended September 30, 2017, respectively, we amortized $1 million and $4 million of basis adjustments related to terminated and/or re-designated fair value hedges of our debt compared with $2 million and $5 million during the three and nine months ended September 30, 2016, respectively. The total accumulated unamortized basis adjustments related to terminated and-or re-designated fair value hedges amounted to increases in the carrying amount of our debt of $8 million and $12 million at September 30, 2017 and December 31, 2016, respectively.

We recorded basis adjustments for active fair value hedges of available-for-sale ("AFS") securities which increased the carrying amount of the securities by $323 million and $258 million at September 30, 2017 and December 31, 2016, respectively.

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
	Interest Income (Expense)	Other Income (Loss)	Interest Income (Expense)	Other Income (Loss)	Other Income (Loss)
			(in millions)		
Three Months Ended September 30, 2017					
Interest rate contracts/AFS Securities	**$ (28)**	**$ 2**	**$ 88**	**$ (2)**	**$ —**
Interest rate contracts/long-term debt	**2**	**(5)**	**(63)**	**3**	**(2)**
Total	**$ (26)**	**$ (3)**	**$ 25**	**$ 1**	**$ (2)**
Three Months Ended September 30, 2016					
Interest rate contracts/AFS Securities	$ (38)	$ 26	$ 92	$ (37)	$ (11)
Interest rate contracts/long-term debt	8	(27)	(34)	26	(1)
Total	$ (30)	$ (1)	$ 58	$ (11)	$ (12)
Nine Months Ended September 30, 2017					
Interest rate contracts/AFS Securities	**$ (95)**	**$ (59)**	**$ 268**	**$ 62**	**$ 3**
Interest rate contracts/long-term debt	**14**	**14**	**(197)**	**(13)**	**1**
Total	**$ (81)**	**$ (45)**	**$ 71**	**$ 49**	**$ 4**
Nine Months Ended September 30, 2016					
Interest rate contracts/AFS Securities	$ (133)	$ (1,027)	$ 281	$ 965	$ (62)
Interest rate contracts/long-term debt	23	71	(95)	(70)	1
Total	$ (110)	$ (956)	$ 186	$ 895	$ (61)

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 (loss). When the cash flows being hedged materialize and are recorded in income or expense, the associated gain or loss from the hedging derivative previously recorded in accumulated other comprehensive income (loss) ("AOCI") is reclassified into earnings in the same accounting period in which the designated forecasted transaction or hedged item affects earnings. If a cash flow hedge of a forecasted transaction is 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 September 30, 2017 and December 31, 2016, active cash flow hedge relationships extend or mature through July 2036. During the three and nine months ended September 30, 2017, respectively, $5 million and $11 million of losses related to terminated and/or re-designated cash flow hedge relationships were amortized to earnings from AOCI compared with losses of $5 million and $14 million during the three and nine months ended September 30, 2016, respectively. During the next twelve months, we expect to amortize $22 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)		Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Gain (Loss) Reclassed From AOCI into Income (Effective Portion)		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)	
	2017	**2016**		**2017**	**2016**		**2017**	**2016**
				(in millions)				
Three Months Ended September 30,								
Interest rate contracts	**$ (3)**	$ 11	Interest income (expense)	**$ (5)**	$ (5)	Other income (loss)	**$ —**	$ —
Total	**$ (3)**	$ 11		**$ (5)**	$ (5)		**$ —**	$ —
Nine Months Ended September 30,								
Interest rate contracts	**$ (14)**	$ (89)	Interest income (expense)	**$ (11)**	$ (14)	Other income (loss)	**$ —**	$ —
Total	**$ (14)**	$ (89)		**$ (11)**	$ (14)		**$ —**	$ —

Trading Derivatives and Non-Qualifying Hedging Activities In addition to risk management, we enter into derivative instruments, including buy- and sell-protection credit derivatives, for trading and market making purposes, to repackage risks and structure trades to facilitate clients' needs for various risk taking and risk modification purposes. We manage our risk exposure by entering into offsetting derivatives with other financial institutions to mitigate the market risks, in part or in full, arising from our trading activities with our clients. In addition, we also enter into buy-protection credit derivatives with other market participants 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. Prior to the sale of our remaining Mortgage Servicing Rights ("MSRs") portfolio during the fourth quarter of 2016, we used forward purchases or sales of to-be-announced ("TBA") securities to economically hedge our MSRs. Changes in the fair value of TBA positions, which were considered derivatives, were recorded in residential mortgage banking revenue (expense). Credit losses arising from counterparty risk on over-the-counter derivative instruments and offsetting buy protection credit derivative positions are recognized as an adjustment to the fair value of the derivatives and are recorded in trading revenue.

Our non-qualifying hedging and other activities include:

- Derivative contracts related to the fixed-rate long-term debt issuances and hybrid instruments, including all structured notes and deposits, for which we have elected fair value option accounting. These derivative contracts are non-qualifying hedges but are considered economic hedges.
- Credit default swaps which are designated as economic hedges against the credit risks within our loan portfolio. In the event of an impairment loss occurring in a loan that is economically hedged, the impairment loss is recognized as provision for credit losses while the gain on the credit default swap is recorded as other income (loss).
- Swap agreements entered into in conjunction with the sales of 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 17, "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 on instruments designated at fair value and related derivatives, other income (loss) or residential mortgage banking revenue (expense) 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 September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
		(in millions)			
Interest rate contracts	Trading revenue	**$ (52)**	$ 97	**$ (249)**	$ (413)
Interest rate contracts	Residential mortgage banking revenue (expense)	**—**	(3)	**—**	40
Foreign exchange contracts	Trading revenue	**116**	(243)	**185**	(15)
Equity contracts	Trading revenue	**1**	2	**—**	5
Precious metals contracts	Trading revenue	**50**	35	**161**	64
Credit contracts	Trading revenue	**(41)**	(40)	**(87)**	(102)
Total		**$ 74**	$ (152)	**$ 10**	$ (421)

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 September 30,		Nine Months Ended September 30,	
		2017	2016	2017	2016
		(in millions)			
Interest rate contracts	Gain (loss) on instruments designated at fair value and related derivatives	**$ 14**	$ (6)	**$ 89**	$ 319
Foreign exchange contracts	Gain (loss) on instruments designated at fair value and related derivatives	**8**	6	**11**	26
Equity contracts	Gain (loss) on instruments designated at fair value and related derivatives	**342**	194	**863**	226
Credit contracts	Other income (loss)	**(9)**	(23)	**(39)**	(64)
Other contracts[1]	Other income (loss)	**(5)**	—	**(7)**	—
Total		**$ 350**	$ 171	**$ 917**	$ 507

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

Credit-Risk Related Contingent Features We enter into total return swap, interest rate swap, cross-currency swap and credit default swap contracts, amongst others, which 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 September 30, 2017 was $1,044 million, for which we had posted collateral of $738 million. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a liability position at December 31, 2016 was $586 million, for which we had posted collateral of $581 million. Substantially all of the collateral posted is in the form of cash or securities available-for-sale. See Note 17, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," for further details.

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

	One-notch downgrade	Two-notch downgrade
	(in millions)	
Amount of additional collateral to be posted upon downgrade	$ 40	$ 41

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

	September 30, 2017	December 31, 2016
	(in millions)	
Interest rate:		
Futures and forwards	**$ 830,442**	$ 501,635
Swaps	**2,367,130**	2,142,183
Options written	**52,585**	74,741
Options purchased	**69,476**	87,020
	3,319,633	2,805,579
Foreign exchange:		
Swaps, futures and forwards	**908,523**	965,301
Options written	**28,088**	52,845
Options purchased	**29,921**	53,260
Spot	**45,123**	34,565
	1,011,655	1,105,971
Commodities, equities and precious metals:		
Swaps, futures and forwards	**55,672**	49,555
Options written	**26,603**	19,495
Options purchased	**38,166**	30,632
	120,441	99,682
Credit derivatives	**95,914**	123,714
Other contracts[1]	**594**	184
Total	**$ 4,548,237**	$ 4,135,130

[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 as 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 sold under repurchase agreements, certain fixed-rate long-term debt issuances and all of our hybrid instruments, including structured notes and deposits. Prior to January 1, 2017, changes in the fair value of these assets and liabilities, including changes in fair value 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. As discussed more fully in Note 20, "New Accounting Pronouncements," beginning January 1, 2017, the fair value movement on fair value option liabilities attributable to our own credit spread is recorded in other comprehensive income (loss).

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 September 30, 2017 and December 31, 2016, 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 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 September 30, 2017			
Commercial loans held for sale	**$ 375**	**$ 384**	**$ (9)**
Securities purchased under resale agreements	**1,309**	**1,303**	**6**
Securities sold under repurchase agreements	**3,609**	**3,609**	**—**
Fixed rate long-term debt	**2,162**	**1,750**	**412**
Hybrid instruments:			
Structured deposits	**7,628**	**7,682**	**(54)**
Structured notes	**10,196**	**9,201**	**995**
At December 31, 2016			
Commercial loans held for sale	$ 725	$ 728	$ (3)
Securities purchased under resale agreements	770	767	3
Securities sold under repurchase agreements	2,672	2,670	2
Fixed rate long-term debt	2,012	1,750	262
Hybrid instruments:			
Structured deposits	7,526	7,881	(355)
Structured notes	8,372	8,067	305

Components of Gain (loss) on Instruments 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 nine months ended September 30, 2017 and 2016:

	Loans	Securities Purchased Under Resale Agreements	Securities Sold Under Repurchase Agreements	Long-Term Debt	Hybrid Instruments	Total
			(in millions)			
Three Months Ended September 30, 2017						
Interest rate and other components[1]	**$ —**	**$ (1)**	**$ —**	**$ —**	**$ (355)**	**$ (356)**
Credit risk component[2]	**(1)**	**—**	**—**	**—**	**—**	**(1)**
Total mark-to-market on financial instruments designated at fair value	**(1)**	**(1)**	**—**	**—**	**(355)**	**(357)**
Mark-to-market on the related derivatives	**—**	**—**	**—**	**(6)**	**354**	**348**
Net realized gain on the related long-term debt derivatives	**—**	**—**	**—**	**16**	**—**	**16**
Gain (loss) on instruments designated at fair value and related derivatives	**$ (1)**	**$ (1)**	**$ —**	**$ 10**	**$ (1)**	**$ 7**
Three Months Ended September 30, 2016						
Interest rate and other components[1]	$ —	$ (4)	$ 1	$ (5)	$ (220)	$ (228)
Credit risk component	6	—	—	5	(65)	(54)
Total mark-to-market on financial instruments designated at fair value	6	(4)	1	—	(285)	(282)
Mark-to-market on the related derivatives	—	—	—	(10)	188	178
Net realized gain on the related long-term debt derivatives	—	—	—	16	—	16
Gain (loss) on instruments designated at fair value and related derivatives	$ 6	$ (4)	$ 1	$ 6	$ (97)	$ (88)
Nine Months Ended September 30, 2017						
Interest rate and other components[1]	**$ —**	**$ 6**	**$ 3**	**$ (7)**	**$ (922)**	**$ (920)**
Credit risk component[2]	**(3)**	**—**	**—**	**—**	**—**	**(3)**
Total mark-to-market on financial instruments designated at fair value	**(3)**	**6**	**3**	**(7)**	**(922)**	**(923)**
Mark-to-market on the related derivatives	**—**	**—**	**—**	**(13)**	**931**	**918**
Net realized gain on the related long-term debt derivatives	**—**	**—**	**—**	**45**	**—**	**45**
Gain (loss) on instruments designated at fair value and related derivatives	**$ (3)**	**$ 6**	**$ 3**	**$ 25**	**$ 9**	**$ 40**
Nine Months Ended September 30, 2016						
Interest rate and other components[1]	$ —	$ 1	$ 2	$ (202)	$ (382)	$ (581)
Credit risk component	6	—	—	113	(19)	100
Total mark-to-market on financial instruments designated at fair value	6	1	2	(89)	(401)	(481)
Mark-to-market on the related derivatives	—	—	—	184	339	523
Net realized gain on the related long-term debt derivatives	—	—	—	48	—	48
Gain (loss) on instruments designated at fair value and related derivatives	$ 6	$ 1	$ 2	$ 143	$ (62)	$ 90

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

(2) As discussed more fully in Note 20, "New Accounting Pronouncements," beginning January 1, 2017, 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 (loss).

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 income (loss) balances:

Three Months Ended September 30,	2017	2016
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	**$ (244)**	$ 252
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $13 million and $(65) million, respectively	**20**	(108)
Reclassification adjustment for gains realized in net income, net of tax of $(2) million and $(6) million, respectively[1]	**(3)**	(10)
Amortization of net unrealized losses on securities transferred from available-for-sale to held-to-maturity realized in net income, net of tax of $3 million and $4 million, respectively[2]	**5**	6
Total other comprehensive income (loss) for period	**22**	(112)
Balance at end of period	**(222)**	140
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	**86**	—
Other comprehensive income (loss) for period:		
Net unrealized losses arising during the period, net of tax of $(26) million	**(45)**	—
Total other comprehensive loss for period	**(45)**	—
Balance at end of period	**41**	—
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	**(159)**	(226)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $(2) million and $5 million, respectively	**(2)**	6
Reclassification adjustment for losses realized in net income, net of tax of $2 million and $2 million, respectively[3]	**4**	3
Total other comprehensive income for period	**2**	9
Balance at end of period	**(157)**	(217)
Pension and postretirement benefit liability:		
Balance at beginning and end of period	**—**	(3)
Total accumulated other comprehensive loss at end of period	**$ (338)**	$ (80)

Nine Months Ended September 30,	2017	2016
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	**$ (461)**	$ (234)
Other comprehensive income (loss) for period:		
Net unrealized gains arising during period, net of tax of $147 million and $243 million, respectively	**244**	407
Reclassification adjustment for gains realized in net income, net of tax of $(11) million and $(30) million, respectively[1]	**(18)**	(51)
Amortization of net unrealized losses on securities transferred from available-for-sale to held-to-maturity realized in net income, net of tax of $8 million and $11 million, respectively[2]	**13**	18
Total other comprehensive income for period	**239**	374
Balance at end of period	**(222)**	140
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period, as previously reported	**—**	—
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	**174**	—
Other comprehensive income (loss) for period:		
Net unrealized losses arising during the period, net of tax of $(78) million	**(133)**	—
Total other comprehensive loss for period	**(133)**	—
Balance at end of period	**41**	—
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	**(157)**	(170)
Other comprehensive income (loss) for period:		
Net unrealized losses arising during period, net of tax of $(6) million and $(33) million, respectively	**(7)**	(56)
Reclassification adjustment for losses realized in net income, net of tax of $4 million and $5 million, respectively[3]	**7**	9
Total other comprehensive loss for period	**—**	(47)
Balance at end of period	**(157)**	(217)
Pension and postretirement benefit liability:		
Balance at beginning and end of period	**—**	(3)
Total accumulated other comprehensive loss at end of period	**$ (338)**	$ (80)

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

(2) 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 will be 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.

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

(4) See Note 20, "New Accounting Pronouncements," for additional discussion.

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 September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(in millions)			
Interest cost on projected benefit obligation	**$ 18**	$ 18	**$ 54**	$ 53
Expected return on plan assets	**(22)**	(21)	**(65)**	(63)
Amortization of net actuarial loss	**7**	13	**25**	32
Administrative costs	**1**	1	**3**	4
Pension expense	**$ 4**	$ 11	**$ 17**	$ 26

In August 2017, the HSBC North America Board of Directors approved a limited-time option to former vested Plan employees who have not yet commenced payment of their annuity benefit to elect a) an immediate lump sum payment; b) an immediate annuity (reduced for early payment under the terms of the Plan); or c) to retain their existing benefit in an annuity to be paid under the original terms of the Plan. The election period for the program commenced in October. The program will result in a charge to pension expense at the time of payment which is expected to occur in the fourth quarter of 2017. The charge to pension expense will be based on the actual number of employees who elect to participate in an early distribution and, therefore, cannot be precisely determined until the election period ends.

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 September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(in millions)			
Interest cost on accumulated benefit obligation	**$ —**	$ 1	**$ 1**	$ 2
Net periodic postretirement benefit cost	**$ —**	$ 1	**$ 1**	$ 2

13. 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:

	September 30, 2017	December 31, 2016
	(in millions)	
Assets:		
Cash and due from banks	**$ 161**	$ 364
Interest bearing deposits with banks	**625**	980
Securities purchased under agreements to resell[1]	**5**	949
Trading assets	**29**	74
Loans	**1,820**	3,274
Other[2]	**348**	291
Total assets	**$ 2,988**	$ 5,932
Liabilities:		
Deposits	**$ 13,131**	$ 23,999
Trading liabilities	**492**	510
Short-term borrowings	**1,639**	2,148
Long-term debt	**4,839**	4,834
Other[2]	**508**	247
Total liabilities	**$ 20,609**	$ 31,738

(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 September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(in millions)			
Income/(Expense):				
Interest income	**$ 16**	$ 30	**$ 51**	$ 90
Interest expense	**(72)**	(38)	**(208)**	(102)
Net interest expense	**(56)**	(8)	**(157)**	(12)
Trading revenue (expense)	**—**	(661)	**(806)**	138
Servicing and other fees from HSBC affiliates:				
HSBC Bank plc	**22**	22	**67**	70
HSBC Finance Corporation	**3**	8	**40**	29
HSBC Markets (USA) Inc. ("HMUS")	**6**	5	**16**	15
Other HSBC affiliates	**21**	15	**63**	41
Total servicing and other fees from HSBC affiliates	**52**	50	**186**	155
Gain on instruments designated at fair value and related derivatives	**347**	193	**871**	228
Support services from HSBC affiliates:				
HMUS	**(14)**	(42)	**(38)**	(150)
HSBC Technology & Services (USA) ("HTSU")	**(268)**	(252)	**(846)**	(734)
Other HSBC affiliates	**(58)**	(60)	**(150)**	(145)
Total support services from HSBC affiliates	**(340)**	(354)	**(1,034)**	(1,029)
Stock based compensation expense[1]	**(8)**	(7)	**(26)**	(24)

(1) 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."

Funding Arrangements with HSBC Affiliates:

We use HSBC affiliates to fund a portion of our borrowing and liquidity needs. At both September 30, 2017 and December 31, 2016, 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 although there was no outstanding balance under this credit facility at either September 30, 2017 or December 31, 2016.

We have also incurred short-term borrowings with certain affiliates, largely securities sold under repurchase agreements with HSI. In addition, certain affiliates have also placed deposits with us.

Lending and Derivative Related Arrangements Extended to HSBC Affiliates:

At September 30, 2017 and December 31, 2016, we have the following loan balances outstanding with HSBC affiliates:

	September 30, 2017	December 31, 2016
	(in millions)	
HSBC Finance Corporation	**$ —**	$ 2,501
HSBC Markets (USA) Inc. ("HMUS") and subsidiaries	**1,742**	563
HSBC Mexico S.A.	**—**	195
Other short-term affiliate lending	**78**	15
Total loans	**$ 1,820**	$ 3,274

HSBC Finance Corporation We have extended a $5.0 billion, 364-day uncommitted unsecured revolving credit agreement to HSBC Finance which expires during the fourth quarter of 2017. The credit agreement allows for borrowings with maturities of up to 5 years. During the first quarter of 2017, HSBC Finance prepaid the $2.5 billion that was outstanding under this credit agreement, including loan prepayment fees of $28 million which are included in servicing and other fees from HSBC affiliates.

HMUS and subsidiaries We have extended loans and lines, some of them uncommitted, to HMUS and its subsidiaries in the amount of $5.9 billion at both September 30, 2017 and December 31, 2016, of which $1.7 billion and $0.6 billion, respectively, was outstanding. The maturities of the outstanding balances range from overnight to three months. Each borrowing is re-evaluated prior to its maturity date and either extended or allowed to mature.

HSBC Mexico S.A. We have extended an uncommitted line of credit to HSBC Mexico S.A. in the amount of $1.2 billion at both September 30, 2017 and December 31, 2016, of which $195 million was outstanding at December 31, 2016. During the second quarter of 2017, this amount was repaid in full.

We have extended lines of credit to various other HSBC affiliates totaling $1.9 billion which did not have any outstanding balances at either September 30, 2017 and December 31, 2016.

Other short-term affiliate lending In addition to loans and lines extended to affiliates discussed above, from time to time we may extend loans to affiliates which are generally short term in nature. At September 30, 2017 and December 31, 2016, there were $78 million and $15 million, respectively, of these loans outstanding.

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 Finance, HSBC Bank plc and other HSBC affiliates. The notional value of derivative contracts related to these transactions was approximately $761.5 billion and $878.5 billion at September 30, 2017 and December 31, 2016, 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 $35 million and $29 million at September 30, 2017 and December 31, 2016, 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:

- Servicing activities for residential mortgage loans across North America are performed both by us and HSBC Finance. As a result, we receive servicing fees from HSBC Finance for services performed on their behalf and pay servicing fees to HSBC Finance for services performed on our behalf. The fees we receive from HSBC Finance are reported in servicing and other fees from HSBC affiliates. Fees we pay to HSBC Finance are reported in support services from HSBC affiliates. This includes fees paid for the servicing of residential mortgage loans (which had a carrying amount of $558 million at December 31, 2016) that we previously purchased from HSBC Finance. During the nine months ended September 30, 2017, we sold substantially all of these residential mortgage loans to third parties. See Note 6, "Loans Held for Sale," for additional information.
- HSBC North America's technology and certain centralized support services including human resources, corporate affairs, risk management, legal, compliance, tax, finance and other shared services that 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 receive fees from other subsidiaries of HSBC, including HSBC Bank plc and HSI, 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.

Other Transactions with HSBC Affiliates

We received revenue from our affiliates for rent on certain office space, which has been recorded as a component of support services from HSBC affiliates. Rental revenue from our affiliates totaled $13 million and $41 million during the three and nine months ended September 30, 2017, respectively, compared with $16 million and $47 million during the three and nine months ended September 30, 2016, respectively.

At both September 30, 2017 and December 31, 2016, we had $1,265 million of non-cumulative preferred stock issued and outstanding to HSBC North America. See Note 17, "Preferred Stock," in our 2016 Form 10-K for additional information.

14. 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") and Private Banking ("PB") and a Corporate Center ("CC") which was created in 2017 and is discussed further below.

We previously announced that we made the decision to implement changes to our internal management reporting for certain activities and functions and report them within a new CC segment beginning in January 2017. These activities and functions include Balance Sheet Management and our legacy structured credit products which historically were both reported in GB&M, as well as a portfolio of residential mortgage loans previously purchased from HSBC Finance, including certain loan servicing activities performed on behalf of HSBC Finance, which were historically reported in RBWM. In addition, we have reviewed central costs historically reported in the Other segment and have reallocated these costs to the global businesses where appropriate. Remaining residual costs are reported in the CC along with all other remaining items historically reported in the Other segment. As a result, beginning in the first quarter of 2017, we have aligned our segment reporting with the changes made to our internal management reporting and are reporting these changes as part of the newly created CC segment for all periods presented.

The following table summarizes the impact on reported segment profit before tax, total assets and total deposits as of and for the three and nine months ended September 30, 2016:

	2016
	(in millions)
Increase (decrease) in segment profit before tax during the three months ended September 30:	
RBWM	$ 1
CMB	3
GB&M	(50)
PB	—
CC (as compared with previously reported Other)	46
Increase (decrease) in segment profit before tax during the nine months ended September 30:	
RBWM	$ 1
CMB	9
GB&M	(131)
PB	—
CC (as compared with previously reported Other)	121
Increase (decrease) in segment total assets at September 30:	
RBWM	$ (611)
CMB	—
GB&M	(107,318)
PB	—
CC (as compared with previously reported Other)	107,929
Increase (decrease) in segment total deposits at September 30:	
RBWM	$ —
CMB	—
GB&M	(6,672)
PB	—
CC (as compared with previously reported Other)	6,672

Our segment results are presented in accordance with HSBC Group accounting and reporting policies, which apply IFRSs as issued by the IASB and as 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. However, we continue to monitor capital adequacy and report to regulatory agencies on a U.S. GAAP basis.

We continue to evaluate the financial information used to manage our businesses, including the presentation of financial data being reported to our Management and our Board. To the extent we make changes to this reporting in the future, we will evaluate any impact such changes may have on our segment reporting.

During the first quarter of 2017, we adopted new accounting guidance under the Group Reporting Basis which, for financial liabilities measured under the fair value option, requires recognizing the change in fair value attributable to our own credit spread in other comprehensive income (loss) consistent with the new accounting guidance also adopted under U.S. GAAP. The adoption of this guidance did not require periods prior to 2017 to be restated. During the three and nine months ended September 30, 2016, total other revenues under the Group Reporting Basis included gains of $5 million and $113 million, respectively, from the change in fair value of our own debt attributable to our own credit spread for which we have elected fair value option accounting.

There have been no additional changes in the basis of our segmentation or measurement of segment profit as compared with the presentation in our 2016 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 2016 Form 10-K. Other than the changes discussed below, there have been no other significant changes since December 31, 2016 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

Structured notes and deposits - Structured notes and deposits are classified as trading liabilities under the Group Reporting Basis and are carried at fair value with changes in fair value recorded in earnings. We elected to apply fair value option accounting to these structured notes and deposits under U.S. GAAP. Beginning January 1, 2017, the adoption of new accounting guidance under U.S. GAAP requires the fair value movement on fair value option liabilities, including structured notes and deposits, attributable to our own credit spread to be recorded in other comprehensive income (loss).

Property - The sale and leaseback of our 452 Fifth Avenue property, including the 1 W. 39th Street building, in 2010 resulted in the recognition of a gain under the Group Reporting Basis while under U.S. GAAP, such gain 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.

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[3]	GB&M[3]	PB	CC	Adjustments/ Reconciling Items	Total	Group Reporting Basis Adjustments[4]	Group Reporting Basis Reclassi- fications[5]	U.S. GAAP Consolidated Totals
						(in millions)				
Three Months Ended September 30, 2017										
Net interest income[1]	**$ 231**	**$ 187**	**$ 131**	**$ 56**	**$ (10)**	**$ —**	**$ 595**	**$ (9)**	**$ (26)**	**$ 560**
Other operating income	**54**	**55**	**111**	**31**	**33**	**—**	**284**	**61**	**23**	**368**
Total operating income	**285**	**242**	**242**	**87**	**23**	**—**	**879**	**52**	**(3)**	**928**
Loan impairment charges	**11**	**(8)**	**(18)**	**(2)**	**1**	**—**	**(16)**	**1**	**(7)**	**(22)**
	274	**250**	**260**	**89**	**22**	**—**	**895**	**51**	**4**	**950**
Operating expenses[2]	**281**	**142**	**200**	**67**	**103**	**—**	**793**	**(2)**	**4**	**795**
Profit (loss) before income tax expense	**$ (7)**	**$ 108**	**$ 60**	**$ 22**	**$ (81)**	**$ —**	**$ 102**	**$ 53**	**$ —**	**$ 155**
Three Months Ended September 30, 2016										
Net interest income[1]	$ 206	$ 187	$ 133	$ 53	$ 29	$ —	$ 608	$ (18)	$ 14	$ 604
Other operating income	69	49	183	22	34	—	357	(27)	(10)	320
Total operating income	275	236	316	75	63	—	965	(45)	4	924
Loan impairment charges	30	(18)	31	1	(2)	—	42	16	4	62
	245	254	285	74	65	—	923	(61)	—	862
Operating expenses[2]	278	151	242	56	87	—	814	(11)	—	803
Profit (loss) before income tax expense	$ (33)	$ 103	$ 43	$ 18	$ (22)	$ —	$ 109	$ (50)	$ —	$ 59

	Group Reporting Basis Consolidated Amounts									
	RBWM	CMB[3]	GB&M[3]	PB	CC	Adjustments/ Reconciling Items	Total	Group Reporting Basis Adjustments[4]	Group Reporting Basis Reclassi- fications[5]	U.S. GAAP Consolidated Totals
						(in millions)				
Nine Months Ended September 30, 2017										
Net interest income[1]	**$ 665**	**$ 548**	**$ 439**	**$ 165**	**$ (9)**	**$ —**	**$ 1,808**	**$ (38)**	**$ (31)**	**$ 1,739**
Other operating income	**416**	**159**	**385**	**73**	**205**	**—**	**1,238**	**190**	**30**	**1,458**
Total operating income	**1,081**	**707**	**824**	**238**	**196**	**—**	**3,046**	**152**	**(1)**	**3,197**
Loan impairment charges	**17**	**(49)**	**(55)**	**1**	**—**	**—**	**(86)**	**(47)**	**13**	**(120)**
	1,064	**756**	**879**	**237**	**196**	**—**	**3,132**	**199**	**(14)**	**3,317**
Operating expenses[2]	**830**	**422**	**635**	**191**	**338**	**—**	**2,416**	**—**	**(14)**	**2,402**
Profit (loss) before income tax expense	**$ 234**	**$ 334**	**$ 244**	**$ 46**	**$ (142)**	**$ —**	**$ 716**	**$ 199**	**$ —**	**$ 915**
Balances at end of period:										
Total assets	**$ 18,968**	**$ 24,154**	**$ 90,779**	**$ 7,684**	**$ 90,262**	**$ —**	**$ 231,847**	**$ (33,961)**	**$ —**	**$ 197,886**
Total loans, net	**16,781**	**22,959**	**18,843**	**5,900**	**3,751**	**—**	**68,234**	**(1,039)**	**(401)**	**66,794**
Goodwill	**581**	**358**	**—**	**321**	**—**	**—**	**1,260**	**347**	**—**	**1,607**
Total deposits	**34,275**	**23,919**	**21,628**	**9,737**	**8,394**	**—**	**97,953**	**(3,874)**	**27,761**	**121,840**
Nine Months Ended September 30, 2016										
Net interest income[1]	$ 613	$ 562	$ 440	$ 153	$ 119	$ (2)	$ 1,885	$ (59)	$ 70	$ 1,896
Other operating income	214	166	598	67	209	2	1,256	(111)	(70)	1,075
Total operating income	827	728	1,038	220	328	—	3,141	(170)	—	2,971
Loan impairment charges	57	13	385	—	(4)	—	451	(72)	(26)	353
	770	715	653	220	332	—	2,690	(98)	26	2,618
Operating expenses[2]	793	451	711	173	220	—	2,348	(22)	26	2,352
Profit (loss) before income tax expense	$ (23)	$ 264	$ (58)	$ 47	$ 112	$ —	$ 342	$ (76)	$ —	$ 266
Balances at end of period:										
Total assets	$ 20,108	$ 25,262	$ 92,055	$ 8,149	$108,400	$ —	$ 253,974	$ (45,673)	$ 9	$ 208,310
Total loans, net	17,116	24,170	24,065	6,433	1,846	—	73,630	(447)	3,382	76,565
Goodwill	581	358	—	325	—	—	1,264	348	—	1,612
Total deposits	31,702	21,858	26,547	13,216	6,672	—	99,995	(4,919)	36,006	131,082

(1) Net interest income of each segment represents the difference between actual interest earned on assets and interest paid 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 2016, we transferred certain client relationships from CMB to GB&M as discussed further in Note 22, "Business Segments," in our 2016 Form 10-K. As a result, we reclassified $23 million and $67 million of profit before tax from the CMB segment to the GB&M segment during the three and nine months ended September 30, 2016, respectively, to conform with the current year presentation. In addition, we reclassified $3,570 million of loans and $3,068 million of deposits from the CMB segment to the GB&M segment at September 30, 2016.

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

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

15. 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. Any non-contractual dividend from HSBC Bank USA would require the approval of the Office of the Comptroller of the Currency ("the OCC"). Approval is also required if the total of all dividends HSBC Bank USA declares in any year exceeds the cumulative net profits for that year, combined with the profits for the two preceding years reduced by dividends attributable to those years. 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 September 30, 2017 and December 31, 2016, HSBC Bank USA was required to maintain $3,033 million and $3,139 million, respectively, of reserve balances with the Federal Reserve Bank.

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 September 30, 2017 and December 31, 2016:

	September 30, 2017			December 31, 2016		
	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	**$ 18,258**	**4.5%** [2]	**15.3%**	$ 17,544	4.5% [2]	13.7%
HSBC Bank USA	**20,082**	**6.5**	**17.1**	19,577	6.5	15.7
Tier 1 capital ratio:						
HSBC USA	**19,512**	**6.0**	**16.3**	18,640	6.0	14.5
HSBC Bank USA	**22,561**	**8.0**	**19.2**	21,971	8.0	17.6
Total capital ratio:						
HSBC USA	**23,628**	**10.0**	**19.8**	23,549	10.0	18.3
HSBC Bank USA	**26,432**	**10.0**	**22.5**	26,325	10.0	21.1
Tier 1 leverage ratio:						
HSBC USA	**19,512**	**4.0** [2]	**9.9**	18,640	4.0 [2]	9.2
HSBC Bank USA	**22,561**	**5.0**	**11.5**	21,971	5.0	11.1
Risk-weighted assets:						
HSBC USA	**119,598**			128,482		
HSBC Bank USA	**117,458**			124,666		
Adjusted quarterly average assets:[3]						
HSBC USA	**198,043**			203,000		
HSBC Bank USA	**195,544**			197,944		

(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) Represents the Tier 1 leverage ratio denominator which reflects quarterly average assets adjusted for amounts permitted to be deducted from Tier 1 capital for the three months ended September 30, 2017 and December 31, 2016, respectively.

In 2013, U.S. banking regulators issued a final rule implementing the Basel III capital framework in the U.S. ("the Basel III final 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 Basel III transition rules within the final rule. In addition, risk-weighted assets in the table above are calculated using the Basel III Standardized Approach.

16. *Variable Interest Entities*

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

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

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

Consolidated VIEs The following table summarizes assets and liabilities related to our consolidated VIEs at September 30, 2017 and December 31, 2016 which are consolidated on our balance sheet. Assets and liabilities exclude intercompany balances that eliminate in consolidation.

	September 30, 2017		December 31, 2016	
	Consolidated Assets	Consolidated Liabilities	Consolidated Assets	Consolidated Liabilities
	(in millions)			
Low income housing limited liability partnership:				
Other assets	**$ 208**	**$ —**	$ 231	$ —
Long-term debt	**—**	**73**	—	79
Interest, taxes and other liabilities	**—**	**58**	—	60
Total	**$ 208**	**$ 131**	$ 231	$ 139

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 September 30, 2017 and December 31, 2016:

	Total Assets Held by Unconsolidated VIEs	Carrying Value of Variable Interests Held Reported as		Maximum Exposure to Loss
		Assets	Liabilities	
	(in millions)			
At September 30, 2017				
Structured note vehicles	**$ 3,013**	**$ 1,803**	**$ —**	**$ 3,013**
Limited partnership investments	**1,536**	**384**	**256**	**384**
Refinancing SPE	**418**	**281**	**—**	**281**
Total	**$ 4,967**	**$ 2,468**	**$ 256**	**$ 3,678**
At December 31, 2016				
Structured note vehicles	$ 5,908	$ 2,888	$ 7	$ 5,896
Limited partnership investments	1,853	427	227	427
Refinancing SPE	659	353	—	353
Total	$ 8,420	$ 3,668	$ 234	$ 6,676

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 September 30, 2017 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.

During the second quarter of 2017, one of the structured note vehicles was unwound and our investment in the structured note vehicle along with any related derivatives were terminated. As a result, we recognized a gain of approximately $11 million, largely reflecting a make-whole payment provided by a third party guarantor of the investment. At the time of unwind, our investment in the structured note vehicle had a total carrying value of $1,081 million, which was recorded in trading assets on the 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 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. Interest and principal repayments of the prepayable financing facility are dependent on and are secured by the rental cash flows generated from the underlying commercial real estate properties. The financing facility contains additional credit enhancements, including a 15 percent equity subordination in the borrower's capital structure and a financial guarantee over 25 percent of the outstanding balance provided by the borrower's parent.

The SPE is a refinancing vehicle designed to secure term financing from external investors to repay our loans. The loans issued to the SPE are supported by the financing facility and the security interests in the commercial real estate loans and the credit enhancements. The refinancing vehicle is a VIE because it does not have sufficient equity investment at risk to permit the entity to finance the activities without additional subordination provided by any parties. We have a variable interest in the VIE through our ownership of the loans. In view of the purpose and design of the SPE, the overall funding structure, the additional credit enhancements and the risks inherent in the VIE, we concluded the investors absorb an insignificant amount of expected loss and/or benefit in the VIE. Rather, the borrower and its parent take on the risks and benefits in the VIE through the credit enhancements provided to the holder of the financing facility. In addition, the investors do not have the power to direct the activities that most significantly impact the economic performance of the VIE and, therefore, we are not the primary beneficiary of the VIE. The maximum exposure to loss shown in the table above represents our investment in the loans without consideration of any recovery benefits from the credit enhancements.

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

17. Guarantee Arrangements, Pledged Assets and Repurchase Agreements

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

The following table presents total carrying value and contractual amounts of our sell protection credit derivatives and major off-balance sheet guarantee arrangements at September 30, 2017 and December 31, 2016. Following the table is a description of the various arrangements.

	September 30, 2017		December 31, 2016	
	Carrying Value	Notional / Maximum Exposure to Loss	Carrying Value	Notional / Maximum Exposure to Loss
	(in millions)			
Credit derivatives[1][4]	**$ (201)**	**$ 45,228**	$ (627)	$ 58,329
Financial standby letters of credit, net of participations[2][3]	**—**	**5,190**	—	5,423
Performance standby letters of credit, net of participations[2][3]	**—**	**3,257**	—	2,969
Total	**$ (201)**	**$ 53,675**	$ (627)	$ 66,721

(1) Includes $26,541 million and $29,999 million of notional issued for the benefit of HSBC affiliates at September 30, 2017 and December 31, 2016, respectively.

(2) Includes $1,270 million and $1,315 million of both financial and performance standby letters of credit issued for the benefit of HSBC affiliates at September 30, 2017 and December 31, 2016, respectively.

(3) 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.

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

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 sell protection position at any time. The following table summarizes our net credit derivative positions at September 30, 2017 and December 31, 2016:

	September 30, 2017		December 31, 2016	
	Carrying / Fair Value	Notional	Carrying / Fair Value	Notional
	(in millions)			
Sell-protection credit derivative positions	**$ (201)**	**$ 45,228**	$ (627)	$ 58,329
Buy-protection credit derivative positions	**275**	**50,686**	845	65,385
Net position[(1)]	**$ 74**	**$ 5,458**	$ 218	$ 7,056

(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 September 30, 2017, the total amount of outstanding financial standby letters of credit (net of participations) and performance guarantees (net of participations) were $5,190 million and $3,257 million, respectively. At December 31, 2016, the total amount of outstanding financial standby letters of credit (net of participations) and performance guarantees (net of participations) were $5,423 million and $2,969 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 $50 million and $49 million at September 30, 2017 and December 31, 2016, respectively. Also included in other liabilities is an allowance for credit losses on unfunded standby letters of credit of $26 million and $39 million at September 30, 2017 and December 31, 2016, respectively.

The following table summarizes the credit ratings related to guarantees including the ratings of counterparties against which we sold credit protection and financial standby letters of credit at September 30, 2017 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")	2.6	$ 24,945	$ 11,937	$ 36,882
Structured CDS	0.2	841	49	890
Index credit derivatives	3.8	3,085	2,786	5,871
Total return swaps	2.8	1,308	277	1,585
Subtotal		30,179	15,049	45,228
Standby Letters of Credit[2]	1.2	5,320	3,127	8,447
Total		$ 35,499	$ 18,176	$ 53,675

(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 as described in Note 27, "Litigation and Regulatory Matters," in our 2016 Form 10-K. Accordingly, the Class B Shares are considered restricted and are only transferable under limited circumstances, which include transfers to other Class B shareholders. As discussed further below, during the first half of 2017, we sold substantially all of our remaining Visa Class B Shares to a third party.

During the first half of 2017, we sold 2,391,936 Visa Class B Shares resulting in a net pre-tax gain of approximately $312 million. During the fourth quarter of 2016, we sold 638,219 Visa Class B Shares resulting in a net pre-tax gain of approximately $71 million. The net pre-tax gains associated with these sales were recorded as a component of other income (loss) 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 $52 million (of which $36 million related to the sales during the first half of 2017) and $14 million at September 30, 2017 and December 31, 2016, respectively. The swap agreements we entered into with the purchaser requires us to (a) make periodic fixed 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. The payments under the derivative will continue until the Class B Shares are able to be converted into Class A Shares. The fair value of the swap agreements is estimated using a discounted cash flow methodology and is dependent upon the final resolution of the related litigation. Changes in fair value between periods are recognized in other income (loss). See Note 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 Historically, we originated and sold mortgage loans, primarily to government sponsored enterprises, and provided various representations and warranties related to, among other things, the ownership of the loans, the validity of the liens, the loan selection and origination process, and the compliance to the origination criteria established by the 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. As a result of settlements with the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation during 2013 and 2014, the repurchase exposure associated with these sales has been substantially resolved. In addition, with the conversion of our mortgage processing and servicing operations to PHH Mortgage in 2013, new agency eligible originations are sold directly to PHH Mortgage and PHH Mortgage is responsible for origination representations and warranties for all loans purchased.

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 $6 million September 30, 2017 and December 31, 2016, respectively.

The following table summarizes the change in our estimated repurchase liability during the three and nine months ended September 30, 2017 and 2016 for obligations arising from the breach of representations and warranties associated with mortgage loans sold:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	**2017**	2016
	(in millions)			
Balance at beginning of period	**$ 11**	$ 13	**$ 12**	$ 17
Increase (decrease) in liability recorded through earnings	**—**	—	**(1)**	(3)
Realized losses	**(1)**	(1)	**(1)**	(2)
Balance at end of period	**$ 10**	$ 12	**$ 10**	$ 12

Our repurchase liability of $10 million at September 30, 2017 represents our best estimate of the loss that has been incurred, including interest, arising from breaches of representations and warranties associated with mortgage loans sold. Because the level of mortgage loan repurchase losses is dependent upon economic factors, investor demand strategies and other external risk factors such as housing market trends that may change, the level of the liability for mortgage loan repurchase losses requires significant judgment. We continue to evaluate our methods of determining the best estimate of loss based on recent trends. As these estimates are influenced by factors outside our control, there is uncertainty inherent in these estimates making it reasonably possible that they could change. The range of reasonably possible losses in excess of our recorded repurchase liability is between zero and $25 million at September 30, 2017. 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 2016 Form 10-K and in Note 18, "Litigation and Regulatory Matters," in our Form 10-Q for the three month period ended March 31, 2017 for additional discussion of related exposure. There have been no significant changes with regards to this exposure since March 31, 2017. The outstanding principal balance on these loans was approximately $4.3 billion and $4.6 billion at September 30, 2017 and December 31, 2016, respectively.

Pledged Assets

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

	September 30, 2017	December 31, 2016
	(in millions)	
Interest bearing deposits with banks	**$ 3,195**	$ 3,034
Trading assets[1]	**3,626**	2,772
Securities available-for-sale[2]	**9,591**	7,503
Securities held-to-maturity[2]	**2,268**	2,551
Loans[3]	**18,108**	18,260
Other assets[4]	**2,194**	1,958
Total	**$ 38,982**	$ 36,078

(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 that can be sold or repledged by the secured party continue to be reported on the consolidated balance sheet. The fair value of securities available-for-sale that could be sold or repledged was $2,814 million and $892 million at September 30, 2017 and December 31, 2016, respectively. The fair value of trading assets that could be sold or repledged was $3,626 million and $2,772 million at September 30, 2017 and December 31, 2016, respectively.

The fair value of collateral we accepted under security resale agreements but not reported on the consolidated balance sheet was $18,897 million and $30,784 million at September 30, 2017 and December 31, 2016, respectively, discussed further below. Of this collateral, $16,997 million and $29,835 million could be sold or repledged at September 30, 2017 and December 31, 2016, respectively, of which $1,815 million and $769 million, respectively, had been sold or repledged as collateral under repurchase agreements or to cover short sales.

Repurchase Agreements

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

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

The following table provides information about resale and repurchase agreements that are subject to offset at September 30, 2017 and December 31, 2016:

	Gross Amounts Recognized	Gross Amounts Offset in the Balance Sheet[(1)]	Net Amounts Presented in the Balance Sheet	Gross Amounts Not Offset in the Balance Sheet: Financial Instruments[(2)]	Gross Amounts Not Offset in the Balance Sheet: Cash Collateral Received / Pledged	Net Amount[(3)]
			(in millions)			
At September 30, 2017						
Assets:						
Securities purchased under resale agreements	**$ 18,897**	**$ 1,761**	**$ 17,136**	**$ 17,114**	**$ —**	**$ 22**
Liabilities:						
Securities sold under repurchase agreements	**$ 8,255**	**$ 1,761**	**$ 6,494**	**$ 6,481**	**$ —**	**$ 13**
At December 31, 2016						
Assets:						
Securities purchased under resale agreements	$ 30,784	$ 761	$ 30,023	$ 29,945	$ —	$ 78
Liabilities:						
Securities sold under repurchase agreements	$ 4,433	$ 761	$ 3,672	$ 3,661	$ —	$ 11

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

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

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

The following table provides the class of collateral pledged and remaining contractual maturity of repurchase agreements accounted for as secured borrowings at September 30, 2017 and December 31, 2016:

	Overnight and Continuous	Up to 30 Days	31 to 90 Days	91 Days to One Year	Greater Than One Year	Total
			(in millions)			
At September 30, 2017						
U.S. Treasury, U.S. Government agency and sponsored entity securities	**$ 1,482**	**$ 2,713**	**$ 1,173**	**$ 1,369**	**$ 1,512**	**$ 8,249**
Foreign debt securities	**—**	**6**	**—**	**—**	**—**	**6**
Total repurchase agreements accounted for as secured borrowings	**$ 1,482**	**$ 2,719**	**$ 1,173**	**$ 1,369**	**$ 1,512**	**$ 8,255**
At December 31, 2016						
U.S. Treasury, U.S. Government agency and sponsored entity securities	$ 761	$ —	$ —	$ 1,272	$ 2,400	$ 4,433
Foreign debt securities	—	—	—	—	—	—
Total repurchase agreements accounted for as secured borrowings	$ 761	$ —	$ —	$ 1,272	$ 2,400	$ 4,433

18. 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.

Fair Value of Financial Instruments The fair value estimates, methods and assumptions set forth below for our financial instruments, including those financial instruments carried at cost, 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 following table summarizes the carrying value and estimated fair value of our financial instruments at September 30, 2017 and December 31, 2016:

September 30, 2017	Carrying Value	Fair Value	Level 1	Level 2	Level 3
			(in millions)		
Financial assets:					
Short-term financial assets	$ 24,108	$ 24,108	$ 986	$ 23,103	$ 19
Federal funds sold and securities purchased under agreements to resell	15,827	15,827	—	15,827	—
Federal funds sold and securities purchased under agreements to resell designated under fair value option	1,309	1,309	—	1,309	—
Non-derivative trading assets	30,142	30,142	6,548	21,666	1,928
Derivatives	3,873	3,873	18	3,830	25
Securities	46,054	46,094	20,420	25,564	110
Commercial loans, net of allowance for credit losses	47,402	48,861	—	—	48,861
Commercial loans designated under fair value option and held for sale	375	375	—	375	—
Commercial loans held for sale	56	56	—	56	—
Consumer loans, net of allowance for credit losses	19,392	18,753	—	—	18,753
Consumer loans held for sale:					
Residential mortgages	12	12	—	7	5
Other consumer	64	64	—	—	64
Financial liabilities:					
Short-term financial liabilities	$ 4,383	$ 4,415	$ —	$ 4,396	$ 19
Deposits:					
Without fixed maturities	102,720	102,720	—	102,720	—
Fixed maturities	10,462	10,489	—	10,489	—
Deposits designated under fair value option	7,628	7,628	—	6,683	945
Deposits held for sale	1,030	1,030	—	1,030	—
Non-derivative trading liabilities	1,474	1,474	1,373	101	—
Derivatives	3,059	3,059	13	3,034	12
Short-term borrowings designated under fair value option	3,609	3,609	—	3,609	—
Long-term debt	25,019	26,114	—	26,114	—
Long-term debt designated under fair value option	12,358	12,358	—	11,805	553

December 31, 2016	Carrying Value	Fair Value	Level 1	Level 2	Level 3
			(in millions)		
Financial assets:					
Short-term financial assets	$ 21,500	$ 21,500	$ 1,235	$ 20,238	$ 27
Federal funds sold and securities purchased under agreements to resell	29,253	29,253	—	29,253	—
Federal funds sold and securities purchased under agreements to resell designated under fair value option	770	770	—	770	—
Non-derivative trading assets	12,439	12,439	3,560	5,811	3,068
Derivatives	5,004	5,004	12	4,961	31
Securities	49,719	49,748	25,145	24,498	105
Commercial loans, net of allowance for credit losses	53,286	54,938	—	—	54,938
Commercial loans designated under fair value option and held for sale	725	725	—	725	—
Commercial loans held for sale	119	119	—	119	—
Consumer loans, net of allowance for credit losses	19,572	18,833	—	—	18,833
Consumer loans held for sale:					
Residential mortgages	894	912	—	9	903
Other consumer	71	71	—	—	71
Financial liabilities:					
Short-term financial liabilities	$ 2,456	$ 2,489	$ —	$ 2,462	$ 27
Deposits:					
Without fixed maturities	112,009	112,009	—	112,009	—
Fixed maturities	9,713	9,749	—	9,749	—
Deposits designated under fair value option	7,526	7,526	—	6,119	1,407
Non-derivative trading liabilities	1,122	1,122	1,060	62	—
Derivatives	4,535	4,535	8	4,511	16
Short-term borrowings designated under fair value option	2,672	2,672	—	2,672	—
Long-term debt	27,355	28,093	—	28,093	—
Long-term debt designated under fair value option	10,384	10,384	—	9,885	499

Assets and Liabilities Recorded at Fair Value on a Recurring Basis The following table presents information about our assets and liabilities measured at fair value on a recurring basis at September 30, 2017 and December 31, 2016, and indicates the fair value hierarchy of the valuation techniques utilized to determine such fair value:

	Fair Value Measurements on a Recurring Basis					
September 30, 2017	**Level 1**	**Level 2**	**Level 3**	**Gross Balance**	**Netting[1]**	**Net Balance**
	(in millions)					
Assets:						
Securities purchased under agreements to resell[2]	$ —	$ 1,309	$ —	$ 1,309	$ —	$ 1,309
Trading securities, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	4,250	338	—	4,588	—	4,588
Collateralized debt obligations	—	—	125	125	—	125
Asset-backed securities:						
Residential mortgages	—	72	—	72	—	72
Student loans	—	91	—	91	—	91
Corporate and other domestic debt securities	—	—	1,803	1,803	—	1,803
Debt securities issued by foreign entities	2,298	2,029	—	4,327	—	4,327
Equity securities	—	12	—	12	—	12
Precious metals trading	—	19,124	—	19,124	—	19,124
Derivatives:[3]						
Interest rate contracts	62	23,298	—	23,360	—	23,360
Foreign exchange contracts	43	15,577	10	15,630	—	15,630
Equity contracts	—	3,249	157	3,406	—	3,406
Precious metals contracts	99	980	—	1,079	—	1,079
Credit contracts	—	869	121	990	—	990
Other contracts[4]	—	1	6	7	—	7
Derivatives netting	—	—	—	—	(40,599)	(40,599)
Total derivatives	204	43,974	294	44,472	(40,599)	3,873
Securities available-for-sale:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	19,773	10,313	—	30,086	—	30,086
Asset-backed securities:						
Home equity	—	55	—	55	—	55
Other	—	399	110	509	—	509
Debt securities issued by foreign entities	647	242	—	889	—	889
Equity securities	—	154	—	154	—	154
Loans[5]	—	375	—	375	—	375
Other assets[6]	—	—	15	15	—	15
Total assets	$ 27,172	$ 78,487	$ 2,347	$ 108,006	$ (40,599)	$ 67,407
Liabilities:						
Domestic deposits[2]	$ —	$ 6,683	$ 945	$ 7,628	$ —	$ 7,628
Trading liabilities, excluding derivatives	1,373	101	—	1,474	—	1,474
Derivatives:[3]						
Interest rate contracts	105	23,219	—	23,324	—	23,324
Foreign exchange contracts	36	14,747	10	14,793	—	14,793
Equity contracts	—	2,291	101	2,392	—	2,392
Precious metals contracts	33	483	—	516	—	516
Credit contracts	—	962	6	968	—	968
Other contracts[4]	—	—	52	52	—	52
Derivatives netting	—	—	—	—	(38,986)	(38,986)
Total derivatives	174	41,702	169	42,045	(38,986)	3,059
Short-term borrowings[2]	—	3,609	—	3,609	—	3,609
Long-term debt[2]	—	11,805	553	12,358	—	12,358
Total liabilities	$ 1,547	$ 63,900	$ 1,667	$ 67,114	$ (38,986)	$ 28,128

December 31, 2016	Fair Value Measurements on a Recurring Basis					
	Level 1	Level 2	Level 3	Gross Balance	Netting[1]	Net Balance
	(in millions)					
Assets:						
Securities purchased under agreements to resell[2]	$ —	$ 770	$ —	$ 770	$ —	$ 770
Trading securities, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	3,560	246	—	3,806	—	3,806
Collateralized debt obligations	—	—	184	184	—	184
Asset-backed securities:						
Residential mortgages	—	96	—	96	—	96
Student loans	—	85	—	85	—	85
Corporate and other domestic debt securities	—	—	2,884	2,884	—	2,884
Debt securities issued by foreign entities	—	3,597	—	3,597	—	3,597
Equity securities	—	15	—	15	—	15
Precious metals trading	—	1,772	—	1,772	—	1,772
Derivatives:[3]						
Interest rate contracts	36	32,163	1	32,200	—	32,200
Foreign exchange contracts	24	24,014	18	24,056	—	24,056
Equity contracts	—	2,171	159	2,330	—	2,330
Precious metals contracts	81	1,038	—	1,119	—	1,119
Credit contracts	—	1,342	208	1,550	—	1,550
Other contracts[4]	—	—	5	5	—	5
Derivatives netting	—	—	—	—	(56,256)	(56,256)
Total derivatives	141	60,728	391	61,260	(56,256)	5,004
Securities available-for-sale:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	25,145	10,924	—	36,069	—	36,069
Asset-backed securities:						
Home equity	—	61	—	61	—	61
Other	—	—	105	105	—	105
Debt securities issued by foreign entities	—	521	—	521	—	521
Equity securities	—	154	—	154	—	154
Loans[5]	—	725	—	725	—	725
Total assets	$ 28,846	$ 79,694	$ 3,564	$ 112,104	$ (56,256)	$ 55,848
Liabilities:						
Domestic deposits[2]	$ —	$ 6,119	$ 1,407	$ 7,526	$ —	$ 7,526
Trading liabilities, excluding derivatives	1,060	62	—	1,122	—	1,122
Derivatives:[3]						
Interest rate contracts	84	32,568	—	32,652	—	32,652
Foreign exchange contracts	6	22,658	18	22,682	—	22,682
Equity contracts	—	1,714	161	1,875	—	1,875
Precious metals contracts	13	867	—	880	—	880
Credit contracts	—	1,354	15	1,369	—	1,369
Other contracts[4]	—	—	14	14	—	14
Derivatives netting	—	—	—	—	(54,937)	(54,937)
Total derivatives	103	59,161	208	59,472	(54,937)	4,535
Short-term borrowings[2]	—	2,672	—	2,672	—	2,672
Long-term debt[2]	—	9,885	499	10,384	—	10,384
Total liabilities	$ 1,163	$ 77,899	$ 2,114	$ 81,176	$ (54,937)	$ 26,239

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

(2) See Note 10, "Fair Value Option," for additional information.

(3) Includes trading derivative assets of $3,378 million and $4,411 million and trading derivative liabilities of $2,610 million and $3,786 million at September 30, 2017 and December 31, 2016, respectively, as well as derivatives held for hedging and commitments accounted for as derivatives.

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

(5) Includes certain commercial loans held for sale which we have elected to apply the fair value option. See Note 6, "Loans Held for Sale," for further information.

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

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 nine months ended September 30, 2017 and 2016.

Information on Level 3 assets and liabilities The following table summarizes additional information about changes in the fair value of Level 3 assets and liabilities during the three and nine months ended September 30, 2017 and 2016. 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								
	Jul. 1, 2017	Earnings	Other Comprehensive Income	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2017	Current Period Unrealized Gains (Losses)
					(in millions)					
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 131	$ 2	$ —	$ —	$ —	$ (8)	$ —	$ —	$ 125	$ 1
Corporate and other domestic debt securities	1,803	—	—	—	—	—	—	—	1,803	—
Derivatives, net:[2]										
Interest rate contracts	—	—	—	—	—	—	—	—	—	—
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—
Equity contracts	32	33	—	—	—	(7)	—	(2)	56	26
Credit contracts	143	(5)	—	—	—	(23)	—	—	115	(2)
Other contracts[3]	(44)	(5)	—	—	—	3	—	—	(46)	—
Other asset-backed securities available-for-sale[4]	107	3	—	—	—	—	—	—	110	2
Other assets[5]	—	15	—	—	—	—	—	—	15	15
Total assets	$ 2,172	$ 43	$ —	$ —	$ —	$ (35)	$ —	$ (2)	$ 2,178	$ 42
Liabilities:										
Domestic deposits[6]	$ (1,142)	$ (19)	$ (3)	$ —	$ (50)	$ 191	$ (4)	$ 82	$ (945)	$ (17)
Long-term debt[6]	(541)	(22)	(1)	—	(44)	28	—	27	(553)	(21)
Total liabilities	$ (1,683)	$ (41)	$ (4)	$ —	$ (94)	$ 219	$ (4)	$ 109	$ (1,498)	$ (38)

	Jan. 1, 2017	Total Realized / Unrealized Gains (Losses) Included in: Earnings	Total Realized / Unrealized Gains (Losses) Included in: Other Comprehensive Income	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2017	Current Period Unrealized Gains (Losses)
					(in millions)					
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 184	$ 20	$ —	$ —	$ —	$ (79)	$ —	$ —	$ 125	$ 6
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)	72	—	—	—	(15)	—	1	56	52
Credit contracts	193	(9)	—	—	—	(69)	—	—	115	(18)
Other contracts[3]	(9)	(7)	—	—	(35)	5	—	—	(46)	—
Other asset-backed securities available-for-sale[4]	105	5	—	—	—	—	—	—	110	5
Other assets[5]	—	15	—	—	—	—	—	—	15	15
Total assets	$ 3,356	$ 95	$ —	$ —	$ (35)	$ (1,239)	$ —	$ 1	$ 2,178	$ 59
Liabilities:										
Domestic deposits[6]	$ (1,407)	$ (33)	$ 9	$ —	$ (141)	$ 468	$ (25)	$ 184	$ (945)	$ (18)
Long-term debt[6]	(499)	(62)	(7)	—	(166)	106	(2)	77	(553)	(56)
Total liabilities	$ (1,906)	$ (95)	$ 2	$ —	$ (307)	$ 574	$ (27)	$ 261	$ (1,498)	$ (74)

	Jul. 1, 2016	Total Realized / Unrealized Gains (Losses) Included in Earnings	Other Compre-hensive Income	Purch-ases	Issu-ances	Settle-ments	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2016	Current Period Unrealized Gains (Losses)
	(in millions)									
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 201	$ 4	$ —	$ —	$ —	$ (14)	$ —	$ —	$ 191	$ 2
Corporate and other domestic debt securities	2,879	1	—	4	—	—	—	—	2,884	1
Derivatives, net:[2]										
Interest rate contracts	1	—	—	—	—	—	—	—	1	—
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—
Equity contracts	(15)	20	—	—	—	(2)	(1)	3	5	—
Credit contracts	188	11	—	—	—	8	—	—	207	(3)
Mortgage servicing rights[7]	104	(4)	—	—	—	(5)	—	(95)	—	(4)
Total assets	$ 3,358	$ 32	$ —	$ 4	$ —	$ (13)	$ (1)	$ (92)	$ 3,288	$ (4)
Liabilities:										
Domestic deposits[6]	$ (1,677)	$ (3)	$ —	$ —	$ (42)	$ 300	$ (39)	$ 57	$ (1,404)	$ (26)
Long-term debt[6]	(573)	(31)	—	—	(86)	110	—	67	(513)	(42)
Total liabilities	$ (2,250)	$ (34)	$ —	$ —	$ (128)	$ 410	$ (39)	$ 124	$ (1,917)	$ (68)

	Jan. 1, 2016	Total Realized / Unrealized Gains (Losses) Included in: Earnings	Other Compre-hensive Income	Purch-ases	Issu-ances	Settle-ments	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2016	Current Period Unrealized Gains (Losses)
	(in millions)									
Assets:										
Trading assets, excluding derivatives:[1]										
Collateralized debt obligations	$ 221	$ (4)	$ —	$ —	$ —	$ (26)	$ —	$ —	$ 191	$ (9)
Corporate and other domestic debt securities	2,870	—	—	14	—	—	—	—	2,884	—
Derivatives, net:[2]										
Interest rate contracts	1	—	—	—	—	—	—	—	1	—
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—
Equity contracts	(83)	75	—	—	—	10	—	3	5	50
Credit contracts	179	27	—	—	—	1	—	—	207	18
Mortgage servicing rights[7]	140	(28)	—	—	—	(17)	—	(95)	—	(28)
Total assets	$ 3,328	$ 70	$ —	$ 14	$ —	$ (32)	$ —	$ (92)	$ 3,288	$ 31
Liabilities:										
Domestic deposits[6]	$ (1,867)	$ (74)	$ —	$ —	$ (206)	$ 599	$ (54)	$ 198	$ (1,404)	$ (46)
Long-term debt[6]	(746)	(23)	—	—	(216)	259	—	213	(513)	(23)
Total liabilities	$ (2,613)	$ (97)	$ —	$ —	$ (422)	$ 858	$ (54)	$ 411	$ (1,917)	$ (69)

(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 $294 million and derivative liabilities of $169 million at September 30, 2017 and derivative assets of $335 million and derivative liabilities of $122 million at September 30, 2016. 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 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 (loss) in the consolidated statement of income.

(6) See Note 10, "Fair Value Option," for additional information. Beginning January 1, 2017, unrealized gains (losses) on fair value option liabilities attributable to our own credit spread is recorded in other comprehensive income (loss).

(7) During the fourth quarter of 2016, we sold our remaining residential mortgage servicing rights portfolio to a third party. Gains (losses) on residential mortgage servicing rights were included in residential mortgage banking revenue (expense) 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 September 30, 2017 and December 31, 2016:

September 30, 2017

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Collateralized debt obligations	$ 125	Broker quotes or consensus pricing and, where applicable, discounted cash flows	Prepayment rates	**1% - 6%**
			Conditional default rates	**6% - 8%**
			Loss severity rates	**85%**
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	**38% - 100%**
Foreign exchange derivative contracts[(1)]	$ —	Option pricing model	Implied volatility of currency pairs	**8% - 12%**
Equity derivative contracts[(1)]	$ 56	Option pricing model	Equity / Equity Index volatility	**7% - 43%**
			Equity / Equity and Equity / Index correlation	**44% - 80%**
			Equity dividend yields	**0% - 9%**
Credit derivative contracts	$ 115	Option pricing model and, where applicable, discounted cash flows	Issuer by issuer correlation of defaults	**82% - 83%**
			Credit default swap spreads	**181bps - 199bps**
Other derivative contracts	$ (46)	Discounted cash flows	Conversion rate	**1.6 times**
			Expected duration	**2 - 5 years**
Other asset-backed securities available-for-sale	$ 110	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)]	$ (945)	Option adjusted discounted cash flows	Implied volatility of currency pairs	**8% - 12%**
			Equity / Equity Index volatility	**7% - 43%**
			Equity / Equity and Equity / Index correlation	**44% - 80%**
Long-term debt (structured notes)[(1)(2)]	$ (553)	Option adjusted discounted cash flows	Implied volatility of currency pairs	**8% - 12%**
			Equity / Equity Index volatility	**7% - 43%**
			Equity / Equity and Equity / Index correlation	**44% - 80%**

December 31, 2016

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Collateralized debt obligations	$ 184	Broker quotes or consensus pricing and, where applicable, discounted cash flows	Prepayment rates	1% - 6%
			Conditional default rates	6% - 8%
			Loss severity rates	85%
Corporate and other domestic debt securities	$ 2,884	Discounted cash flows	Spread volatility on collateral assets	3% - 4%
			Correlation between insurance claim shortfall and collateral value	80%
Interest rate derivative contracts	$ 1	Market comparable adjusted for probability to fund	Probability to fund for rate lock commitments	38% - 100%
Foreign exchange derivative contracts[(1)]	$ —	Option pricing model	Implied volatility of currency pairs	15% - 21%
Equity derivative contracts[(1)]	$ (2)	Option pricing model	Equity / Equity Index volatility	11% - 49%
			Equity / Equity and Equity / Index correlation	45% - 57%
			Equity dividend yields	0% - 14%
Credit derivative contracts	$ 193	Option pricing model and, where applicable, discounted cash flows	Issuer by issuer correlation of defaults	82% - 83%
			Credit default swap spreads	150bps - 173bps
Other derivative contracts	$ (9)	Discounted cash flows	Conversion rate	1.6 times
			Expected duration	3 - 5 years
Other asset-backed securities available-for-sale	$ 105	Discounted cash flows	Market assumptions related to yields for comparable instruments	1% - 4%
Domestic deposits (structured deposits)[(1)(2)]	$ (1,407)	Option adjusted discounted cash flows	Implied volatility of currency pairs	15% - 21%
			Equity / Equity Index volatility	11% - 49%
			Equity / Equity and Equity / Index correlation	45% - 57%
Long-term debt (structured notes)[(1)(2)]	$ (499)	Option adjusted discounted cash flows	Implied volatility of currency pairs	15% - 21%
			Equity / Equity Index volatility	11% - 49%
			Equity / Equity and Equity / Index correlation	45% - 57%

(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. The prepayment rate of our CDOs portfolio is close to the mid-point of the range.
- *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 low end of the range.
- *Loss severity rate* - Included in our Level 3 CDOs portfolio are trust preferred securities which had a loss severity rate of 85 percent at September 30, 2017.

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 8 percent and 12 percent while the implied volatility for equity/equity or equity/equity index is between 7 percent and 43 percent, respectively, at September 30, 2017. 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 2 percent and 5 percent, respectively, at September 30, 2017.

- *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 80 percent at September 30, 2017.

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 nine months ended September 30, 2017, we transferred $82 million and $184 million of domestic deposits and $27 million and $77 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 nine months ended September 30, 2017, we transferred $4 million and $25 million 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 nine months ended September 30, 2016, we transferred $57 million and $198 million of domestic deposits and $67 million and $213 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. During the third quarter of 2016, we transferred $95 million of mortgage servicing rights from Level 3 to Level 2 upon execution of the sale agreement with a third party. Additionally, during the three and nine months ended September 30, 2016, we transferred $39 million $54 million 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 September 30, 2017 and December 31, 2016. The gains (losses) during the three and nine months ended September 30, 2017 and 2016 are also included.

	Non-Recurring Fair Value Measurements at September 30, 2017				Total Gains (Losses) For the Three Months Ended September 30, 2017	Total Gains (Losses) For the Nine Months Ended September 30, 2017
	Level 1	Level 2	Level 3	Total		
	(in millions)					
Residential mortgage loans held for sale[1]	**$ —**	**$ —**	**$ 3**	**$ 3**	**$ —**	**$ 7**
Consumer loans[2]	**—**	**21**	**—**	**21**	**(2)**	**(10)**
Commercial loans held for sale[3]	**—**	**34**	**—**	**34**	**4**	**4**
Impaired commercial loans[4]	**—**	**—**	**333**	**333**	**38**	**87**
Real estate owned[5]	**—**	**10**	**—**	**10**	**2**	**6**
Total assets at fair value on a non-recurring basis	**$ —**	**$ 65**	**$ 336**	**$ 401**	**$ 42**	**$ 94**

	Non-Recurring Fair Value Measurements at December 31, 2016				Total Gains (Losses) For the Three Months Ended September 30, 2016	Total Gains (Losses) For the Nine Months Ended September 30, 2016
	Level 1	Level 2	Level 3	Total		
	(in millions)					
Residential mortgage loans held for sale[1]	$ —	$ 6	$ 769	$ 775	$ (17)	$ (61)
Consumer loans[2]	—	46	—	46	(10)	(19)
Commercial loans held for sale[3]	—	79	—	79	(7)	(37)
Impaired commercial loans[4]	—	—	278	278	7	(295)
Real estate owned[5]	—	17	—	17	2	6
Total assets at fair value on a non-recurring basis	$ —	$ 148	$ 1,047	$ 1,195	$ (25)	$ (406)

(1) At September 30, 2017 and December 31, 2016, 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, including certain residential mortgage loans held for sale for which the underlying real estate properties used to determine fair value are illiquid assets as a result of market conditions and, at December 31, 2016, certain residential mortgage loans which were transferred to held for sale during 2016 and substantially sold during the nine months ended September 30, 2017 for which significant inputs in estimating fair value were unobservable. 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. Total gains (losses) for the three and nine months ended September 30, 2016 include amounts recorded on loans that were subsequently transferred to held for sale.

(3) At September 30, 2017 and December 31, 2016, 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 September 30, 2017 and December 31, 2016:

At September 30, 2017

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Residential mortgage loans held for sale	**$ 3**	Third party appraisal valuation based on estimated loss severities, including collateral values	Loss severity rates	**6% - 100%**
Impaired commercial loans	**333**	Valuation of third party appraisal on underlying collateral	Loss severity rates	**3% - 100%**

At December 31, 2016

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs
Residential mortgage loans held for sale	$ 769	Third party appraisal valuation based on estimated loss severities,	Loss severity rates	0% - 100%
		including collateral values and market discount rate	Market discount rate	8% - 14%
Impaired commercial loans	278	Valuation of third party appraisal on underlying collateral	Loss severity rates	4% - 100%

Significant Unobservable Inputs for Non-Recurring Fair Value Measurements

Residential mortgage loans held for sale represent subprime residential mortgage loans which were previously acquired with the intent of securitizing or selling them to third parties and, at December 31, 2016, residential mortgage loans which were transferred to held for sale during 2016 and substantially sold during the nine months ended September 30, 2017. The weighted average loss severity rate for residential mortgage loans held for sale was approximately 57 percent at September 30, 2017. These severity rates are primarily impacted by the value of the underlying collateral securing the loans.

Impaired loans represent commercial loans. The weighted average severity rate for these loans was approximately 34 percent at September 30, 2017. 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 and for estimating fair value for those financial instruments not recorded at fair value for which fair value disclosure is required.

Short-term financial assets and liabilities - The carrying amount of certain financial assets and liabilities recorded at cost 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, short-term borrowings and dividends payable.

Federal funds sold and purchased and securities purchased and sold under resale and repurchase agreements - We record 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.

The remaining federal funds sold and purchased and securities purchased and sold under resale and repurchase agreements are recorded at cost. A majority of these transactions are short-term in nature and, as such, the recorded amounts approximate fair value. For transactions with long-dated maturities, fair value is based on dealer quotes for instruments with similar terms and collateral.

Loans - Except for certain commercial loans held for sale for which the fair value option has been elected, we do not record loans at fair value on a recurring basis. From time to time, we record impairments to loans. The write-downs can be based on observable market price of the loan, the underlying collateral value or a discounted cash flow analysis. In addition, fair value estimates are determined based on the product type, financial characteristics, pricing features and maturity.

- 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 the discounted cash flow method using assumptions consistent with those which would be used by market participants in valuing such loans. Valuation inputs include estimates of prepayment rates, default rates, loss severities, collateral values and market rates of return. Where available, such inputs are derived from or corroborated by observable market data. We also may hold discussions on value directly with potential investors. Since some loan pools may have features which are unique, the fair value measurement processes use significant unobservable inputs which are specific to the performance characteristics of the various loan portfolios. Where available, we measure residential mortgage whole loans held for sale based on transaction prices of loan portfolios of similar characteristics observed in the whole loan market. 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.

- 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 record 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 loans – Commercial loans and commercial real estate loans are valued by discounting the contractual cash flows, adjusted for prepayments and the borrower's credit risk, using a discount rate that reflects the current rates offered to borrowers of similar credit standing for the remaining term to maturity and, when applicable, our own estimate of liquidity premium.
- Commercial impaired loans – Generally represents collateral dependent commercial loans with fair value determined based on pricing quotes obtained from an independent third party appraisal.
- Consumer loans – The estimated fair value of our consumer loans were determined by developing an approximate range of value from a mix of various sources as appropriate for the respective pool of assets. These sources included estimates from an HSBC affiliate which reflect over-the-counter trading activity, trading input from other market participants which includes observed primary and secondary trades, where appropriate, the impact of current estimated rating agency credit tranching levels with the associated benchmark credit spreads as well as general discussions held directly with potential investors. Since some loan pools may have features which are unique, the fair value measurement processes use significant unobservable inputs which are specific to the performance characteristics of the various loan portfolios. For revolving products, the estimated fair value excludes future draws on the available credit line as well as other items and, therefore, does not include the fair value of the entire relationship.

  We perform analytical reviews of fair value changes on a quarterly basis and periodically validate our valuation methodologies and assumptions based on the results of actual sales of loans with similar characteristics. In addition, from time to time, we may engage a third party valuation specialist to measure the fair value of a pool of loans. Portfolio risk management personnel provide further validation through discussions with third party brokers and other market participants.

Lending-related commitments - The fair value of commitments to extend credit, standby letters of credit and financial guarantees 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 commitments and standby letters of credit totaled $50 million and $49 million at September 30, 2017 and December 31, 2016, respectively.

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.

The following tables provide additional information relating to asset-backed securities as well as certain collateralized debt obligations held at September 30, 2017:

Trading asset-backed securities:

Rating of Securities:[1]	Collateral Type:	Level 2	Level 3	Total
			(in millions)	
AAA -A	Residential mortgages - Alt A	$ 31	$ —	$ 31
	Residential mortgages - Subprime	25	—	25
	Student loans	91	—	91
	Total AAA -A	147	—	147
BBB -B	Collateralized debt obligations	—	125	125
CCC-Unrated	Residential mortgages - Subprime	16	—	16
		$ 163	$ 125	$ 288

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	$ 54	$ —	$ 54
	Other	400	110	510
	Total AAA -A	$ 454	$ 110	$ 564

(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. Correlation is derived using market quotes from brokers and various pricing services.
- 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 45 days to reflect observable local market data, including local area sales data.

Structured notes and deposits – Structured notes and deposits are hybrid instruments containing embedded derivatives and are elected to be measured at fair value in their entirety under fair value option 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 – We elected to apply fair value option 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.

For long-term debt recorded at cost, fair value is determined based on quoted market prices where available. If quoted market prices are not available, fair value is based on dealer quotes, quoted prices of similar instruments, or internally developed valuation models adjusted for our own credit spreads.

Deposits – For fair value disclosure purposes, the carrying amount of deposits with no stated maturity (e.g., demand, savings, and certain money market deposits), which represents the amount payable upon demand, is considered to generally approximate fair value. For deposits with stated maturities, fair value is estimated by discounting cash flows using market interest rates currently offered on deposits with similar characteristics and maturities.

19. Litigation and Regulatory Matters

The following supplements, and should be read together with, the disclosure in Note 27, "Litigation and Regulatory Matters," in our 2016 Form 10-K and in Note 18, "Litigation and Regulatory Matters," in our Form 10-Q for the three month period ended March 31, 2017 (the "2017 First Quarter Form 10-Q") and the six month period ended June 30, 2017 (the "2017 Second Quarter Form 10-Q"). Only those matters with significant updates and new matters since our disclosure in our 2016 Form 10-K, our 2017 First Quarter Form 10-Q and our 2017 Second Quarter Form 10-Q are reported herein.

In addition to the matters described below, and in our 2016 Form 10-K, our 2017 First Quarter Form 10-Q and our 2017 Second Quarter Form 10-Q, in the ordinary course of business, we are routinely named as defendants in, or as parties to, various legal actions and proceedings relating to activities of our current and/or former operations. These legal actions and proceedings may include claims for substantial or indeterminate compensatory or punitive damages, or for injunctive relief. In the ordinary course of business, we also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In connection with formal and informal inquiries by these regulators, we receive numerous requests, subpoenas and orders seeking documents, testimony and other information in connection with various aspects of our regulated activities.

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

For the legal matters disclosed below, including litigation and governmental and regulatory matters, as well as for the legal matters disclosed in Note 27, "Litigation and Regulatory Matters," in our 2016 Form 10-K and in Note 18, "Litigation and Regulatory Matters," in our 2017 First Quarter Form 10-Q and our 2017 Second Quarter Form 10-Q as to which a loss in excess of accrued liability is reasonably possible in future periods and for which there is sufficient currently available information on the basis of which management believes it can make a reliable estimate, we believe a reasonable estimate could be as much as $350 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.

Based on the facts currently known, in respect of each of the below investigations as well as for the investigations disclosed in Note 27, "Litigation and Regulatory Matters," in our 2016 Form 10-K and in Note 18, "Litigation and Regulatory Matters," in our 2017 First Quarter Form 10-Q and our 2017 Second Quarter Form 10-Q, it is not practicable at this time for us to determine the terms on which these ongoing investigations will be resolved or the timing of such resolution. As matters progress, it is possible that any fines and/or penalties could be significant.

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

County of Cook v. HSBC North America Holdings Inc., et al. Defendants filed a motion to dismiss the amended complaint in August 2017. The motion is fully briefed and the HSBC defendants await a decision.

Interest Rate Swaps Litigation In June 2017, the court granted HSBC’s separate motion to dismiss, as well as dismissed co-defendants Tradeweb and ICAP. The court denied the dealer defendants’ joint motion to dismiss. The court has not permitted plaintiffs to amend their complaint, but set a deadline in February 2018 for the parties to amend their pleadings or join additional parties.

Foreign Exchange ("FX") Matters

U.S. Litigation In connection with the retail plaintiffs' action, the defendants have moved to dismiss the third amended complaint.

Canada Litigation The settlements of the Canada FX matters have been approved by the presiding courts.

U.S. Investigations In September 2017, HSBC and HSBC North America agreed to a settlement with the Federal Reserve Board ("FRB") for historic deficiencies in their controls and oversight over HSBC Group's FX trading business. HSBC paid a civil money penalty to the FRB, and HSBC and HSBC North America agreed to further improve HSBC Group's controls and compliance risk management program for certain markets activities. HSBC Group continues to be in active discussions with the U.S. Department of Justice ("DOJ") and other regulatory authorities about potential resolutions of their FX investigations.

Precious Metals Fix Matters

Platinum and Palladium Fix Litigation The defendants have filed a joint motion to dismiss the third amended complaint and await a ruling.

Supranational, Sovereign and Agency ("SSA") Bonds In October 2017, plaintiffs filed a motion for leave to file an amended complaint. The proposed amended complaint drops HSBC and HSBC Bank USA as defendants. The remaining HSBC defendants, HSBC Bank plc and HSI, await the court's ruling on the motion.

Benchmark Rate Litigation

Frontpoint Asian Event Driven Fund, L.P., et al. v. Citibank, N.A., et al. In August 2017, the defendants' joint motion to dismiss was granted, but the court granted leave to replead. Plaintiffs have filed a second amended complaint, which defendants have moved to dismiss.

Mortgage Securitization Matters

As noted previously, discussions are ongoing with the DOJ regarding liability under the Financial Industry Reform, Recovery, and Enforcement Act in connection with certain residential mortgage-backed securities securitizations from 2005 to 2007.

Mortgage Securitization Trust Litigation In September 2017, Western & Southern Life Insurance Company voluntarily dismissed its claim against HSBC Bank USA, as trustee, without prejudice to refile at a later date. In October 2017, Royal Park Investments SA/NV filed a complaint against HSBC Bank USA, as trustee, in the U.S. District Court for the Southern District of New York ("SDNY") alleging various common law claims arising out of HSBC Bank USA's use of trust funds to defend itself against several lawsuits brought against the trustee. This matter is at an early stage.

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

Jeffrey Siegel, et al. v. HSBC Holdings plc, et al. In August 2017, the court granted HSBC's and HSBC Bank Middle East's motion to dismiss for lack of personal jurisdiction and transferred the action as to HSBC Bank USA and HSBC North America to the SDNY. Plaintiffs have moved to amend the complaint to add allegations against HSBC, and that motion remains pending.

Ramiro Giron, et al. v. Hong Kong and Shanghai Bank Company, Ltd., et al. HSBC Bank USA filed a motion for summary judgment in September 2017. Plaintiffs' motion for class certification remains pending.

Mary Zapata, et al. v HSBC In October 2017, the court granted HSBC Mexico's motion to dismiss the complaint for lack of personal jurisdiction and denied HSBC Bank USA's motion to transfer the case. Plaintiffs thereafter filed a notice of dismissal in which they indicated they plan to refile the action in federal district court in New York.

Saul Martinez, et al. v. Deutsche Bank AG, et al. Plaintiffs voluntarily dismissed the case in October 2017.

Telephone Consumer Protection Act ("TCPA") Litigation HSBC Mortgage Corporation responded to the complaint, and discovery is underway.

20. New Accounting Pronouncements

The following new accounting pronouncements were adopted effective January 1, 2017:

- ***Financial Instruments - Classification and Measurement of Financial Liabilities Measured Under the Fair Value Option*** In January 2016, the Financial Accounting Standards Board ("FASB") issued an ASU which, for financial liabilities measured under the fair value option, requires recognizing the change in fair value attributable to our own credit spread in other comprehensive income (loss). We elected to early adopt this guidance, which required a cumulative effect adjustment to the consolidated balance sheet, resulting in a reclassification from retained earnings to accumulated other comprehensive loss of an after tax gain of approximately $174 million as of January 1, 2017. The adoption of this guidance did not require financial statements for periods prior to 2017 to be restated.
- ***Compensation - Stock Compensation*** In March 2016, the FASB issued an ASU that requires all excess tax benefits and tax deficiencies for share-based payment awards to be recorded within income tax expense in the statement of income, rather than directly to additional paid-in capital, and for excess tax benefits to be classified as an operating activity in the statement of cash flows. The adoption of this guidance did not have a material impact on our financial position and results of operations.

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

- ***Recognition of Revenue from Contracts with Customers*** In May 2014, the FASB issued an 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 ASU is effective for all annual and interim periods beginning January 1, 2018. 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 we currently do not expect any material changes in revenue recognition. Therefore, we do not expect the adoption of this guidance will have a material impact on our financial position or results of operations.

- ***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. Additionally, the ASU requires new disclosure related to equity investments and modifies certain disclosure requirements related to the fair value of financial instruments. The ASU is effective for all annual and interim periods beginning January 1, 2018 and the guidance should be applied by recording a cumulative effect adjustment to the balance sheet or, as it relates to equity investments without readily determinable fair values, prospectively. The adoption of this guidance is not expected to have a material impact on our financial position or results of operations. However, it will require a cumulative effect adjustment to the consolidated balance sheet 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 related to equity investments which were previously classified as available-for-sale. The adoption of this guidance will result in all equity investments being recorded together as a component of other assets.
- ***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 will determine whether a lease is reported as a financing transaction in the income statement and statement of cash flows. The ASU does not substantially change lessor accounting, but it does make certain changes related to leases for which collectability of the lease payments is uncertain or there are significant variable payments. 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) narrowing the definition of initial direct costs which an entity is permitted to capitalize to include only those incremental costs of a lease that would not have been incurred if the lease had not been obtained; c) 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 d) expanding disclosures to provide 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 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 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.

- ***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. The ASU is effective for all annual and interim periods beginning January 1, 2018 and is required to be applied retrospectively to all periods presented. While the adoption of this guidance will result in a change in classification in the statement of cash flows, it is not expected to have a material impact as either we are already in compliance with the new guidance or the balances to which the new guidance will be applied are immaterial, and it will not have any impact on our financial position or results of operations.
- ***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. The ASU is effective for all annual and interim periods beginning January 1, 2018 and is required to be applied retrospectively to all periods presented. While the adoption of this guidance will result 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 will not have any impact on our financial position or results of operations.
- ***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 ASU is effective for all annual and interim periods beginning January 1, 2018 and should be applied prospectively.
- ***Goodwill Impairment Testing*** In January 2017, the FASB issued an ASU that simplifies the accounting for goodwill impairment by removing step 2 of the goodwill impairment test. Under step 2, 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.
- ***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 ASU is effective for all annual and interim periods beginning January 1, 2018 and is required to be applied retrospectively. The adoption of this guidance will not have a material impact on our financial statement presentation.
- ***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. We are currently evaluating the impact of adopting this ASU.

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 or a prolonged period of low or negative 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 new Administration in the U.S. (the "Administration");
- the ability to deliver on our regulatory priorities;
- extraordinary government actions as a result of market turmoil;
- capital and liquidity requirements under Basel III, the Federal Reserve Board's ("FRB") Comprehensive Capital Analysis and Review ("CCAR"), 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 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 the deferred prosecution agreements with the U.S. Department of Justice, the U.S. Attorney's Office for the Eastern District of New York, and the U.S. Attorney's Office for the Northern District of West Virginia, our agreement with the Office of the Comptroller of the Currency ("OCC"), our other consent agreements 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 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;
- disruption in our operations from the external environment arising from events such as natural disasters, global pandemic, 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 and our affiliates to provide adequate services;
- losses suffered due to the negligence or misconduct of our employees or the negligence or misconduct on the part of employees 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 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;
- 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 are subject;
- changes in bankruptcy laws to allow for principal reductions or other modifications to mortgage loan terms;
- 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, 2016 ("2016 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 nine months of 2017. U.S. Gross Domestic Product ("GDP") grew at an estimated annual rate of 3.0 percent in the third quarter of 2017, higher than 2016's GDP annual growth rate, while inflation in the third quarter of 2017 remained subdued. In June 2017, the FRB increased short-term interest rates by 25 basis points, the second such rate increase this year and the third since December 2016, and many believe the FRB will increase short-term interest rates once more during the fourth quarter. The FRB also announced in September it will begin reducing its holdings of U.S. Treasury bonds and mortgage-backed securities during the fourth quarter. These actions by the FRB will likely cause longer term interest rates to rise over time. The U.S. economy added approximately 1.3 million jobs during the first nine months of 2017 and the total unemployment rate fell to 4.2 percent at September 2017 as compared with 4.7 percent at December 2016. However, a significant number of part-time workers continue to seek full-time work and the number of discouraged people who have stopped looking for work remains elevated.

Despite the continued improvement of the U.S. economy, economic uncertainty remains high in many economies outside the U.S., including China as well as Latin America and in particular Brazil, where economic activity continues to be slow. In addition, recent geopolitical events and the implications of those events could potentially impact the capital markets and trade further adding to this global uncertainty. The sustainability of the economic recovery will be determined by numerous variables including consumer sentiment, energy prices, credit market volatility, employment levels and housing market conditions which will impact corporate earnings and the capital markets. These conditions in combination with global economic conditions, fiscal and monetary policy, geopolitical concerns and the level of regulatory and government scrutiny of financial institutions will continue to impact our results in 2017 and beyond.

Performance, Developments and Trends The following table sets forth selected financial highlights of HSBC USA for the three and nine months ended September 30, 2017 and 2016 and at September 30, 2017 and December 31, 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(dollars are in millions)			
Net income	**$ 94**	$ 33	**$ 594**	$ 166
Rate of return on average:				
Total assets	**.2%**	.1%	**.4%**	.1%
Total risk-weighted assets	**.3**	.1	**.7**	.2
Total common equity	**1.9**	.7	**3.8**	.9
Total equity	**1.8**	.6	**3.8**	1.1
Net interest margin	**1.26**	1.22	**1.28**	1.30
Efficiency ratio	**85.7**	86.9	**75.1**	79.2
Commercial net charge-off ratio(1)	**.19**	.16	**.21**	.31
Consumer net charge-off ratio(1)	**.08**	.81	**.12**	.41

(1) Excludes loans held for sale.

	September 30, 2017	December 31, 2016
	(dollars are in millions)	
Additional Select Ratios:		
Allowance as a percent of loans[1]	**1.18%**	1.38%
Commercial allowance as a percent of loans[1]	**1.51**	1.72
Consumer allowance as a percent of loans[1]	**.38**	.44
Consumer two-months-and-over contractual delinquency	**2.37**	4.05
Loans to deposits ratio[2]	**69.28**	75.67
Common equity Tier 1 capital to risk-weighted assets	**15.3**	13.7
Tier 1 capital to risk-weighted assets	**16.3**	14.5
Total capital to risk-weighted assets	**19.8**	18.3
Tier 1 leverage ratio	**9.9**	9.2
Total equity to total assets	**10.6**	10.1
Select Balance Sheet Data:		
Cash and interest bearing deposits with banks	**$ 24,089**	$ 21,473
Trading assets	**33,520**	16,850
Securities available-for-sale	**31,693**	36,910
Loans:		
Commercial loans	**48,128**	54,216
Consumer loans	**19,465**	19,659
Total loans	**67,593**	73,875
Deposits[3]	**121,840**	129,248

(1) Excludes loans held for sale.

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

(3) Includes $1.0 billion of deposits held for sale at September 30, 2017.

Net income was $94 million and $594 million during the three and nine months ended September 30, 2017, respectively, compared with $33 million and $166 million during the three and nine months ended September 30, 2016, respectively. Income before income tax was $155 million and $915 million during the three and nine months ended September 30, 2017, respectively, compared with $59 million and $266 million during the three and nine months ended September 30, 2016, respectively. The increase in income before income tax during the three and nine months ended September 30, 2017 reflects a lower provision for credit losses and higher other revenues driven in the year-to-date period by gains on sales of Visa Inc. ("Visa") Class B common shares ("Class B Shares"), partially offset by lower net interest income. While lower operating expenses also contributed to the increase in the three month period, operating expenses were higher in the year-to-date period which partially offset the increase.

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 September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(in millions)			
Income before income tax, as reported	**$ 155**	$ 59	**$ 915**	$ 266
Fair value movement on own fair value option debt attributable to our own credit spread[1]	**—**	(5)	**—**	(113)
Costs to achieve[2]	**51**	54	**159**	85
Gains on sales of Visa Inc. Class B common shares to a third party	**—**	—	**(312)**	—
Adjusted performance[3]	**$ 206**	$ 108	**$ 762**	$ 238

(1) As discussed more fully in Note 20, "New Accounting Pronouncements," in the accompanying consolidated financial statements, beginning January 1, 2017, the fair value movement on fair value option liabilities attributable to credit spread is recorded in common equity as a component of other comprehensive income (loss).

(2) Reflects transformation costs to deliver the cost reduction and productivity outcomes outlined in the HSBC Investor Update in June 2015.

(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 nine months ended September 30, 2017 increased $98 million and $524 million, respectively, compared with the prior year periods due to a lower provision for credit losses, higher other revenues and lower operating expenses, partially offset by lower net interest income.

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.

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”). Our Private Banking business has made a decision to no longer service clients based in those markets and renew focus on clients and prospects based in markets where we can leverage HSBC’s global connectivity, including the United States, Argentina, Brazil, Chile and Mexico. These markets are consistent with HSBC’s global strategy and allow us to better serve clients through collaboration with other HSBC businesses based in these markets. Under the terms of the agreement, we will 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. As a result of entering into the agreement, we recognized a pre-tax gain on sale, net of allocated goodwill and transaction costs, of $8 million during the third quarter of 2017. See Note 8, “Sale of Certain Private Banking Client Relationships,” for further discussion.

During the three and nine months ended September 30, 2017, we completed the sale of substantially all of the portfolio of residential mortgage loans that we previously purchased from HSBC Finance Corporation ("HSBC Finance") and transferred to held for sale during 2016 to third parties. These residential mortgage loans had an unpaid principal balance of $84 million (aggregate carrying value of $68 million) and $579 million (aggregate carrying value of $535 million), respectively, at the time of sale and we recognized gains on sale of approximately $6 million and $50 million, respectively, including transaction costs.

In addition to the residential mortgage loan sales discussed above, in March 2017, we also completed the sale of certain residential mortgage loans which previously had been written down to the lower of amortized cost or fair value of the collateral less cost to sell (generally 180 days past due) in accordance with our existing charge-off policies and were transferred to held for sale during 2016 to a third party. These residential mortgage loans had an unpaid principal balance of $364 million (aggregate carrying value of $276 million) at the time of sale and we recognized a loss on sale of approximately $2 million, largely reflecting transaction costs.

During the first half of 2017, we sold substantially all of our remaining Visa Class B Shares to a third party resulting in a net pre-tax gain of approximately $312 million which was recorded as a component of other income (loss) in the consolidated statement of income. Consistent with the Visa Class B Shares that were sold in 2016, 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. The swaps related to the sales during the first half of 2017 had a carrying value of $36 million at September 30, 2017. See Note 9, "Derivative Financial Instruments," and Note 17, "Guarantee

Arrangements, Pledged Assets and Repurchase Agreements," in the accompanying consolidated financial statements for additional information about these transactions.

During the fourth quarter of 2016, PHH Mortgage Corporation ("PHH Mortgage") announced their decision to exit certain business platforms by the end of the first quarter of 2018. As a result of this decision, we evaluated various options for our mortgage fulfillment operations and have decided to insource a substantial portion of these operations. We currently do not anticipate PHH Mortgage's decision will have a material impact on our financial position or results of operations.

Our operations are focused on the core activities of our global businesses and the positioning of our activities towards international connectivity strategies, including what we believe are our unique capabilities to serve clients in the North American Free Trade Agreement trade corridor in order to improve profitability. We also continue to focus on cost optimization efforts to ensure realization of cost efficiencies. To date, we have identified and implemented various opportunities to reduce costs through organizational structure redesign, vendor spending, discretionary spending and other general efficiency initiatives which have resulted in workforce reductions. These efforts continue and, as a result, we may incur restructuring charges in future periods, the amount of which will depend upon the actions that ultimately are implemented. We also continue to evaluate our overall operations as we seek to optimize our risk profile and cost efficiencies as well as our liquidity, capital and funding requirements. This could result in further strategic actions that may include changes to our legal structure, asset levels, cost structure or product offerings in support of HSBC's strategic priorities.

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 as 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 September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
	(in millions)			
Profit before tax – U.S. GAAP basis	**$ 155**	$ 59	**$ 915**	$ 266
Adjustments:				
Loans held for sale	**(20)**	22	**(141)**	71
Structured notes and deposits	**(46)**	—	**(69)**	—
Loan impairment	**5**	21	**(18)**	(19)
Property	**(2)**	(5)	**(9)**	(14)
Litigation expense	**3**	(9)	**11**	(9)
Pension and other postretirement benefit costs	**1**	8	**8**	17
Low income housing tax credit investments[(1)]	**2**	4	**5**	9
Other	**4**	9	**14**	21
Profit before tax – Group Reporting Basis	**$ 102**	$ 109	**$ 716**	$ 342

(1) Under the Group Reporting Basis, given the inter-relationship between the tax benefits obtained from our investment in low income housing tax credit investments and the amortization of our investment balance, such amounts are presented net in other operating income. Under U.S. GAAP, such amounts are presented net in income tax expense.

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 2016 Form 10-K. Other than the changes discussed below, there have been no other significant changes since December 31, 2016 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

Structured notes and deposits - Structured notes and deposits are classified as trading liabilities under the Group Reporting Basis and are carried at fair value with changes in fair value recorded in earnings. We elected to apply fair value option accounting to these structured notes and deposits under U.S. GAAP. Beginning January 1, 2017, the adoption of new accounting guidance under U.S. GAAP requires the fair value movement on fair value option liabilities, including structured notes and deposits, attributable to our own credit spread to be recorded in other comprehensive income (loss).

Property - The sale and leaseback of our 452 Fifth Avenue property, including the 1 W. 39th Street building, in 2010 resulted in the recognition of a gain under the Group Reporting Basis while under U.S. GAAP, such gain 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.

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 September 30, 2017 and increases (decreases) since December 31, 2016:

		Increase (Decrease) From December 31, 2016	
	September 30, 2017	Amount	%
	(dollars are in millions)		
Period end assets:			
Short-term investments	**$ 41,225**	$ (10,271)	(19.9)%
Loans, net	**66,794**	(6,064)	(8.3)
Loans held for sale	**507**	(1,302)	(72.0)
Trading assets	**33,520**	16,670	98.9
Securities	**46,054**	(3,665)	(7.4)
All other assets	**9,786**	1,217	14.2
	$ 197,886	$ (3,415)	(1.7)%
Period end liabilities and equity:			
Total deposits	**$ 121,840**	$ (7,408)	(5.7)%
Trading liabilities	**4,084**	(824)	(16.8)
Short-term borrowings	**7,973**	2,872	56.3
Long-term debt	**37,376**	(363)	(1.0)
Interest, taxes and other liabilities	**5,615**	1,665	42.2
Total equity	**20,998**	643	3.2
	$ 197,886	$ (3,415)	(1.7)%

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, 2016 reflecting a redeployment of surplus liquidity in the short term to precious metal inventory positions which are included in trading assets.

Loans, Net The following table summarizes our loan balances at September 30, 2017 and increases (decreases) since December 31, 2016:

	September 30, 2017	Increase (Decrease) From December 31, 2016	
		Amount	%
	(dollars are in millions)		
Commercial loans:			
Real estate, including construction	**$ 10,442**	$ (448)	(4.1)%
Business and corporate banking	**13,328**	(752)	(5.3)
Global banking[1][2]	**19,950**	(3,531)	(15.0)
Other commercial[2]	**4,408**	(1,357)	(23.5)
Total commercial	**48,128**	(6,088)	(11.2)
Consumer loans:			
Residential mortgages	**17,196**	15	.1
Home equity mortgages	**1,234**	(174)	(12.4)
Credit cards	**656**	(32)	(4.7)
Other consumer	**379**	(3)	(.8)
Total consumer	**19,465**	(194)	(1.0)
Total loans	**67,593**	(6,282)	(8.5)
Allowance for credit losses	**799**	(218)	(21.4)
Loans, net	**$ 66,794**	$ (6,064)	(8.3)%

(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) During the first quarter of 2017, in conjunction with the creation of the new Corporate Center segment as discussed further in Note 14, "Business Segments," in the accompanying consolidated financial statements, we reclassified loans to HSBC affiliates from global banking to other commercial and revised the prior period to conform with the current year presentation. As a result, other commercial includes loans to HSBC affiliates which totaled $1,820 million and $3,274 million at September 30, 2017 and December 31, 2016, respectively.

Commercial loans decreased compared with December 31, 2016 due to paydowns and maturities exceeding new loan originations as we continue to focus efforts on improving returns. The decrease also reflects lower loans to affiliates driven by the prepayment of a $2.5 billion credit agreement by HSBC Finance during the first quarter of 2017. The decline in commercial non-affiliate loans was primarily in the energy, real estate, materials, pharmaceutical and banking industries.

Consumer loans decreased slightly compared with December 31, 2016 driven by a continued decline in home equity mortgages due to net paydowns and, to a lesser extent, lower credit card receivables reflecting seasonal paydowns.

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

	LTV Ratios[1][2]			
	September 30, 2017		December 31, 2016	
	First Lien	Second Lien	First Lien	Second Lien
LTV < 80%	**97.5%**	**87.7%**	96.8%	83.6%
80% ≤ LTV < 90%	**1.6**	**7.7**	1.9	9.7
90% ≤ LTV < 100%	**.6**	**3.4**	.8	4.8
LTV ≥ 100%	**.3**	**1.2**	.5	1.9
Average LTV for portfolio	**51.4**	**53.8**	52.8	56.4

(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 June 30, 2017 and September 30, 2016, respectively.

Loans Held for Sale The following table summarizes loans held for sale at September 30, 2017 and increases (decreases) since December 31, 2016:

	September 30, 2017	Increase (Decrease) From December 31, 2016	
		Amount	%
	(dollars are in millions)		
Commercial loans:			
Real estate, including construction	**$ 7**	$ (10)	(58.8)%
Global banking	**424**	(403)	(48.7)
Total commercial	**431**	(413)	(48.9)
Consumer loans:			
Residential mortgages	**12**	(878)	(98.7)
Home equity mortgages	**—**	(4)	(100.0)
Other consumer	**64**	(7)	(9.9)
Total consumer	**76**	(889)	(92.1)
Total loans held for sale	**$ 507**	$ (1,302)	(72.0)%

Commercial loans held for sale decreased compared with December 31, 2016. Commercial loans held for sale primarily consists of certain global banking 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 $375 million and $725 million at September 30, 2017 and December 31, 2016, 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 $49 million and $102 million at September 30, 2017 and December 31, 2016, respectively. During the three and nine months ended September 30, 2017, we reversed $4 million and $5 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 (loss) in the consolidated statement of income as a result of an increase in fair value due to improved pricing.

Consumer loans held for sale decreased compared with December 31, 2016. As previously disclosed, during the first quarter of 2016, we determined we no longer have the intent to hold for investment certain residential mortgage loans which had been written down to the lower of amortized cost or fair value of the collateral less cost to sell (generally 180 days past due) in accordance with our existing charge-off policies. These loans were largely originated by us prior to the implementation of our Premier strategy. As a result of this decision, during 2016, we transferred residential mortgage loans to held for sale with a total unpaid principal balance of approximately $568 million at the time of transfer. The carrying value of these loans prior to transfer, after considering the fair value of the property less costs to sell, was approximately $473 million, including related escrow advances.

In March 2017, we completed the sale of these residential mortgage loans to a third arty. These residential mortgage loans had an unpaid principal balance of $364 million (aggregate carrying value of $276 million) at the time of sale and we recognized a loss on sale of approximately $2 million, largely reflecting transaction costs. During the three months ended March 31, 2017, we reversed $5 million of the lower of amortized cost or fair value adjustment previously recorded on these loans as a component of other income (loss) in the consolidated statement of income as a result of an increase in fair value due to improved pricing.

In addition to the residential mortgage loans discussed above, during the third quarter of 2016, we determined we no longer have the intent to hold for investment a portfolio of residential mortgage loans that we previously purchased from HSBC Finance, along with any home equity mortgage balances associated with these loans and, as a result, transferred residential mortgage and home equity mortgage loans with a total unpaid principal balance of approximately $648 million at the time of transfer to held for sale. The carrying value of these loans prior to transfer, after considering the fair value of the property less costs to sell, as applicable, was approximately $628 million, including accrued interest.

During the three and nine months ended September 30, 2017, we completed the sale of substantially all of this portfolio of residential mortgage loans to third parties. These residential mortgage loans had an unpaid principal balance of $84 million (aggregate carrying value of $68 million) and $579 million (aggregate carrying value of $535 million), respectively, at the time of sale and we recognized gains on sale of approximately $6 million and $50 million, respectively, including transaction costs. During the nine months ended

September 30, 2017, we reversed $2 million of the lower of amortized cost or fair value adjustment previously recorded on this portfolio of loans as a component of other income (loss) in the consolidated statement of income as a result of an increase in fair value due to improved pricing.

We also continue to sell all our agency eligible residential mortgage loan originations servicing released directly to PHH Mortgage. Gains and losses from the sale of these residential mortgage loans are reflected as a component of residential mortgage banking revenue (expense) in the accompanying consolidated statement of income. Residential mortgage loans held for sale also includes subprime residential mortgage loans with a fair value of $2 million and $3 million at September 30, 2017 and December 31, 2016, respectively, which were previously acquired from unaffiliated third parties and from HSBC Finance with the intent of securitizing or selling the loans to third parties.

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 $7 million and $57 million at September 30, 2017 and December 31, 2016, respectively. The valuation allowance on commercial loans held for sale was $8 million and $55 million at September 30, 2017 and December 31, 2016, respectively.

Trading Assets and Liabilities The following table summarizes trading assets and liabilities at September 30, 2017 and increases (decreases) since December 31, 2016:

	September 30, 2017	Increase (Decrease) From December 31, 2016	
		Amount	%
		(dollars are in millions)	
Trading assets:			
Securities[1]	**$ 11,018**	$ 351	3.3 %
Precious metals	**19,124**	17,352	*
Derivatives, net[2]	**3,378**	(1,033)	(23.4)
	$ 33,520	$ 16,670	98.9 %
Trading liabilities:			
Securities sold, not yet purchased	**$ 1,474**	$ 414	39.1 %
Payables for precious metals	**—**	(62)	(100.0)
Derivatives, net[3]	**2,610**	(1,176)	(31.1)
	$ 4,084	$ (824)	(16.8)%

* Not meaningful.

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

(2) At September 30, 2017 and December 31, 2016, the fair value of derivatives included in trading assets has been reduced by $3,628 million and $4,462 million, respectively, relating to amounts recognized for the obligation to return cash collateral received under master netting agreements with derivative counterparties.

(3) At September 30, 2017 and December 31, 2016, the fair value of derivatives included in trading liabilities has been reduced by $3,195 million and $3,826 million, respectively, relating to amounts recognized for the right to reclaim cash collateral paid under master netting agreements with derivative counterparties.

Securities balances increased compared with December 31, 2016 due to increases in foreign sovereign and U.S. Treasury positions, partially offset by a decrease in corporate bond positions. Securities positions are held as economic hedges of interest rate and credit derivative products issued to clients of domestic and emerging markets. The decrease in corporate bonds reflects the unwind of one of our unconsolidated variable interest entities ("VIEs") which resulted in the termination of our investment in the VIE along with any related derivatives during the second quarter of 2017. At the time of unwind, our investment in the VIE had a total carrying value of $1,081 million. Balances of securities sold, not yet purchased increased compared with December 31, 2016 driven by an increase in short U.S. Treasury positions related to economic hedges of derivatives in the interest rate trading portfolio.

Precious metals trading assets increased compared with December 31, 2016 due to increases in our own gold and silver inventory positions as well as higher spot prices. The increase in our own inventory positions was primarily driven by 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. Payables for precious metals were lower reflecting a decrease in borrowing of silver inventory. 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, 2016 mainly from market movements as well as the termination of derivatives associated with the unwind of an unconsolidated VIE as discussed above. Market movements resulted in lower valuations of interest rate, foreign exchange, credit and commodity derivatives, partially offset by higher valuations of equity derivatives.

Securities Securities include securities available-for-sale and securities held-to-maturity. Securities balances decreased compared with December 31, 2016 reflecting 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 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.

All Other Assets All other assets includes properties and equipment, net and goodwill. All other assets increased compared with December 31, 2016 largely due to higher tax assets and higher outstanding settlement balances related to security sales.

During the third quarter of 2017, we completed our annual impairment test of goodwill and determined that the fair value of all of our reporting units exceeded their carrying amounts, with the fair value of each reporting unit being 137 percent or more of book value, including allocated goodwill.

Deposits The following table summarizes deposit balances by major depositor categories at September 30, 2017 and increases (decreases) since December 31, 2016:

	September 30, 2017	Increase (Decrease) From December 31, 2016	
		Amount	%
	(dollars are in millions)		
Individuals, partnerships and corporations	**$ 107,283**	$ (3,007)	(2.7)%
Domestic and foreign banks	**11,531**	(6,041)	(34.4)
U.S. government and states and political subdivisions	**661**	64	10.7
Foreign governments and official institutions	**1,335**	546	69.2
Deposits held for sale(1)	**1,030**	1,030	*
Total deposits	**$ 121,840**	$ (7,408)	(5.7)%
Total core deposits(2)	**$ 97,141**	$ (1,530)	(1.6)%

* Not meaningful.

(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, 2016 due to lower deposits from affiliates, partially offset by an increase in wholesale time deposits and growth in deposits from individuals driven by promotional rates offered to our retail customers on savings accounts and certificates of deposit. 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 increased to $25,502 million at September 30, 2017 as compared with $24,351 million at December 31, 2016; 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, 2016 due to an increase in securities sold under repurchase agreements, a preferred source of funding given the current interest rate environment.

Long-Term Debt Long-term debt decreased slightly compared with December 31, 2016 as the impact of debt issuances and fair value movements on fair value option debt were more than offset by debt retirements. Debt issuances during the three and nine months ended September 30, 2017 totaled $1,058 million and $3,886 million, respectively, of which $183 million and $191 million, respectively, was issued by HSBC Bank USA.

Incremental issuances from our shelf registration statement with the SEC totaled $3,695 million of senior structured notes during the nine months ended September 30, 2017. Total long-term debt outstanding under this shelf was $22,293 million and $22,235 million at September 30, 2017 and December 31, 2016, respectively.

Incremental issuances from the HSBC Bank USA Global Bank Note Program totaled $191 million during the nine months ended September 30, 2017. Total debt outstanding under this program was $3,983 million and $4,443 million at September 30, 2017 and December 31, 2016, respectively. 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.

Borrowings from the Federal Home Loan Bank of New York ("FHLB") totaled $4,900 million and $5,700 million at September 30, 2017 and December 31, 2016, respectively.

Interest, Taxes and Other Liabilities Interest, taxes and other liabilities increased compared with December 31, 2016 due primarily to higher outstanding settlement balances related to security purchases and an increase in tax liabilities, partially offset by lower derivative balances associated with hedging activities and lower margin requirements related to futures trading.

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. In the discussion that follows, interest income and rates are presented and analyzed on a taxable equivalent basis to permit comparisons of yields on tax-exempt and taxable assets. An analysis of consolidated average balances and interest rates on a taxable equivalent basis 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:

		2017 Compared to 2016 Increase (Decrease)		
Three Months Ended September 30,	**2017**	**Volume**	**Rate**	**2016**
		(dollars are in millions)		
Interest income:				
Short-term investments	**$ 203**	$ 1	$ 102	$ 100
Trading securities	**47**	(6)	1	52
Securities	**231**	(34)	31	234
Commercial loans	**371**	(80)	68	383
Consumer loans	**181**	(10)	6	185
Other	**14**	5	(3)	12
Total interest income	**1,047**	(124)	205	966
Interest expense:				
Deposits	**188**	(13)	79	122
Short-term borrowings	**39**	14	3	22
Long-term debt	**256**	—	43	213
Tax liabilities and other	**4**	2	(3)	5
Total interest expense	**487**	3	122	362
Net interest income – taxable equivalent basis	**560**	$ (127)	$ 83	604
Less: tax equivalent adjustment	**—**			—
Net interest income – non taxable equivalent basis	**$ 560**			$ 604
Yield on total interest earning assets	**2.35%**			1.96%
Cost of total interest bearing liabilities	**1.35**			.98
Interest rate spread	**1.00**			.98
Benefit from net non-interest paying funds[1]	**.26**			.24
Net interest margin on average earning assets	**1.26%**			1.22%

Nine Months Ended September 30,	2017	2017 Compared to 2016 Increase (Decrease)		2016
		Volume	Rate	
		(dollars are in millions)		
Interest income:				
Short-term investments	**$ 515**	$ 27	$ 220	$ 268
Trading securities	**163**	(18)	(16)	197
Securities	**715**	(58)	51	722
Commercial loans	**1,125**	(232)	209	1,148
Consumer loans	**548**	(21)	8	561
Other	**38**	8	(1)	31
Total interest income	**3,104**	(294)	471	2,927
Interest expense:				
Deposits	**507**	(10)	173	344
Short-term borrowings	**94**	(7)	40	61
Long-term debt	**749**	48	88	613
Tax liabilities and other	**15**	4	(1)	12
Total interest expense	**1,365**	35	300	1,030
Net interest income – taxable equivalent basis	**1,739**	$ (329)	$ 171	1,897
Less: tax equivalent adjustment	**—**			1
Net interest income – non taxable equivalent basis	**$1,739**			$1,896
Yield on total interest earning assets	**2.28%**			2.01%
Cost of total interest bearing liabilities	**1.27**			.95
Interest rate spread	**1.01**			1.06
Benefit from net non-interest paying funds[1]	**.27**			.24
Net interest margin on average earning assets	**1.28%**			1.30%

[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 nine months ended September 30, 2017, net interest income decreased as the favorable impact of higher short-term market rates was more than offset by lower interest income from the impact of lower average loan balances, higher interest expense from long-term debt and lower interest income from trading securities. Higher short-term market rates resulted in higher interest income from variable rate assets, including short-term investments and variable rate loans, partially offset by higher wholesale deposit and short-term borrowing interest expense.

Short-term investments Higher interest income during the three and nine months ended September 30, 2017 was due to higher yields earned on these investments and, to a lesser extent, higher average balances.

Trading securities Interest income declined during the three and nine months ended September 30, 2017 driven primarily by lower average balances in corporate and foreign bonds and, in the year-to-date period, a decrease in higher yielding municipal bonds. 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 decreased slightly during the three and nine months ended September 30, 2017 as the impact of lower average balances was largely offset by higher yields.

Commercial loans Interest income was lower during the three and nine months ended September 30, 2017 as the impact of higher yields driven by rate increases on variable rate products was more than offset by lower average balances driven by paydowns, maturities and loan sales exceeding new loan originations as we continue to focus efforts on improving returns.

Consumer loans Interest income decreased during the three and nine months ended September 30, 2017 due primarily to lower average balances driven by loan sales and net paydowns, partially offset by higher yields.

Other Higher interest income during the three and nine months ended September 30, 2017 largely reflects higher average balances in cash collateral posted.

Deposits Interest expense increased during the three and nine months ended September 30, 2017 due primarily to higher rates paid reflecting the impacts of rate increases on wholesale deposits and promotional rates offered to our retail customers on savings accounts and certificates of deposits, partially offset by lower average interest-bearing deposit balances.

Short-term borrowings Higher interest expense during the three months ended September 30, 2017 was driven by higher average borrowings and, to a lesser extent, higher rates paid on these borrowings. Higher average borrowings in the three month period reflects an increase in securities sold under repurchase agreements, partially offset by lower commercial paper outstanding. In the year-to-date period, interest expense increased due to higher rates paid on these borrowings, partially offset by lower average borrowings as an increase in securities sold under repurchase agreements was more than offset by lower commercial paper outstanding.

Long-term debt Interest expense was higher during the three and nine months ended September 30, 2017 due to higher rates paid reflecting the impact of rate increases on variable rate borrowings and new issuances and, in the year-to-date period, higher average borrowings.

Tax liabilities and other Interest expense was relatively flat during the three months ended September 30, 2017. 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 September 30,	**2017**	**2016**	**Amount**	**%**
		(dollars are in millions)		
Commercial:				
Real estate, including construction	**$ (1)**	$ (8)	$ 7	87.5%
Business and corporate banking	**(9)**	13	(22)	*
Global banking	**(21)**	38	(59)	*
Other commercial	**(1)**	(1)	—	—
Total commercial	**(32)**	42	(74)	*
Consumer:				
Residential mortgages	**4**	11	(7)	(63.6)
Home equity mortgages	**(2)**	1	(3)	*
Credit cards	**8**	7	1	14.3
Other consumer	**—**	1	(1)	(100.0)
Total consumer	**10**	20	(10)	(50.0)
Total provision for credit losses	**$ (22)**	$ 62	$ (84)	*
Provision as a percentage of average loans	**(.1)%**	.3%		

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Commercial:				
Real estate, including construction	**$ (9)**	$ (2)	$ (7)	*
Business and corporate banking	**(56)**	(29)	(27)	(93.1)
Global banking	**(60)**	371	(431)	*
Other commercial	**1**	(5)	6	*
Total commercial	**(124)**	335	(459)	*
Consumer:				
Residential mortgages	**(4)**	(5)	1	20.0
Home equity mortgages	**(8)**	(2)	(6)	*
Credit cards	**17**	21	(4)	(19.0)
Other consumer	**(1)**	4	(5)	*
Total consumer	**4**	18	(14)	(77.8)
Total provision for credit losses	**$ (120)**	$ 353	$ (473)	*
Provision as a percentage of average loans	**(.2)%**	.6%		

* Not meaningful.

Our provision for credit losses decreased $84 million and $473 million during the three and nine months ended September 30, 2017, respectively, driven by lower provisions for credit losses in our commercial loan portfolio and, to a lesser extent, lower provisions for credit losses in our consumer loan portfolio. During the three and nine months ended September 30, 2017, we decreased our allowance for credit losses as the provision for credit losses was lower than net charge-offs by $49 million and $218 million, respectively.

The provision for credit losses in our commercial loan portfolio decreased $74 million and $459 million during the three and nine months ended September 30, 2017, respectively, reflecting releases in credit loss reserves recorded in the current year periods compared with loss provisions recorded in the prior year periods. Releases of loss reserves in the current year periods reflect improvements in the credit quality of our portfolio driven by paydowns, sales and maturities exceeding new loan originations as we continue to focus efforts on improving returns and, in the year-to-date period, improvements in credit conditions associated with certain client relationships, including a single mining client relationship. In the prior year periods, loss provisions were driven primarily by the continued deterioration of the single mining client relationship and, in the year-to-date period, other downgrades reflecting weakness in the financial condition of certain clients at that time, including oil and gas, mining and other industry loan exposures.

As previously discussed, during the third quarter of 2016 we transferred certain mortgages to held for sale and, as a result, recorded a lower of cost or fair value adjustment of $11 million related to credit factors as a component of the provision for credit losses. Excluding the impact of this item, the provision for credit losses on residential mortgages and home equity mortgages was relatively flat during the three months ended September 30, 2017 and increased $6 million in the year-to-date period. In the three month period, a higher provision for credit losses on residential mortgages due in part to higher dollars of delinquency on accounts less than 180 days contractually delinquent was largely offset by a lower provision for credit losses on home equity mortgages reflecting lower outstanding balances. In the year-to-date period, the positive impacts of improvements in economic and credit conditions and lower outstanding home equity mortgage balances were offset by the non-recurrence of a reserve release recorded in 2016 related to residential mortgages serviced by others as a result of updated information regarding the underlying loan characteristics reported by the servicers.

The provision for credit losses associated with credit cards and other consumer loans was flat during the three months ended September 30, 2017 and decreased $9 million in the year-to-date period. The decrease in the year-to-date period was due to improvements in economic and credit conditions and lower outstanding balances.

Our methodology and accounting policies related to the allowance for credit losses are presented in our 2016 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 September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Credit card fees	**$ 12**	$ 12	$ —	—
Trust and investment management fees	**39**	40	(1)	(2.5)
Other fees and commissions	**167**	215	(48)	(22.3)
Trading revenue	**81**	120	(39)	(32.5)
Other securities gains, net	**5**	16	(11)	(68.8)
Servicing and other fees from HSBC affiliates	**52**	50	2	4.0
Residential mortgage banking revenue (expense)	**(4)**	(3)	(1)	(33.3)
Gain (loss) on instruments designated at fair value and related derivatives	**7**	(88)	95	*
Other income (loss):				
Valuation of loans held for sale	**3**	(11)	14	*
Insurance	**4**	5	(1)	(20.0)
Miscellaneous income (loss)	**2**	(36)	38	*
Total other income (loss)	**9**	(42)	51	*
Total other revenues	**$ 368**	$ 320	$ 48	15.0 %

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Credit card fees	**$ 37**	$ 39	$ (2)	(5.1)%
Trust and investment management fees	**116**	118	(2)	(1.7)
Other fees and commissions	**492**	557	(65)	(11.7)
Trading revenue	**222**	185	37	20.0
Other securities gains, net	**29**	81	(52)	(64.2)
Servicing and other fees from HSBC affiliates	**186**	155	31	20.0
Residential mortgage banking revenue (expense)	**(8)**	24	(32)	*
Gain (loss) on instruments designated at fair value and related derivatives	**40**	90	(50)	(55.6)
Other income (loss):				
Valuation of loans held for sale	**17**	(82)	99	*
Insurance	**11**	15	(4)	(26.7)
Gains on sales of Visa Inc. Class B common shares to a third party	**312**	—	312	*
Miscellaneous income (loss)	**4**	(107)	111	*
Total other income (loss)	**344**	(174)	518	*
Total other revenues	**$ 1,458**	$ 1,075	$ 383	35.6 %

* Not meaningful.

Credit card fees Credit card fees were flat during the three months ended September 30, 2017. In the year-to-date period, credit card fees decreased due to lower interchange fees, partially offset by lower cost estimates associated with our credit card rewards program.

Trust and investment management fees Trust and investment management fees were relatively flat during the three and nine months ended September 30, 2017.

Other fees and commissions The following table summarizes the components of other fees and commissions:

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Account services	**$ 68**	$ 69	$ (1)	(1.4)%
Credit facilities	**81**	116	(35)	(30.2)
Custodial fees	**5**	6	(1)	(16.7)
Other fees	**13**	24	(11)	(45.8)
Total other fees and commissions	**$ 167**	$ 215	$ (48)	(22.3)%

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Account services	**$ 205**	$ 210	$ (5)	(2.4)%
Credit facilities	**224**	273	(49)	(17.9)
Custodial fees	**16**	16	—	—
Other fees	**47**	58	(11)	(19.0)
Total other fees and commissions	**$ 492**	$ 557	$ (65)	(11.7)%

Other fees and commissions decreased during the three and nine months ended September 30, 2017 primarily due to lower credit facilities fees and other fee based income reflecting the impact of lower commercial lending activity compared with the prior year periods.

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 activities 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 revenue (expense).

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Business Activities:				
Derivatives[(1)]	**$ (28)**	$ 38	$ (66)	*
Balance Sheet Management	**6**	6	—	—
Foreign Exchange	**51**	45	6	13.3
Precious Metals	**53**	36	17	47.2
Global Banking	**(1)**	(3)	2	66.7
Other trading	**—**	(2)	2	100.0
Total trading revenue	**$ 81**	$ 120	$ (39)	(32.5)%

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Business Activities:				
Derivatives[1]	**$ (79)**	$ (16)	$ (63)	*
Balance Sheet Management	**16**	7	9	*
Foreign Exchange	**151**	147	4	2.7
Precious Metals	**136**	56	80	*
Global Banking	**(2)**	(7)	5	71.4
Other trading	**—**	(2)	2	100.0
Total trading revenue	**$ 222**	$ 185	$ 37	20.0 %

* Not meaningful.

(1) Includes derivative contracts related to credit default and cross-currency swaps, equities, interest rates and structured credit products.

Trading revenue decreased during the three months ended September 30, 2017 driven by lower revenue from Derivatives, partially offset by the improved performance of Precious Metals and Foreign Exchange. In the year-to-date period, trading revenue increased as lower revenue from derivatives was more than offset by the improved performance of Precious Metals and Balance Sheet Management.

During the second quarter of 2017, one of our unconsolidated VIEs was unwound and our investment in the VIE along with any related derivatives were terminated resulting in a gain of approximately $11 million, largely reflecting a make-whole payment provided by a third party guarantor of the investment. Excluding this item from the year-to-date period, trading revenue from Derivatives remained lower during the three and nine months ended September 30, 2017 primarily due to lower new deal activity on interest rate swaps and lower gains from valuation adjustments on our legacy structured credit products, partially offset by the improved performance of emerging markets products. While favorable debit valuation adjustments associated with movements in our own credit spreads partially offset the decrease in the three month period, they were unfavorable and also contributed to the decrease in the year-to-date period. 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.

Trading revenue related to Balance Sheet Management activities was flat during the three months ended September 30, 2017. In the year-to-date period, Balance Sheet Management trading revenue increased due to the performance of economic hedge positions used to manage interest rate risk.

Foreign Exchange trading revenue increased during the three and nine months ended September 30, 2017 driven by higher client trading activity.

Precious Metals trading revenue increased during the three and nine months ended September 30, 2017 from 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 Precious Metals.

Global Banking trading revenue improved during the three and nine months ended September 30, 2017 due primarily to a lower 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 nine months ended September 30, 2017, we sold $2,286 million and $12,620 million, respectively, of primarily U.S. Treasury and U.S. Government agency mortgage-backed securities compared with sales of $1,026 million and $13,697 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 nine months ended September 30, 2017 due primarily to lower gains from the sales of U.S. Treasury and U.S. Government agency mortgage-backed securities associated with rebalancing the portfolio for risk management purposes and, in the year-to-date period, the non-recurrence of gains from the sale of certain longer-term state municipal bonds as we reduced these positions during the first quarter of 2016. 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 During the first quarter of 2017, we received $28 million of loan prepayment fees from HSBC Finance. Excluding this item from the year-to-date period, affiliate income increased during the three and nine months ended September 30, 2017 driven by higher billings associated with shared services performed on behalf of other HSBC affiliates which was partially offset by lower fees associated with residential mortgage servicing activities performed on behalf of HSBC Finance and lower fee income associated with trading activity booked on the balance sheets of other HSBC affiliates.

Residential mortgage banking revenue (expense) Residential mortgage banking revenue (expense) was relatively flat during the three months ended September 30, 2017. In the year-to-date period, residential mortgage banking revenue (expense) declined due to the impact of the sale of our remaining Mortgage Servicing Rights ("MSRs") portfolio during the fourth quarter of 2016.

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. Beginning January 1, 2017, the fair value movement on fair value option liabilities attributable to our own credit spread is recorded in other comprehensive income (loss). Excluding the impact of this item, which resulted in a loss of $60 million and a gain of $94 million during the three and nine months ended September 30, 2016, respectively, gain (loss) on instruments designated at fair value and related derivatives increased during the three and nine months ended September 30, 2017 attributable primarily to favorable movements related to the economic hedging of interest rate and other risks within our structured notes and deposits. 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 (loss) During the first half of 2017, we sold substantially all of our remaining Visa Class B Shares to a third party resulting in a net pre-tax gain of approximately $312 million. Excluding this item from the year-to-date period, other income (loss) remained higher during the three and nine months ended September 30, 2017 primarily due to improved valuations on loans held for sale, lower losses associated with fair value hedge ineffectiveness, net gains in 2017 from the sales of certain residential mortgages and lower losses associated with credit default swap protection which largely reflects the hedging of a single client exposure.

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

			Increase (Decrease)	
Three Months Ended September 30,	**2017**	**2016**	**Amount**	**%**
	(dollars are in millions)			
Salaries and employee benefits	**$ 268**	$ 235	$ 33	14.0 %
Support services from HSBC affiliates:				
Fees paid to HSBC Markets (USA) Inc. ("HMUS")	**14**	42	(28)	(66.7)
Fees paid to HSBC Technology and Services (USA) ("HTSU")	**268**	252	16	6.3
Fees paid to other HSBC affiliates	**58**	60	(2)	(3.3)
Total support services from HSBC affiliates	**340**	354	(14)	(4.0)
Occupancy expense, net	**63**	57	6	10.5
Other expenses:				
Equipment and software	**13**	10	3	30.0
Marketing	**16**	10	6	60.0
Outside services	**21**	35	(14)	(40.0)
Professional fees	**28**	28	—	—
Off-balance sheet credit reserves	**7**	(4)	11	*
Federal Deposit Insurance Corporation ("FDIC") assessment fee	**26**	63	(37)	(58.7)
Miscellaneous	**13**	15	(2)	(13.3)
Total other expenses	**124**	157	(33)	(21.0)
Total operating expenses	**$ 795**	$ 803	$ (8)	(1.0)%
Personnel - average number	**5,810**	5,706		
Efficiency ratio	**85.7%**	86.9%		

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Salaries and employee benefits	**$ 789**	$ 718	$ 71	9.9 %
Support services from HSBC affiliates:				
Fees paid to HMUS	**38**	150	(112)	(74.7)
Fees paid to HTSU	**846**	734	112	15.3
Fees paid to other HSBC affiliates	**150**	145	5	3.4
Total support services from HSBC affiliates	**1,034**	1,029	5	.5
Occupancy expense, net	**193**	173	20	11.6
Other expenses:				
Equipment and software	**37**	32	5	15.6
Marketing	**45**	38	7	18.4
Outside services	**63**	80	(17)	(21.3)
Professional fees	**69**	79	(10)	(12.7)
Off-balance sheet credit reserves	**(13)**	26	(39)	*
FDIC assessment fee	**106**	137	(31)	(22.6)
Miscellaneous	**79**	40	39	97.5
Total other expenses	**386**	432	(46)	(10.6)
Total operating expenses	**$ 2,402**	$ 2,352	$ 50	2.1 %
Personnel - average number	**5,791**	5,706		
Efficiency ratio	**75.1%**	79.2%		

* Not meaningful.

Costs to achieve, which reflect 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 during the three and nine months ended September 30, 2017. 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 during the three and nine months ended September 30, 2017 declined $5 million and $24 million, respectively. The following table presents costs to achieve by financial statement line item:

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Salaries and employee benefits	**$ 6**	$ 6	$ —	— %
Support services from HSBC affiliates	**31**	41	(10)	(24.4)
Occupancy expense, net	**7**	3	4	*
Other expenses	**7**	4	3	75.0
Total operating expenses	**$ 51**	$ 54	$ (3)	(5.6)%

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Salaries and employee benefits	**$ 14**	$ 10	$ 4	40.0 %
Support services from HSBC affiliates	**98**	58	40	69.0
Occupancy expense, net	**26**	7	19	*
Other expenses	**21**	10	11	*
Total operating expenses	**$ 159**	$ 85	$ 74	87.1 %

* Not meaningful.

Salaries and employee benefits Excluding costs to achieve as discussed above, salaries and employee benefits expense remained higher during the three and nine months ended September 30, 2017 driven by the impact of salaries expense associated with certain RBWM wealth managers which were transferred to HSBC Bank USA from HMUS support services during the third quarter of 2016, higher incentive compensation expense and higher expense associated with long-term disability medical benefits. In addition, while salaries expense continues to reflect the impact of cost management efforts, including targeted staff reductions to optimize staffing and improve efficiency as well as reductions in staff performing residential mortgage servicing activities on behalf of HSBC Finance, these reductions were more than offset by the factors described above as well as the addition of higher cost personnel associated with growth initiatives in certain businesses and the implementation of a global standards program designed to achieve the most effective financial crime risk controls and capabilities.

Support services from HSBC affiliates Excluding costs to achieve as discussed above, support services from HSBC affiliates declined in both periods largely due to the transfer of certain RBWM wealth managers to HSBC Bank USA from HMUS support services as discussed above as well as the favorable impact of cost management efforts including staff optimization in our technology and support service functions. The trends in the components of support services from HSBC affiliates presented in the table above also reflect the impact of a transfer of support service personnel from HMUS to HTSU during the first quarter of 2017 which increased HTSU support services expense and decreased HMUS support services expense by approximately $25 million and $72 million during the three and nine months ended September 30, 2017, respectively. A summary of the activities charged to us from various HSBC affiliates is included in Note 13, "Related Party Transactions," in the accompanying consolidated financial statements.

Occupancy expense, net Excluding costs to achieve as discussed above, occupancy expense remained higher during the three and nine months ended September 30, 2017 due primarily to the impact of extending the lease of our 452 Fifth Avenue property, including the 1 W. 39th Street building, during the second quarter of 2017. The sale and leaseback of this 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 Excluding costs to achieve as discussed above, other expenses remained lower during the three and nine months ended September 30, 2017 largely due to lower deposit insurance assessment fees, lower outside services expense due in part to activities related to the sale of our MSRs in 2016 and higher levels of expense capitalization related to internally developed software, partially offset by higher marketing expense and, in the year-to-date period, higher litigation expense. While off-balance sheet credit reserves resulted in higher expense, which partially offset the decrease in the three month period, they were favorable and also contributed to lower expense in the year-to-date period due to releases of off-balance sheet credit reserves in 2017 compared with provisions in 2016.

Efficiency ratio Our efficiency ratio was 85.7 percent and 75.1 percent during the three and nine months ended September 30, 2017, respectively, compared with 86.9 percent and 79.2 percent during the prior year periods. Our efficiency ratio in the 2016 periods were impacted by the change in the fair value of our own debt attributable to our own credit spread for which we have elected fair value option accounting which was reported as a component of total other revenues. Excluding the impact of this item, our efficiency ratio improved during the three and nine months ended September 30, 2017 due primarily to higher other revenues, partially offset by lower net interest income. While lower operating expenses also contributed to the improvement in the three month period, operating expenses were higher in the year-to-date period which partially offset the improvement.

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

Three Months Ended September 30,	**2017**		**2016**	
	(dollars are in millions)			
Tax expense at the U.S. Federal statutory income tax rate	**$ 54**	**35.0%**	$ 21	35.0%
Increase (decrease) in rate resulting from:				
State and local taxes, net of Federal benefit	**4**	**2.6**	2	3.4
Other non-deductible / non-taxable items	**1**	**.6**	5	8.5
Items affecting prior periods[1]	**(2)**	**(1.3)**	(1)	(1.7)
Low income housing and other tax credit investments	**(4)**	**(2.6)**	(4)	(6.8)
Other	**8**	**5.2**	3	5.1
Total income tax expense	**$ 61**	**39.4%**	$ 26	44.1%

Nine Months Ended September 30,	**2017**		**2016**	
	(dollars are in millions)			
Tax expense at the U.S. Federal statutory income tax rate	**$ 320**	**35.0%**	$ 93	35.0%
Increase (decrease) in rate resulting from:				
State and local taxes, net of Federal benefit	**25**	**2.7**	10	3.8
Other non-deductible / non-taxable items	**3**	**.3**	5	1.9
Items affecting prior periods[1]	**(11)**	**(1.2)**	(1)	(.4)
Low income housing and other tax credit investments	**(16)**	**(1.7)**	(12)	(4.5)
Stock based compensation[2]	**(10)**	**(1.1)**	—	—
Other	**10**	**1.1**	5	1.9
Total income tax expense	**$ 321**	**35.1%**	$ 100	37.6%

(1) The 2017 amounts relate to the impact of State tax rate adjustments on deferred tax assets and changes in tax credits as a result of filing the 2016 Federal income tax return.

(2) As discussed more fully in Note 20, "New Accounting Pronouncements," in the accompanying consolidated financial statements, beginning January 1, 2017, all excess tax benefits and tax deficiencies for share-based payment awards are recorded within income tax expense in the statement of income.

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") which was created in 2017 and is discussed further below. The segments, which are generally based upon customer groupings and global businesses, are described under Item 1, "Business," in our 2016 Form 10-K.

We previously announced that we made the decision to implement changes to our internal management reporting for certain activities and functions and report them within a new CC segment beginning in January 2017. These activities and functions include Balance Sheet Management and our legacy structured credit products which historically were both reported in GB&M, as well as a portfolio of residential mortgage loans previously purchased from HSBC Finance, including certain loan servicing activities performed on behalf of HSBC Finance, which were historically reported in RBWM. In addition, we have reviewed central costs historically reported in the Other segment and have reallocated these costs to the global businesses where appropriate. Remaining residual costs are reported in the CC along with all other remaining items historically reported in the Other segment. As a result, beginning in the first quarter of 2017, we have aligned our segment reporting with the changes made to our internal management reporting and are reporting these changes as part of the newly created CC segment for all periods presented.

The following table summarizes the impact on reported segment profit before tax, total assets and total deposits as of and for the three and nine months ended September 30, 2016:

	2016
	(in millions)
Increase (decrease) in segment profit before tax during the three months ended September 30:	
RBWM	$ 1
CMB	3
GB&M	(50)
PB	—
CC (as compared with previously reported Other)	46
Increase (decrease) in segment profit before tax during the nine months ended September 30:	
RBWM	$ 1
CMB	9
GB&M	(131)
PB	—
CC (as compared with previously reported Other)	121
Increase (decrease) in segment total assets at September 30:	
RBWM	$ (611)
CMB	—
GB&M	(107,318)
PB	—
CC (as compared with previously reported Other)	107,929
Increase (decrease) in segment total deposits at September 30:	
RBWM	$ —
CMB	—
GB&M	(6,672)
PB	—
CC (as compared with previously reported Other)	6,672

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 as 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. However, we continue to monitor capital adequacy and report to regulatory agencies on a U.S. GAAP basis. The significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in our 2016 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 discussion of significant changes in the differences between U.S. GAAP and the Group Reporting Basis impacting our results since December 31, 2016, including a new difference related to structured notes and deposits.

We continue to evaluate the financial information used to manage our businesses, including the presentation of financial data being reported to our Management and our Board. To the extent we make changes to this reporting in the future, we will evaluate any impact such changes may have on our segment reporting.

During the first quarter of 2017, we adopted new accounting guidance under the Group Reporting Basis which, for financial liabilities measured under the fair value option, requires recognizing the change in fair value attributable to our own credit spread in other comprehensive income consistent with the new accounting guidance also adopted under U.S. GAAP. The adoption of this guidance did not require periods prior to 2017 to be restated. See the discussion of the CC segment below for further details regarding the impact of adopting this guidance.

There have been no additional changes in the basis of our segmentation or measurement of segment profit as compared with the presentation in our 2016 Form 10-K.

Retail Banking and Wealth Management RBWM provides a full 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 nine months of 2017, 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.

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

			Increase (Decrease)	
Three Months Ended September 30,	**2017**	**2016**	**Amount**	**%**
	(dollars are in millions)			
Net interest income	**$ 231**	$ 206	$ 25	12.1%
Other operating income	**54**	69	(15)	(21.7)
Total operating income[1]	**285**	275	10	3.6
Loan impairment charges	**11**	30	(19)	(63.3)
Net operating income	**274**	245	29	11.8
Operating expenses	**281**	278	3	1.1
Profit (loss) before tax	**$ (7)**	$ (33)	$ 26	78.8%

			Increase (Decrease)	
Nine Months Ended September 30,	**2017**	**2016**	**Amount**	**%**
	(dollars are in millions)			
Net interest income	**$ 665**	$ 613	$ 52	8.5%
Other operating income	**416**	214	202	94.4
Total operating income[1]	**1,081**	827	254	30.7
Loan impairment charges	**17**	57	(40)	(70.2)
Net operating income	**1,064**	770	294	38.2
Operating expenses	**830**	793	37	4.7
Profit (loss) before tax	**$ 234**	$ (23)	$ 257	*

* Not meaningful.

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Current accounts, savings and deposits	**$ 168**	$ 135	$ 33	24.4%
Mortgages, credit cards and other personal lending	**64**	90	(26)	(28.9)
Wealth and asset management products	**31**	29	2	6.9
Retail business banking and other	**22**	21	1	4.8
Total operating income	**$ 285**	$ 275	$ 10	3.6%

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Current accounts, savings and deposits	**$ 467**	$ 405	$ 62	15.3%
Mortgages, credit cards and other personal lending	**210**	289	(79)	(27.3)
Wealth and asset management products	**95**	89	6	6.7
Retail business banking and other[(2)]	**309**	44	265	*
Total operating income	**$ 1,081**	$ 827	$ 254	30.7%

(2) During the nine months ended September 30, 2017, retail business banking and other reflects a gain on the sale of Visa Class B Shares of approximately $312 million and a loss on the sale of certain partially charged off residential mortgages as discussed below.

Our RBWM segment reported a lower loss before tax during the three months ended September 30, 2017 due to higher net interest income and lower loan impairment charges, partially offset by lower other operating income. In the year-to-date period, our RBWM segment reported a higher profit before tax due primarily to higher other operating income driven by a net pre-tax gain of approximately $312 million from the sale of substantially all of our remaining Visa Class B Shares during the first half of 2017 as well as higher net interest income and lower loan impairment charges, partially offset by higher operating expenses.

Net interest income increased during the three and nine months ended September 30, 2017 largely driven by higher net interest income from deposits due to higher average balances and improved spreads, partially offset by lower net interest income from lending. Net interest income from lending declined due to lower average balances driven by loan sales and a declining home equity mortgage portfolio as well as lower spreads.

Excluding the gain on sale of Visa Class B Shares as discussed above from the year-to-date period, other operating income decreased during the three and nine months ended September 30, 2017 primarily due to lower servicing fees reflecting the impact of the sale of our remaining MSRs portfolio during the fourth quarter of 2016 and, in the year-to-date period, a loss of $73 million on the sale of certain partially charged-off residential mortgages during the first quarter of 2017.

Loan impairment charges were lower during the three and nine months ended September 30, 2017 driven by continued improvements in economic and credit conditions. These decreases were partially offset in the year-to-date period by the non-recurrence of reserve releases recorded in 2016 related to residential mortgages serviced by others as a result of updated information regarding the underlying loan characteristics reported by the servicers and improved loss estimates associated with certain home equity mortgages.

Operating expenses were relatively flat during the three months ended September 30, 2017 and increased in the year-to-date period. The increase in the year-to-date period was due primarily to the addition of personnel associated with growth initiatives, the non-recurrence of a reserve release recorded in 2016 associated with a litigation matter and higher operational losses largely associated with certain credit card accounts.

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, decreased 7 percent as compared with the third quarter of 2016 as we focused efforts on improving returns. Total quarter-to-date average deposits outstanding were flat compared with the third quarter of 2016.

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	$ **187**	$ 187	$ —	— %
Other operating income	**55**	49	6	12.2
Total operating income[1]	**242**	236	6	2.5
Loan impairment charges (recoveries)	**(8)**	(18)	10	55.6
Net operating income	**250**	254	(4)	(1.6)
Operating expenses	**142**	151	(9)	(6.0)
Profit before tax[2]	$ **108**	$ 103	$ 5	4.9 %

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	$ **548**	$ 562	$ (14)	(2.5)%
Other operating income	**159**	166	(7)	(4.2)
Total operating income[1]	**707**	728	(21)	(2.9)
Loan impairment charges (recoveries)	**(49)**	13	(62)	*
Net operating income	**756**	715	41	5.7
Operating expenses	**422**	451	(29)	(6.4)
Profit before tax[2]	$ **334**	$ 264	$ 70	26.5 %

* Not meaningful.

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Lending and Transaction Management	$ **109**	$ 119	$ (10)	(8.4)%
Global Liquidity and Cash Management, current accounts and savings deposits	**107**	92	15	16.3
Global Trade and Receivables Finance	**13**	11	2	18.2
Investment banking products and other	**13**	14	(1)	(7.1)
Total operating income	$ **242**	$ 236	$ 6	2.5 %

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Lending and Transaction Management	$ **326**	$ 371	$ (45)	(12.1)%
Global Liquidity and Cash Management, current accounts and savings deposits	**305**	279	26	9.3
Global Trade and Receivables Finance	**40**	37	3	8.1
Investment banking products and other	**36**	41	(5)	(12.2)
Total operating income	$ **707**	$ 728	$ (21)	(2.9)%

(2) During the fourth quarter of 2016, we transferred certain client relationships from CMB to GB&M as discussed further in Note 22, "Business Segments," in our 2016 Form 10-K. As a result, we reclassified $23 million and $67 million of profit before tax from the CMB segment to the GB&M segment during the three and nine months ended September 30, 2016, respectively, to conform with the current year presentation.

Our CMB segment reported a higher profit before tax during the three months ended September 30, 2017 driven by higher other operating income and lower operating expenses, partially offset by lower loan impairment recoveries. In the year-to-date period, profit before tax increased due to improved loan impairment charges and lower operating expenses, partially offset by lower net interest income and lower other operating income.

Net interest income was flat during the three months ended September 30, 2017. In the year-to-date period, net interest income was lower due to lower loan balances largely reflecting the sale of certain commercial real estate loans during the second quarter of 2016 as well as paydowns and maturities exceeding new loan originations as we focused efforts on improving returns, partially offset by improved spreads on deposits.

Other operating income increased during the three months ended September 30, 2017 due primarily to higher syndication fees in commercial real estate. In the year-to-date period, other operating income was lower driven by lower credit facilities fees reflecting the impact of lower commercial lending activity compared with the prior year period and the non-recurrence of gains recorded in the first quarter of 2016 from asset sales in commercial real estate.

Loan impairment recoveries were lower during the three months ended September 30, 2017 as releases in credit loss reserves reflecting improvements in credit conditions associated with certain client relationships were more pronounced in the prior year period. In the year-to-date period, loan impairment charges improved due primarily to releases in credit loss reserves recorded in the current year period reflecting improvements in credit conditions associated with certain client relationships, including oil and gas industry clients, as well as releases of reserves due to paydowns and maturities exceeding new loan originations compared with loan impairment charges recorded in the prior year period associated with downgrades reflecting weaknesses in the financial condition of certain client relationships at that time.

Operating expenses declined during the three and nine months ended September 30, 2017 driven by lower deposit insurance assessment fees and the impact of targeted staff reductions during 2016.

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:

			Increase (Decrease)	
Three Months Ended September 30,	**2017**	**2016**	**Amount**	**%**
		(dollars are in millions)		
Net interest income	**$ 131**	$ 133	$ (2)	(1.5)%
Other operating income	**111**	183	(72)	(39.3)
Total operating income[1]	**242**	316	(74)	(23.4)
Loan impairment charges (recoveries)	**(18)**	31	(49)	*
Net operating income	**260**	285	(25)	(8.8)
Operating expenses	**200**	242	(42)	(17.4)
Profit (loss) before tax[2]	**$ 60**	$ 43	$ 17	39.5 %

			Increase (Decrease)	
Nine Months Ended September 30,	**2017**	**2016**	**Amount**	**%**
		(dollars are in millions)		
Net interest income	**$ 439**	$ 440	$ (1)	(.2)%
Other operating income	**385**	598	(213)	(35.6)
Total operating income[1]	**824**	1,038	(214)	(20.6)
Loan impairment charges (recoveries)	**(55)**	385	(440)	*
Net operating income	**879**	653	226	34.6
Operating expenses	**635**	711	(76)	(10.7)
Profit (loss) before tax[2]	**$ 244**	$ (58)	$ 302	*

* Not meaningful.

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Credit	**$ 2**	$ 22	$ (20)	(90.9)%
Rates	**15**	44	(29)	(65.9)
Foreign Exchange and Metals	**59**	72	(13)	(18.1)
Equities	**10**	12	(2)	(16.7)
Total Global Markets	**86**	150	(64)	(42.7)
Global Banking	**63**	123	(60)	(48.8)
Global Liquidity and Cash Management	**121**	116	5	4.3
Securities Services	**12**	5	7	*
Global Trade and Receivables Finance	**11**	15	(4)	(26.7)
Credit and funding valuation adjustments	**(50)**	(95)	45	47.4
Other[3]	**(1)**	2	(3)	*
Total operating income	**$ 242**	$ 316	$ (74)	(23.4)%

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Credit	**$ 12**	$ 56	$ (44)	(78.6)%
Rates	**59**	85	(26)	(30.6)
Foreign Exchange and Metals	**195**	196	(1)	(.5)
Equities	**24**	29	(5)	(17.2)
Total Global Markets	**290**	366	(76)	(20.8)
Global Banking	**195**	291	(96)	(33.0)
Global Liquidity and Cash Management	**369**	336	33	9.8
Securities Services	**29**	16	13	81.3
Global Trade and Receivables Finance	**36**	49	(13)	(26.5)
Credit and funding valuation adjustments	**(86)**	(31)	(55)	*
Other[3]	**(9)**	11	(20)	*
Total operating income	**$ 824**	$ 1,038	$ (214)	(20.6)%

(2) During the fourth quarter of 2016, we transferred certain client relationships from CMB to GB&M as discussed further in Note 22, "Business Segments," in our 2016 Form 10-K. As a result, we reclassified $23 million and $67 million of profit before tax from the CMB segment to the GB&M segment during the three months and nine months ended September 30, 2016, respectively, to conform with the current year presentation.

(3) Other includes corporate funding charges and net interest income on capital held in the business and not assigned to products.

Our GB&M segment reported improved profit before tax during the three and nine months ended September 30, 2017 due primarily to improved loan impairment charges and lower operating expenses, partially offset by lower other operating income.

Credit revenue declined during the three and nine months ended September 30, 2017 due to lower revenue from collateralized financing related activity.

Revenue from Rates decreased during the three and nine months ended September 30, 2017 due to lower new deal activity on interest rate swaps. This decrease was partially offset by favorable movements related to the economic hedging of interest rate and other risks within our structured notes and deposits.

Foreign Exchange and Metals revenue decreased during the three months ended September 30, 2017 primarily due to lower revenue from Metals client related trading activity. In the year-to-date period, Foreign Exchange and Metals revenue was relatively flat as higher revenue from Metals client related trading activity was offset by lower revenue from client trading activity in Foreign Exchange.

The decrease in Equities revenue during the three and nine months ended September 30, 2017 was due primarily to unfavorable movements related to the economic hedging of interest rate and other risks within our structured notes and deposits.

Global Banking revenue decreased during the three and nine months ended September 30, 2017 due to lower net interest income driven by lower loan balances and lower event financing fees which were partially offset by lower losses associated with credit default swap protection which largely reflects the hedging of a single client exposure.

Global Liquidity and Cash Management revenue increased during the three and nine months ended September 30, 2017 driven by higher net interest income due to the favorable impact of higher short-term market rates as well as an increase in high quality deposit balances, partially offset by decreased fee income due to lower transaction volumes.

Securities Services revenue increased during the three and nine months ended September 30, 2017 driven 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 was lower during the three and nine months ended September 30, 2017 reflecting a decline in receivables financing products, partially offset by higher supply chain solutions revenue.

Credit and funding valuation adjustments were favorable during the three months ended September 30, 2017 and unfavorable in the year-to-date period attributable primarily to movements in our own credit spreads within our structured notes and deposits and, to a lesser extent, our derivative liability balances.

Other revenue decreased during the three and nine months ended September 30, 2017 reflecting higher corporate funding charges and, in the year-to-date period, 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.

Loan impairment charges improved during the three and nine months ended September 30, 2017 reflecting releases in credit loss reserves recorded in the current year periods compared with loan impairment charges recorded in the prior year periods. The releases of loss reserves in the current year periods reflect improvements in the credit quality of our portfolio driven by paydowns, sales and maturities exceeding new loan originations as we continue to focus efforts on improving returns and, in the year-to-date period, improvements in credit conditions associated with certain client relationships, including a single mining client relationship. In the prior year periods, loan impairment charges were driven primarily by the continued deterioration of the single mining client relationship and, in the year-to-date period, other downgrades reflecting weakness in the financial condition of certain clients at that time, including oil and gas, mining and other industry loan exposures. Loan impairment charges associated with oil and gas industry loan exposures in the prior year-to-date period were largely due to the downgrade of a large client relationship and the establishment of specific reserves related to two large loans which became impaired.

Operating expenses were lower during the three and nine months ended September 30, 2017 due primarily to lower corporate function cost allocations from affiliates and lower deposit insurance assessment fees.

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. Our Private Banking business has made a decision to no longer service clients based in those markets and renew focus on clients and prospects based in markets where we can leverage HSBC's global connectivity, including the United States, Argentina, Brazil, Chile and Mexico. These markets are consistent with HSBC's global strategy and allow us to better serve clients through collaboration with other HSBC businesses based in these markets. Under the terms of the agreement, we will 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. As a result of entering into the agreement, we recognized a pre-tax gain on sale, net of allocated goodwill and transaction costs, of $9 million during the third quarter of 2017. Total operating income associated with these client relationships was approximately $13 million and $38 million during the three and nine months ended September 30, 2017, respectively, and $12 million and $38 million during the three and nine months ended September 30, 2016, respectively.

While client deposit levels decreased $2,488 million or 19 percent and total loans decreased by $524 million or 8 percent as compared with September 30, 2016, overall period end client assets were $1,145 million higher largely driven by higher assets under custody.

The following table provides additional information regarding client assets during the nine months ended September 30, 2017 and 2016:

Nine Months Ended September 30,	2017	2016
	(in millions)	
Client assets at beginning of period	**$ 40,462**	$ 42,716
Net new money (outflows)	**205**	(2,186)
Value change	**1,805**	797
Client assets at end of period	**$ 42,472**	$ 41,327

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Net interest income	**$ 56**	$ 53	$ 3	5.7 %
Other operating income	**31**	22	9	40.9
Total operating income	**87**	75	12	16.0
Loan impairment charges (recoveries)	**(2)**	1	(3)	*
Net operating income	**89**	74	15	20.3
Operating expenses	**67**	56	11	19.6
Profit before tax	**$ 22**	$ 18	$ 4	22.2 %

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
		(dollars are in millions)		
Net interest income	**$ 165**	$ 153	$ 12	7.8 %
Other operating income	**73**	67	6	9.0
Total operating income	**238**	220	18	8.2
Loan impairment charges (recoveries)	**1**	—	1	*
Net operating income	**237**	220	17	7.7
Operating expenses	**191**	173	18	10.4
Profit before tax	**$ 46**	$ 47	$ (1)	(2.1)%

* Not meaningful.

Our PB segment reported a higher profit before tax during the three months ended September 30, 2017 due to higher net interest income, higher other operating income and lower loan impairment charges, partially offset by higher operating expenses. In the year-to-date period, profit before tax was relatively flat as higher net interest income and higher other operating income was offset by higher operating expenses.

Net interest income was higher during the three and nine months ended September 30, 2017 due to improved spreads reflecting the impact of favorable market rates.

Other operating income includes a net pre-tax gain of $9 million associated with the sale of a portion of our Private Banking business during the third quarter of 2017 as discussed above. Excluding the impact of this item, other operating income was relatively flat during the three months ended September 30, 2017 and decreased in the year-to-date period. The decrease in the year-to-date period reflects lower fees and commissions driven by a decline in managed and investment product balances.

Loan impairment charges improved during the three months ended September 30, 2017 and were relatively flat in the year-to-date period. The improvement in the three month period was driven by recoveries in the current year period.

Operating expenses increased during the three and nine months ended September 30, 2017 reflecting higher litigation expense, higher staff costs and higher corporate function cost allocations from affiliates.

Corporate Center CC includes Balance Sheet Management, our legacy structured credit products, certain legacy residential mortgage loan and servicing activities, income and expense associated with certain affiliate transactions, certain corporate function costs including costs to achieve, 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, which for periods prior to January 1, 2017 included the fair value movement attributable to our own credit spread. Beginning January 1, 2017, the fair value movement on fair value option liabilities attributable to our own credit spread is recorded in other comprehensive income.

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income (expense)	**$ (10)**	$ 29	$ (39)	*
Gain on own fair value option debt attributable to our own credit spread	**—**	5	(5)	(100.0)
Other operating income	**33**	29	4	13.8
Total operating income[1]	**23**	63	(40)	(63.5)
Loan impairment charges (recoveries)	**1**	(2)	3	*
Net operating income	**22**	65	(43)	(66.2)
Operating expenses	**103**	87	16	18.4
Profit (loss) before tax	**$ (81)**	$ (22)	$ (59)	*

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income (expense)	**$ (9)**	$ 119	$ (128)	*
Gain on own fair value option debt attributable to our own credit spread	**—**	113	(113)	(100.0)
Other operating income	**205**	96	109	*
Total operating income[1]	**196**	328	(132)	(40.2)
Loan impairment charges (recoveries)	**—**	(4)	4	100.0
Net operating income	**196**	332	(136)	(41.0)
Operating expenses	**338**	220	118	53.6
Profit (loss) before tax	**$ (142)**	$ 112	$ (254)	*

* Not meaningful.

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

Three Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Balance Sheet Management[2]	**$ 56**	$ 36	$ 20	55.6 %
Legacy structured credit products	**1**	24	(23)	(95.8)
Legacy residential mortgage activities[3]	**(23)**	4	(27)	*
Other[4]	**(11)**	(1)	(10)	*
Total operating income	**$ 23**	$ 63	$ (40)	(63.5)%

Nine Months Ended September 30,	2017	2016	Increase (Decrease) Amount	%
	(dollars are in millions)			
Balance Sheet Management[2]	**$ 189**	$ 138	$ 51	37.0 %
Legacy structured credit products	**25**	22	3	13.6
Legacy residential mortgage activities[3]	**3**	19	(16)	(84.2)
Other[4]	**(21)**	149	(170)	*
Total operating income	**$ 196**	$ 328	$ (132)	(40.2)%

(2) Balance Sheet Management includes gains on the sale of securities of $3 million and $24 million in the three and nine months ended September 30, 2017, respectively, compared with $16 million and $78 million in the three and nine months ended September 30, 2016, respectively.

(3) Reflects fees associated with residential mortgage servicing activities performed on behalf of HSBC Finance and revenue associated with certain residential mortgage loans that we previously purchased from HSBC Finance.

(4) In 2016, other includes the gain (loss) on own fair value option debt attributable to our own credit spread.

Our CC segment reported a lower profit before tax during the three and nine months ended September 30, 2017 due to lower net interest income, the non-recurrence of gains on own fair value option debt attributable to our own credit spread of $5 million and $113 million during the three and nine months ended September 30, 2016, respectively, and higher operating expenses due in part to higher costs to achieve in the year-to-date period of approximately $62 million, partially offset by higher other operating income.

Net interest income was lower during the three and nine months ended September 30, 2017 driven largely by lower corporate funding charges to the businesses due in part to the impact of the liquidity framework we adopted in preparation for the planned implementation of the Net Stable Funding Ratio ("NSFR") which provides a temporary cap on the net liquidity charge to GB&M until the NSFR becomes effective. See "Risk Management" in this MD&A for additional discussion of NSFR.

Excluding the gains on own fair value option debt attributable to our own credit spread as discussed above, other operating income was higher during the three and nine months ended September 30, 2017 reflecting lower losses associated with fair value hedge ineffectiveness, the improved performance of economic hedge positions used to manage interest rate risk and, in the year-to-date period, fees of $28 million received from HSBC Finance associated with the prepayment of its loan during the first quarter of 2017 and a gain of approximately $11 million associated with the unwind of one of our unconsolidated VIEs during the second quarter of 2017. These increases were partially offset in both periods by lower gains from asset sales in Balance Sheet Management, lower gains from valuation adjustments on our legacy structured credit products and lower fees associated with residential mortgage servicing activities performed on behalf of HSBC Finance. While sales of certain residential mortgages that we previously purchased from HSBC Finance resulted in a loss of $7 million, which partially offset the increase in the three month period, they resulted in a net gain of $5 million in the year-to-date period which contributed to the increase.

Excluding costs to achieve as discussed above, operating expenses remained higher during the three and nine months ended September 30, 2017 reflecting higher corporate function cost allocations, partially offset by the favorable impact of cost management efforts, including staff optimization in our technology and support service functions.

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 14, "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.

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 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 2016 Form 10-K. Our approach toward credit risk management is summarized under the caption "Risk Management" in our 2016 Form 10-K. There have been no significant revisions to our policies or methodologies during the first nine months of 2017.

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

	September 30, 2017	June 30, 2017	December 31, 2016
	(dollars are in millions)		
Allowance for credit losses	**$ 799**	$ 848	$ 1,017
Ratio of Allowance for credit losses to:			
Loans:[1]			
Commercial:			
Non-affiliates	**1.57%**	1.66%	1.83%
Affiliates	**—**	—	—
Total commercial	**1.51**	1.61	1.72
Consumer:			
Residential mortgages	**.15**	.12	.15
Home equity mortgages	**.81**	.93	1.42
Credit cards	**4.88**	4.64	4.94
Other consumer	**1.32**	1.18	1.83
Total consumer	**.38**	.34	.44
Total	**1.18%**	1.25%	1.38%
Net charge-offs:[2]			
Commercial[3]	**679%**	679%	463%
Consumer	**304**	239	132
Total	**610%**	593%	381%
Nonperforming loans:[1][4]			
Commercial	**99%**	101%	118%
Consumer	**14**	13	17
Total	**64%**	66%	77%

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

(2) Ratio at September 30, 2017 and June 30, 2017 reflects year-to-date net charge-offs, annualized. Ratio at December 31, 2016 reflects full year net charge-offs.

(3) Our commercial net charge-off coverage ratio for the year-to-date periods ended September 30, 2017 and June 30, 2017 and year ended December 31, 2016 was 81 months, 81 months and 56 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 nine months ended September 30, 2017 and 2016.

The allowance for credit losses at September 30, 2017 decreased $49 million or 6 percent as compared with June 30, 2017 and decreased $218 million or 21 percent as compared with December 31, 2016 driven by lower loss estimates in our commercial loan portfolio. While higher loss estimates in our consumer loan portfolio partially offset the decrease in the three month period, loss estimates in our consumer loan portfolio were lower and also contributed to the decrease in the year-to-date period.

Our commercial allowance for credit losses decreased $55 million or 7 percent as compared with June 30, 2017 and decreased $204 million or 22 percent as compared with December 31, 2016 largely due to improvements in the credit quality of our portfolio driven by managed reductions in certain exposures, releases of reserves due to paydowns and maturities exceeding new loan originations as we continue to focus efforts on improving returns and, as compared with December 31, 2016, improvements in credit conditions associated with certain client relationships, including a single mining client relationship.

Our consumer allowance for credit losses increased $6 million or 9 percent as compared with June 30, 2017 reflecting higher loss estimates in our residential mortgage and credit card loan portfolios due in part to higher dollars of delinquency on accounts less than 180 days contractually delinquent and an increase in credit card delinquency roll rates. These increases were partially offset by lower loss estimates in our home equity mortgage loan portfolio reflecting lower outstanding balances. As compared with December 31, 2016, our consumer allowance for credit losses decreased $14 million or 16 percent due to lower loss estimates in our home equity mortgage, credit card, and other consumer loan portfolios driven by improvements in economic and credit conditions as well as lower outstanding balances, while the allowance for credit losses in our residential mortgage portfolio remained flat.

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 and economic uncertainty, including housing market trends as well as second lien exposure.

The allowance for credit losses as a percentage of total loans at September 30, 2017 decreased as compared with both June 30, 2017 and December 31, 2016 primarily due to a decrease in the commercial loan percentage for the reasons discussed above. While a higher consumer loan percentage partially offset the decrease in the three month period, the consumer loan percentage was lower and also contributed to the decrease in the year-to-date period for the reasons discussed above.

The allowance for credit losses as a percentage of net charge-offs increased slightly as compared with June 30, 2017 due to a higher ratio in our consumer loan portfolio driven by lower dollars of net charge-offs in the ratio and an increase in the allowance for credit losses while the ratio in our commercial loan portfolio was flat. As compared with December 31, 2016, the allowance for credit losses as a percentage of net charge-offs increased due to lower dollars of net charge-offs in the ratio for both our commercial and consumer loan portfolios, partially offset by a decrease in our overall allowance for credit losses for the reasons discussed above. Lower dollars of net charge-offs as compared with December 31, 2016 reflect lower charge-offs associated with oil and gas industry loan exposures and the non-recurrence of charge-offs recorded in 2016 associated with transfers of residential mortgages to held for sale.

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

	Amount	% of Loans to Total Loans	Amount	% of Loans to Total Loans	Amount	% of Loans to Total Loans
	September 30, 2017		June 30, 2017		December 31, 2016	
	(dollars are in millions)					
Commercial[1]	**$ 726**	**71.2%**	$ 781	71.4%	$ 930	73.4%
Consumer:						
Residential mortgages	**26**	**25.4**	20	25.2	26	23.3
Home equity mortgages	**10**	**1.8**	12	1.9	20	1.9
Credit cards	**32**	**1.0**	30	1.0	34	.9
Other consumer	**5**	**.6**	5	.6	7	.5
Total consumer	**73**	**28.8**	67	28.6	87	26.6
Total	**$ 799**	**100.0%**	$ 848	100.0%	$ 1,017	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.

	September 30, 2017	June 30, 2017	December 31, 2016
	(in millions)		
Off-balance sheet credit risk reserve	**$ 121**	$ 114	$ 134

The increase in off-balance sheet reserves at September 30, 2017 as compared with June 30, 2017 was driven by downgrades reflecting weakness in the financial condition of certain client relationships. As compared with December 31, 2016, off-balance sheet reserves decreased reflecting lower outstanding exposure. 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"):

	September 30, 2017	June 30, 2017	December 31, 2016
	(dollars are in millions)		
Delinquent loans:			
Commercial	**$ 82**	$ 68	$ 90
Consumer:			
Residential mortgages[1][2]	**406**	442	765
Home equity mortgages[1][2]	**36**	38	46
Credit cards	**11**	11	14
Other consumer	**10**	8	11
Total consumer	**463**	499	836
Total	**$ 545**	$ 567	$ 926
Delinquency ratio:			
Commercial	**.17%**	.14%	.16%
Consumer:			
Residential mortgages[1][2]	**2.36**	2.57	4.23
Home equity mortgages[1][2]	**2.92**	2.96	3.26
Credit cards	**1.68**	1.70	2.03
Other consumer	**2.26**	1.63	2.43
Total consumer	**2.37**	2.54	4.05
Total	**.80%**	.82%	1.22%

(1) At September 30, 2017, June 30, 2017 and December 31, 2016, consumer mortgage loan delinquency includes $328 million, $368 million and $711 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less costs to sell, including $3 million, $39 million and $358 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:

	September 30, 2017	June 30, 2017	December 31, 2016
	(dollars are in millions)		
Dollars of delinquent loans:			
Interest-only loans	**$ 30**	$ 41	$ 46
ARM loans	**137**	147	237
Delinquency ratio:			
Interest-only loans	**.86%**	1.18%	1.28%
ARM loans	**1.15**	1.24	1.94

Compared with June 30, 2017 and December 31, 2016, our two-months-and-over contractual delinquency ratio decreased 2 basis points and 42 basis points, respectively, driven by lower dollars of delinquency in our consumer loan portfolio, partially offset by lower outstanding loan balances, primarily in our commercial loan portfolio.

Compared with June 30, 2017 our commercial loan two-months-and-over contractual delinquency ratio increased 3 basis points due to higher dollars of delinquency in commercial real estate and business and corporate banking as well as lower outstanding loan balances. As compared with December 31, 2016, our commercial loan two-months-and-over contractual delinquency ratio increased 1 basis point as lower dollars of delinquency due to improved collections and managed reductions in certain exposures were more than offset by lower outstanding loan balances.

Our consumer loan two-month-and-over contractual delinquency ratio decreased 17 basis points and 168 basis points compared with June 30, 2017 and December 31, 2016, respectively, due to lower dollars of delinquency driven by the sales of certain residential mortgages as well as 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"):

	September 30, 2017	June 30, 2017	September 30, 2016
	(dollars are in millions)		
Net Charge-off Dollars:			
Commercial:			
Real estate, including construction	**$ 4**	$ 2	$ (6)
Business and corporate banking	**5**	—	23
Global banking	**14**	45	7
Other commercial	**—**	1	—
Total commercial	**23**	48	24
Consumer:			
Residential mortgages	**(2)**	(4)	31
Home equity mortgages	**—**	1	3
Credit cards	**6**	7	6
Other consumer	**—**	—	1
Total consumer	**4**	4	41
Total	**$ 27**	$ 52	$ 65
Net Charge-off Ratio:			
Commercial:			
Real estate, including construction	**.15%**	.08%	(.22)%
Business and corporate banking	**.15**	—	.50
Global banking	**.28**	.81	.11
Other commercial	**—**	.10	—
Total commercial	**.19**	.39	.16
Consumer:			
Residential mortgages	**(.04)**	(.09)	.70
Home equity mortgages	**—**	.30	.81
Credit cards	**3.68**	4.34	3.59
Other consumer	**—**	—	1.11
Total consumer	**.08**	.08	.81
Total	**.16%**	.30%	.33 %

Our net charge-off ratio as a percentage of average loans for the quarter ended September 30, 2017 decreased 14 basis points compared with the quarter ended June 30, 2017 due to lower levels of net charge-offs in our commercial loan portfolio largely driven by the non-recurrence of a charge-off recorded during the second quarter of 2017 related to the sale of a large impaired oil and gas industry loan while levels of net charge-offs in our consumer loan portfolio were flat.

Compared with the quarter ended September 30, 2016, our net charge-off ratio as a percentage of average loans decreased 17 basis points due to lower levels of net charge-offs in our consumer loan portfolio largely due to the non-recurrence of charge-offs recorded during the third quarter of 2016 related to the transfer of certain mortgages to held for sale while levels of net charge-offs in our commercial loan portfolio were relatively flat.

Nonperforming Assets Nonperforming assets consisted of the following:

	September 30, 2017	June 30, 2017	December 31, 2016
		(in millions)	
Nonaccrual loans:			
Commercial:			
Real estate, including construction	**$ 18**	$ 50	$ 56
Business and corporate banking	**244**	188	187
Global banking	**469**	537	546
Other commercial	**—**	—	1
Commercial nonaccrual loans held for sale	**—**	29	11
Total commercial	**731**	804	801
Consumer:			
Residential mortgages[(1)(2)(3)]	**435**	432	435
Home equity mortgages[(1)(2)]	**69**	70	75
Consumer nonaccrual loans held for sale	**3**	34	369
Total consumer	**507**	536	879
Total nonaccruing loans	**1,238**	1,340	1,680
Accruing loans contractually past due 90 days or more:			
Commercial:			
Business and corporate banking	**5**	1	1
Total commercial	**5**	1	1
Consumer:			
Credit cards	**8**	8	10
Other consumer	**6**	6	7
Total consumer	**14**	14	17
Total accruing loans contractually past due 90 days or more	**19**	15	18
Total nonperforming loans	**1,257**	1,355	1,698
Other real estate owned[(4)]	**17**	20	27
Total nonperforming assets	**$ 1,274**	$ 1,375	$ 1,725

(1) At September 30, 2017, June 30, 2017 and December 31, 2016, nonaccrual consumer mortgage loans held for investment include $378 million, $383 million and $382 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 are 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 September 30, 2017, June 30, 2017 and December 31, 2016.

Nonaccrual loans at September 30, 2017 decreased as compared with both June 30, 2017 and December 31, 2016 due to lower levels of nonaccrual loans in both our commercial and consumer loan portfolios. The decrease in commercial nonaccrual loans as compared with both June 30, 2017 and December 31, 2016 was driven by managed reductions in certain exposures, partially offset by the downgrades of two large business and corporate banking clients while the decrease in consumer nonaccrual loans as compared with both June 30, 2017 and December 31, 2016 was primarily due to the sales of certain residential mortgages. Accruing loans past due 90 days or more remained relatively flat compared with both June 30, 2017 and December 31, 2016.

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 2016 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 June 30, 2017 and December 31, 2016 due to managed reductions in certain exposures and paydowns, partially offset by the downgrades of two large business and corporate banking clients.

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 September 30, 2017 and December 31, 2016. Each category is not mutually exclusive and loans may appear in more than one category below.

	September 30, 2017	December 31, 2016
	(in millions)	
Interest-only residential mortgage and home equity mortgage loans	**$ 3,472**	$ 3,589
ARM loans[1]	**11,898**	12,219

[1] During the remainder of 2017 and during 2018, approximately $149 million and $767 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 $12 million and $890 million at September 30, 2017 and December 31, 2016, respectively, and home equity mortgage loans held for sale of $4 million at December 31, 2016.

	September 30, 2017	December 31, 2016
	(in millions)	
Closed end:		
First lien	**$ 17,196**	$ 17,181
Second lien	**52**	64
Revolving[1]	**1,182**	1,344
Total	**$ 18,430**	$ 18,589

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

Geographic Concentrations The following table reflects regional exposure at September 30, 2017 and December 31, 2016 for our real estate secured loan portfolios:

	Commercial Real Estate, including Construction Loans	Residential Mortgages and Home Equity Mortgages
September 30, 2017		
New York State	**32.1%**	**32.1%**
California	**22.9**	**42.1**
North Central United States	**3.2**	**2.4**
North Eastern United States, excluding New York State	**7.4**	**8.2**
Southern United States	**25.0**	**10.7**
Western United States, excluding California	**6.7**	**4.5**
Mexico	**2.7**	**—**
Total	**100.0%**	**100.0%**
December 31, 2016		
New York State	30.8 %	32.0 %
California	20.9	39.0
North Central United States	3.2	3.6
North Eastern United States, excluding New York State	8.3	8.8
Southern United States	26.8	12.0
Western United States, excluding California	6.9	4.6
Mexico	3.1	—
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 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.

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;
- credit worthiness 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 Basel III Standardized Approach regulatory capital rules published by U.S. banking regulatory agencies 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. However, many contracts contain provisions that allow us to close out the transaction if the counterparty fails to post required collateral. In addition, many contracts give us the right to break the transactions earlier than the final maturity date. As a result, these contracts have potential future exposures that are often much smaller than the future exposures derived from the regulatory capital rules.

	September 30, 2017	December 31, 2016
	(in millions)	
Risk associated with derivative contracts:		
Total credit risk exposure	**$ 28,682**	$ 30,339
Less: collateral held against exposure	**7,863**	7,733
Net credit risk exposure	**$ 20,819**	$ 22,606

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 nine months ended September 30, 2017, marketplace liquidity continued to remain available for most sources of funding.

As previously reported, 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, we continue to review the composition of our capital structure.

Interest Bearing Deposits with Banks totaled $23,103 million and $20,238 million at September 30, 2017 and December 31, 2016, respectively, of which $21,532 million and $18,833 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 $17,136 million and $30,023 million at September 30, 2017 and December 31, 2016, 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 $11,018 million and $10,667 million at September 30, 2017 and December 31, 2016, 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 $46,054 million and $49,719 million at September 30, 2017 and December 31, 2016, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on trends.

Short-Term Borrowings totaled $7,973 million and $5,101 million at September 30, 2017 and December 31, 2016, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on short-term borrowing trends.

Deposits totaled $121,840 million and $129,248 million at September 30, 2017 and December 31, 2016, respectively, which included $97,141 million and $98,671 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 $37,376 million at September 30, 2017 from $37,739 million at December 31, 2016. The following table presents the maturities of long-term debt at September 30, 2017:

	(in millions)
2017	$ 1,500
2018	10,243
2019	4,935
2020	6,841
2021	3,576
Thereafter	10,281
Total	$ 37,376

The following table summarizes issuances and retirements of long-term debt during the nine months ended September 30, 2017 and 2016:

Nine Months Ended September 30,	**2017**	**2016**
	(in millions)	
Long-term debt issued	**$ 3,886**	$ 7,675
Long-term debt repaid	**(5,098)**	(2,122)
Net long-term debt issued (repaid)	**$ (1,212)**	$ 5,553

See "Balance Sheet Review" in this MD&A for further analysis and discussion on long-term debt trends, including additional information on debt issued and repaid during the nine months ended September 30, 2017.

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 September 30, 2017, we were authorized to issue up to $36,000 million, of which $13,707 million was available. HSBC Bank USA has a $40,000 million Global Bank Note Program that provides for the issuance of subordinated and senior notes, of which $15,541 million was available at September 30, 2017.

As a member of the FHLB and the Federal Reserve Bank of New York, we have secured borrowing facilities which are collateralized by loans and investment securities. At September 30, 2017, long-term debt included $4,900 million of borrowings from the FHLB facility. Based upon the amounts pledged as collateral under these facilities, we have additional borrowing capacity of up to $13,962 million.

Preferred Equity See Note 17, "Preferred Stock," in our 2016 Form 10-K for information regarding all outstanding preferred share issues.

Common Equity During the nine months ended September 30, 2017, 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 transitional and fully phased-in capital ratios calculated as of September 30, 2017 and December 31, 2016:

	Transitional		Fully Phased-In	
	September 30, 2017	**December 31, 2016**	**September 30, 2017**	**December 31, 2016**
Common equity Tier 1 capital to risk-weighted assets	**15.3%**	13.7%	**15.3%**	13.2%
Tier 1 capital to risk-weighted assets	**16.3**	14.5	**16.4**	14.2
Total capital to risk-weighted assets	**19.8**	18.3	**19.6**	17.5
Tier 1 leverage ratio(1)	**9.9**	9.2	**9.8**	9.1
Supplementary leverage ratio(2)	**7.4**	6.5	**7.4**	6.5

(1) Adjusted quarterly average assets, the Tier 1 leverage ratio denominator, reflects quarterly average assets adjusted for amounts permitted to be deducted from Tier 1 capital for the three months ended September 30, 2017 and December 31, 2016, respectively.

(2) Beginning January 1, 2018, banking institutions will be 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, economic 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, as defined by regulations, and the amount of risk-weighted assets, also calculated based on regulatory definitions. Economic Capital is a proprietary measure to estimate unexpected loss at the 99.95 percent confidence level over a 1-year time horizon. Economic Capital is compared to a calculation of available capital resources to assess capital adequacy as part of the ICAAP.

In 2013, U.S. banking regulators issued a final rule implementing the Basel III capital framework in the United States 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 final rule established an integrated regulatory capital framework to improve the quality and quantity of regulatory capital. 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 2016 Form 10-K. In 2017, HSBC Bank USA submitted an annual statement to the OCC to renew its opt out of the Advanced Approaches Capital Framework (which includes using an advanced internal ratings based approach for credit risk and an advanced measurement approach for operational risk). As a result, we calculate our risk-based and leverage capital requirements solely under the general risk-based capital rules of the Standardized Approach.

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 has issued long-term debt and will be required to issue additional long-term debt in future periods.

In 2015, HSBC submitted its required 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 submitted its required resolution plan under the Federal

Deposit Insurance Act (the Insured Depository Institution Plan or "IDI Plan"). While HSBC has not received formal feedback from the FRB on the 2015 SIFI Plan, in June 2017, HSBC Bank USA received feedback from the FDIC regarding its IDI Plan which will be addressed in their next plan submission. In addition, HSBC and HSBC Bank USA have been advised that the next submission dates for the SIFI and IDI Plans were extended to December 31, 2018 and July 1, 2018, respectively.

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. 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 2017 and its latest mid-cycle DFAST results in October 2017. 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 2017. 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 2017 CCAR cycle.

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 June 2017, HSBC North America and HSBC Bank USA publicly disclosed their most recent annual DFAST results and the FRB also publicly disclosed its own DFAST and CCAR results.

In June 2017, the FRB 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 2017 CCAR submission. 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 2016 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 15, "Retained Earnings and Regulatory Capital Requirements," in the accompanying consolidated financial statements.

In June 2017, the FRB issued a proposal which would require certain IHCs of foreign banking organizations, including HSBC North America, to provide information about the effect of a hypothetical global market shock on trading and counterparty exposures. If adopted as proposed, HSBC North America would be required to provide quarterly information about such effects, and such effects would also be incorporated into the FRB’s CCAR stress testing applicable to HSBC North America in 2018, potentially causing additional projected stress losses under such tests.

2017 Funding Strategy Our current estimate for funding needs and sources for 2017 are summarized in the following table:

	Actual January 1 through September 30, 2017	Estimated October 1 through December 31, 2017	Estimated Full Year 2017
		(in billions)	
Increase (decrease) in funding needs:			
Net change in loans	$ (7)	$ 1	$ (6)
Net change in short-term investments and securities	(14)	9	(5)
Net change in trading and other assets	18	(9)	9
Total funding needs	$ (3)	$ 1	$ (2)
Increase (decrease) in funding sources:			
Net change in deposits	$ (7)	$ 1	$ (6)
Net change in trading and other short-term liabilities	2	1	3
Net change in long-term debt	2	(1)	1
Total funding sources	$ (3)	$ 1	$ (2)

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 continue to sell a portion of new mortgage loan originations to PHH Mortgage.

HSBC Finance relies on its affiliates, including HSBC USA, to satisfy its funding needs which are not met by cash generated from its loan sales and operations. During the first quarter of 2017, HSBC Finance prepaid the $2.5 billion that was outstanding under our credit agreement with it. See Note 13, "Related Party Transactions," in the accompanying consolidated financial statements for further information.

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 September 30, 2017				
	One Year or Less	Over One through Five Years	Over Five Years	Total	Balance at December 31, 2016
	(in millions)				
Standby letters of credit, net of participations[(1)]	**$ 6,195**	**$ 2,147**	**$ 105**	**$ 8,447**	$ 8,392
Commercial letters of credit	**187**	**61**	**—**	**248**	242
Credit derivatives[(2)]	**11,520**	**30,994**	**2,714**	**45,228**	58,329
Other commitments to extend credit:					
Commercial[(3)]	**16,470**	**57,908**	**2,855**	**77,233**	74,832
Consumer	**7,486**	**—**	**—**	**7,486**	7,270
Total	**$ 41,858**	**$ 91,110**	**$ 5,674**	**$138,642**	$ 149,065

(1) Includes $1,270 million and $1,315 million issued for the benefit of HSBC affiliates at September 30, 2017 and December 31, 2016, respectively.

(2) Includes $26,541 million and $29,999 million issued for the benefit of HSBC affiliates at September 30, 2017 and December 31, 2016, respectively.

(3) Includes $500 million issued for the benefit of HSBC affiliates at both September 30, 2017 and December 31, 2016, 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 18, "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 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. GSEs 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 structured derivative products is determined using valuation techniques based on inputs derived from observable benchmark index tranches 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. In addition, a validation process has been established, which includes participation in peer group consensus pricing surveys, to ensure that valuation inputs incorporate market participants' risk expectations and risk premium.

Level 3 inputs are unobservable estimates that management expects market participants would use to determine the fair value of the asset or liability. That is, Level 3 inputs incorporate market participants' assumptions about risk and the risk premium required by market participants in order to bear that risk. We develop Level 3 inputs based on the best information available in the circumstances. At September 30, 2017 and December 31, 2016, our Level 3 instruments 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 residential mortgage and subprime 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, at September 30, 2017, a contingent consideration receivable associated with the sale of a portion of our Private Banking business.

See Note 18, "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 nine months ended September 30, 2017 and 2016.

Level 3 Measurements The following table provides information about Level 3 assets/liabilities in relation to total assets/liabilities measured at fair value at September 30, 2017 and December 31, 2016:

	September 30, 2017	December 31, 2016
	(dollars are in millions)	
Level 3 assets[1][2]	**$ 2,683**	$ 4,611
Total assets measured at fair value[1][3]	**108,407**	113,299
Level 3 liabilities[1]	**1,667**	2,114
Total liabilities measured at fair value[1]	**67,114**	81,176
Level 3 assets as a percent of total assets measured at fair value	**2.5%**	4.1%
Level 3 liabilities as a percent of total liabilities measured at fair value	**2.5%**	2.6%

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

(2) Includes $2,347 million of recurring Level 3 assets and $336 million of non-recurring Level 3 assets at September 30, 2017. Includes $3,564 million of recurring Level 3 assets and $1,047 million of non-recurring Level 3 assets at December 31, 2016.

(3) Includes $108,006 million of assets measured on a recurring basis and $401 million of assets measured on a non-recurring basis at September 30, 2017. Includes $112,104 million of assets measured on a recurring basis and $1,195 million of assets measured on a non-recurring basis at December 31, 2016.

Significant Changes in Fair Value for Level 3 Assets and Liabilities During the second quarter of 2017, one of our unconsolidated VIEs was unwound and our investment in the VIE along with any related derivatives were terminated. Our investment in the VIE, which was a level 3 asset measured at fair value on a recurring basis, had a carrying value of $1,081 million at the time of unwind. See Note 16, "Variable Interest Entities," in the accompanying consolidated financial statements for additional information.

During the nine months ended September 30, 2017, we sold substantially all of the residential mortgage loans which were transferred to held for sale during 2016 and were level 3 assets measured at fair value on a non-recurring basis. See Note 6, "Loans Held for Sale," in the accompanying consolidated financial statements for additional information.

In addition to the above, we have entered into credit default swaps with monoline insurers to hedge our credit exposure in certain asset-backed securities and synthetic CDOs. We made $2 million negative and $3 million positive credit risk adjustments to the fair value of our credit default swap contracts during the three and nine months ended September 30, 2017, respectively, compared with positive adjustments of $12 million and $25 million during the three and nine months ended September 30, 2016, 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 $19 million and $22 million against our monoline exposure at September 30, 2017 and December 31, 2016, respectively. The fair value of our monoline exposure net of cumulative credit adjustment reserves equaled $119 million and $159 million at September 30, 2017 and December 31, 2016, respectively.

See Note 18, "Fair Value Measurements," in the accompanying consolidated financial statements for information on additions to and transfers into (out of) Level 3 measurements during the three and nine months ended September 30, 2017 and 2016 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 $82 million or a decrease of the overall fair value measurement of approximately $25 million at September 30, 2017. 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 certain monoline insurers 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 September 30, 2017:

		Total
		(in millions)
Rating of securities:[1]	Collateral type:	
AAA	Residential mortgages - Alt A	$ 31
AA	Other	50
A	Residential mortgages - Alt A	3
	Residential mortgages - Subprime	25
	Home equity - Alt A	54
	Student loans	91
	Other	460
	Total A	633
BBB	Residential mortgages - Alt A	1
	Collateralized debt obligations	125
	Total BBB	126
CCC	Residential mortgages - Subprime	16
		$ 856

(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. To do so, we employ a risk management framework at all levels and across all risk types. 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. While we are subject to a number of legal and regulatory actions and investigations, our risk management framework has been designed to provide robust controls and ongoing monitoring of our principal risks. We strive to continuously improve our risk management processes through ongoing employee training and development.

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);
- *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 (including financial crime and fraud risk);
- *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 2016 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 reputational risk management, strategic risk management, model risk management, pension risk management or sustainability risk management since December 31, 2016.

Credit Risk Management 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. There have been no material changes to our approach towards credit risk management since December 31, 2016. See "Risk Management" in MD&A in our 2016 Form 10-K for a more complete discussion of our approach to credit risk.

Credit risk is inherent in various on- and off-balance sheet instruments and arrangements, such as:

- loan portfolios;
- investment portfolios;
- unfunded commitments such as letters of credit, lines of credit, and unutilized credit card lines that customers can draw upon; and
- derivative financial instruments, such as interest rate swaps which, if more valuable today than when originally contracted, may represent an exposure to the counterparty to the contract.

While credit risk exists widely in our operations, diversification among various commercial and consumer portfolios helps to lessen risk exposure. Day-to-day management of credit and market risk is performed by the Chief Credit Officer/Head of Wholesale Credit and Market Risk North America and the HSBC North America Chief Retail Credit Officer, who report directly to the HSBC North America Chief Risk Officer and maintain independent risk functions. The credit risk associated with commercial portfolios is managed by the Chief Credit Officer, while credit risk associated with retail consumer loan portfolios, such as credit cards, installment loans and residential mortgages, is managed by the HSBC North America Chief Retail Credit Officer. Further discussion of credit risk can be found under the "Credit Quality" caption in this MD&A.

Liquidity Risk Management There have been no material changes to our approach towards liquidity risk management since December 31, 2016. See "Risk Management" in MD&A in our 2016 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.

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 encourage banks to retain a portfolio of extremely high quality liquid assets. As such, we are maintaining a large portfolio of high quality sovereign and sovereign guaranteed securities. As previously discussed, HSBC Finance relies on its affiliates, including HSBC USA, to satisfy its funding needs outside of cash generated from its loan sales and operations.

As part of our approach towards liquidity risk management, we employ the following key measures to define, monitor and control our liquidity and funding risk in accordance with HSBC policy:

The Basel Committee based Liquidity Coverage Ratio ("LCR") is designed to be a short-term liquidity measure to ensure banks have sufficient High Quality Liquid Assets ("HQLA") to cover net stressed cash outflows over the next 30 days. At both September 30, 2017 and December 31, 2016, 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 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 rule, which may differ in future periods depending on completion of the European calibration and further implementation guidance from regulators. At both September 30, 2017 and December 31, 2016, 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, are required to maintain a minimum LCR of 100 percent beginning 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 beginning July 1, 2016. During the nine months ended September 30, 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 in an international observation period. Based on the results of the observation period, 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 September 30, 2017 and December 31, 2016, HSBC Bank USA's estimated NSFR, based on our current interpretation and understanding of the proposed U.S. NSFR rule, exceeded 100 percent.

Enhanced prudential standard rules issued pursuant to Section 165 of the Dodd-Frank Act complement the LCR, capital planning, resolution planning, and stress testing requirements for U.S. bank holding companies and foreign banking organizations with total global consolidated assets of $50 billion or more ("Covered Companies"). The rules require Covered Companies, such as HSBC North America, to comply with various liquidity risk management standards and to maintain a liquidity buffer of unencumbered highly liquid assets based on the results of internal liquidity stress testing. Covered Companies are also required to meet heightened liquidity requirements, which include qualitative liquidity standards, cash flow projections, internal liquidity stress tests, and liquidity buffer requirements. HSBC North America has implemented the standard and it does not have a significant impact to our business model.

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 ability to regularly attract wholesale funds at a competitive cost is enhanced by strong ratings from the major credit ratings agencies. The following table reflects the short and long-term credit ratings of HSBC USA and HSBC Bank USA at September 30, 2017:

	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 September 30, 2017.

Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices and litigation 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 September 30, 2017, 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 Various techniques are utilized to quantify and monitor risks associated with the repricing characteristics of our assets, liabilities and derivative contracts. Our approach to managing interest rate risk is summarized in MD&A in our 2016 Form 10-K under the caption "Risk Management". There have been no material changes to our approach towards interest rate risk management since December 31, 2016.

Present value of a basis point ("PVBP") PVBP is the change in value of the balance sheet for a one basis point upward movement in all interest rates. The following table reflects the PVBP position at September 30, 2017 and December 31, 2016:

	September 30, 2017	December 31, 2016
	(in millions)	
Institutional PVBP movement limit	**$ 8.0**	$ 8.0
PVBP position at period end	**1.2**	4.4

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 rise gradually by as much as 200 basis point or fall by as much as 100 basis points over a twelve month period. The following table reflects the impact on projected net interest income of the scenarios utilized by these modeling techniques:

	September 30, 2017		December 31, 2016	
	Amount	%	Amount	%
	(dollars are in millions)			
Estimated increase (decrease) in projected net interest income (reflects projected rate movements on October 1, 2017 and January 1, 2017, respectively):				
Resulting from a gradual 100 basis point increase in the yield curve	**$ 208**	**8%**	$ 123	5%
Resulting from a gradual 100 basis point decrease in the yield curve	**(220)**	**(8)**	(158)	(6)
Resulting from a gradual 200 basis point increase in the yield curve	**368**	**14**	208	8
Other significant scenarios monitored (reflects projected rate movements on October 1, 2017 and January 1, 2017, respectively):				
Resulting from an immediate 50 basis point decrease in the yield curve	**(175)**	**(7)**	(156)	(6)
Resulting from an immediate 100 basis point increase in the yield curve	**320**	**12**	209	8
Resulting from an immediate 100 basis point decrease in the yield curve	**(488)**	**(18)**	(347)	(14)
Resulting from an immediate 200 basis point increase in the yield curve	**558**	**21**	366	15

The projections do not take into consideration possible complicating factors such as the effect of changes in interest rates on the credit quality, size and composition of the balance sheet. Therefore, although this provides a reasonable estimate of interest rate sensitivity, actual results will differ from these estimates, possibly by significant amounts.

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 is being phased into common equity Tier 1 capital over five years beginning in 2014. At September 30, 2017, we had an available-for-sale securities portfolio of approximately $31,693 million with a negative mark-to-market adjustment of $230 million. An increase of 25 basis points in interest rates of all maturities would lower the mark-to-market by approximately $308 million to a net loss of $538 million with the following results on our capital ratios:

	September 30, 2017		December 31, 2016	
	Actual	Proforma[1]	Actual	Proforma[1]
Common equity Tier 1 capital to risk-weighted assets	**15.3%**	**15.1%**	13.7%	13.6%
Total equity to total assets	**10.6**	**10.5**	10.1	10.0

[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:

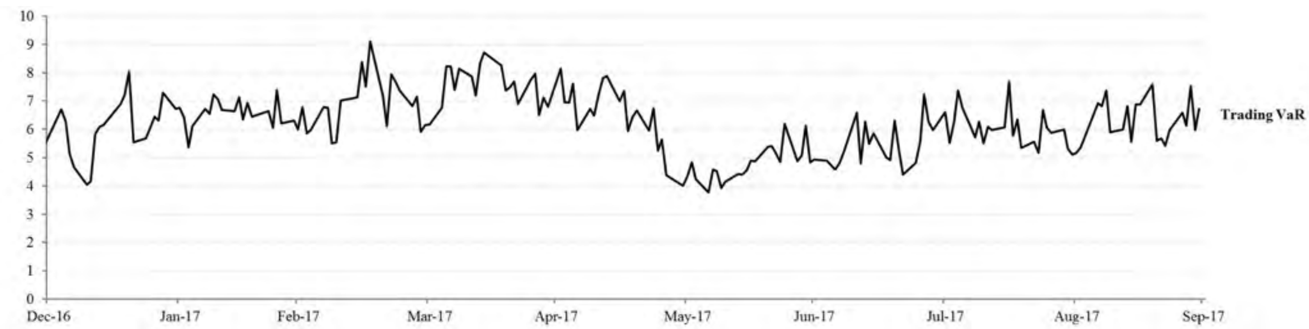
- *Trading portfolios* comprise positions arising from market-making and warehousing of client-derived positions.
- *Non-trading portfolios* comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities and financial investments 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, 2016. See "Risk Management" in MD&A in our 2016 Form 10-K for a more complete discussion of our approach to market risk.

Value at Risk ("VaR") VaR is a technique that estimates the 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. VaR is calculated for all trading positions and non-trading positions which are equally sensitive to market moves regardless of how we capitalize those exposures. VAR is calculated at a 99 percent confidence level for 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 nine months ended September 30, 2017:

	Foreign exchange and commodity	Interest rate	Credit Spread	Portfolio diversification[(1)]	Total[(2)]
			(in millions)		
At September 30, 2017	**$ 2**	**$ 6**	**$ 1**	**$ (2)**	**$ 7**
Nine Months Ended September 30, 2017					
Average	**2**	**6**	**1**	**(3)**	**6**
Maximum	**4**	**9**	**1**		**9**
Minimum	**—**	**4**	**1**		**4**
At December 31, 2016	$ 1	$ 6	$ 1	$ (3)	$ 5

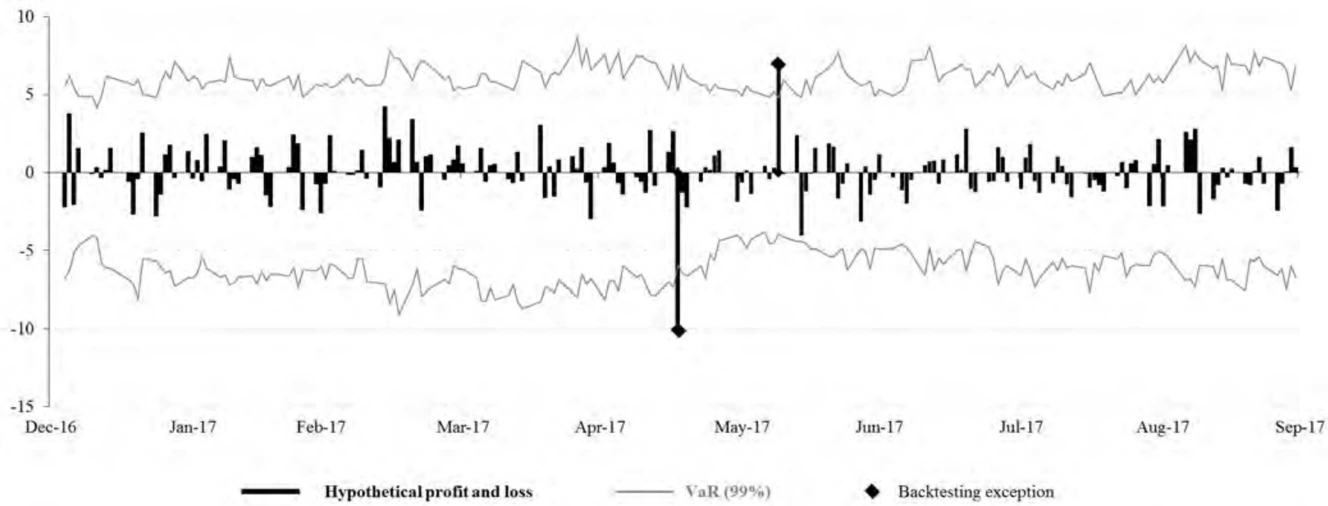
(1) Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, foreign exchange, interest rate and credit spread, 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 In the nine months ended September 30, 2017, we experienced two back-testing exceptions. The first exception, a loss exception, occurred in May and was driven by political turmoil in Brazil, which sparked an increase in Brazilian interest rates that exceeded levels within our historical time series. The second exception, a profit exception, occurred in June and was due to a large gain in Precious Metals as borrowing rates for Palladium metals increased due to a liquidity squeeze in the market and experienced a move that exceeded levels within our historical time series.

We daily 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 to three profits, and two to 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 to calculate the VaR numbers used for risk management or capital purposes.

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. Treasuries and U.S. Government agency 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 nine months ended September 30, 2017:

	Interest rate	Credit Spread	Portfolio diversification(1)	Total(1)
		(in millions)		
At September 30, 2017	**$ 42**	**$ 18**	**$ (6)**	**$ 54**
Nine Months Ended September 30, 2017				
Average	**52**	**22**	**(13)**	**61**
Maximum	**79**	**31**		**74**
Minimum	**38**	**17**		**48**
At December 31, 2016	$ 75	$ 27	$ (32)	$ 70

(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" in MD&A in our 2016 Form 10-K.

Operational Risk Management During the second quarter of 2017, we implemented a new Operational Risk Management Framework ("ORMF") and operational risk database. The new ORMF was designed to simplify and improve our approach to managing operational risks. It promotes more focused efforts on material risks and ensures clarity and accountability of related roles and responsibilities.

Under the new ORMF, risk and control assessments provide an end to end view of operational risk. Material risks are assigned an inherent risk assessment based on the likelihood and the direct (financial costs) and indirect impacts to the business. An assessment of the effectiveness of key controls that mitigate these risks is made and a residual risk assessment is determined. An operational risk database is used to record risk and control assessments and track related issues and mitigation action plans. The risk assessments, which are refreshed based on relevant triggers, provide an up-to-date view of the operational risk profile.

There have been no other material changes to our approach to operational risk management since December 31, 2016.

Compliance Risk Management During the second quarter of 2017, there was a reorganization of certain risk activities as we continued to implement the most effective global standards to combat financial crime and strengthen our financial crime detection and compliance capabilities. As part of this reorganization, the activities related to financial crime and fraud risk management previously performed by the Security and Fraud Risk Management function are now performed by the Financial Crime Risk function. Additionally, during the second quarter of 2017, the Compliance Committee of the Board of Directors was demised and the Compliance and Conduct Committee of the Board of Directors (the "CCC") was established. The CCC oversees the remediation of the compliance risk management program as well as fiduciary matters. There have been no other material changes to our approach to compliance risk management since December 31, 2016.

Fiduciary Risk Management During the second quarter of 2017, the Fiduciary Committee of the Board of Directors was demised and its responsibilities taken over by the CCC as discussed above. There have been no other material changes to our approach to compliance risk management since December 31, 2016.

Security Risk Management As discussed above, during the second quarter of 2017, activities related to financial crime and fraud risk management are no longer performed by the Security and Fraud Risk Management function, but are now performed by the Financial Crime Risk function. Additionally, the Security and Fraud Risk Management function was renamed "Security Risk Management" to reflect this reorganization. During the third quarter of 2017, Security Risk Management was expanded to include Insider Risk which focuses holistically around managing, monitoring and controlling the risks related to all insiders, including employees, contractors, and third parties. There have been no other material changes to our approach to security risk management since December 31, 2016.

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, presented on a taxable equivalent basis, which resulted in increases to interest income on securities of nil during both the three and nine months ended September 30, 2017, respectively, and increases to interest income on securities of less than a million and $1 million during the three and nine months ended September 30, 2016, respectively. Net interest margin is calculated by dividing net interest income by the average interest earning assets from which interest income is earned. Loan interest for the three and nine months ended September 30, 2017 included fees of $15 million and $61 million, respectively, compared with fees of $24 million and $57 million during the three and nine months ended September 30, 2016, respectively.

Three Months Ended September 30,	2017			2016		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets						
Interest bearing deposits with banks	**$ 44,300**	**$ 148**	**1.33%**	$ 35,633	$ 46	.51%
Federal funds sold and securities purchased under resale agreements	**5,410**	**55**	**4.03**	13,829	54	1.55
Trading securities	**9,943**	**47**	**1.88**	11,276	52	1.83
Securities	**45,474**	**231**	**2.02**	52,627	234	1.77
Loans:						
Commercial	**48,565**	**371**	**3.03**	60,063	383	2.54
Consumer:						
Residential mortgages	**17,235**	**143**	**3.29**	18,080	148	3.26
Home equity mortgages	**1,257**	**13**	**4.10**	1,484	13	3.49
Credit cards	**652**	**18**	**10.95**	669	17	10.11
Other consumer	**465**	**7**	**5.97**	467	7	5.96
Total consumer	**19,609**	**181**	**3.66**	20,700	185	3.56
Total loans	**68,174**	**552**	**3.21**	80,763	568	2.80
Other	**3,129**	**14**	**1.78**	2,072	12	2.30
Total interest earning assets	**$ 176,430**	**$ 1,047**	**2.35%**	$ 196,200	$ 966	1.96%
Allowance for credit losses	**(841)**			(1,062)		
Cash and due from banks	**1,088**			922		
Other assets	**22,647**			15,201		
Total assets	**$ 199,324**			$ 211,261		
Liabilities and Equity						
Domestic deposits:						
Savings deposits	**$ 48,829**	**$ 66**	**.54%**	$ 50,976	$ 32	.25%
Time deposits	**22,412**	**95**	**1.68**	26,338	72	1.09
Other interest bearing deposits	**10,912**	**14**	**.51**	9,468	2	.08
Foreign deposits:						
Foreign banks deposits	**5,195**	**8**	**.61**	8,846	12	.54
Other interest bearing deposits	**2,807**	**5**	**.71**	4,367	4	.36
Deposits held for sale	**237**	**—**	**.58**	—	—	—
Total interest bearing deposits	**90,392**	**188**	**.83**	99,995	122	.49
Short-term borrowings	**13,904**	**39**	**1.11**	8,793	22	1.00
Long-term debt	**37,361**	**256**	**2.72**	37,359	213	2.27
Total interest bearing deposits and debt	**141,657**	**483**	**1.35**	146,147	357	.97
Tax liabilities and other	**1,266**	**4**	**1.25**	843	5	2.36
Total interest bearing liabilities	**$ 142,923**	**$ 487**	**1.35%**	$ 146,990	$ 362	.98%
Net interest income/Interest rate spread		**$ 560**	**1.00%**		$ 604	.98%
Noninterest bearing deposits	**28,002**			32,052		
Other liabilities	**7,393**			11,166		
Total equity	**21,006**			21,053		
Total liabilities and equity	**$ 199,324**			$ 211,261		
Net interest margin on average earning assets			**1.26%**			1.22%
Net interest income to average total assets			**1.11%**			1.13%

Nine Months Ended September 30,	2017			2016		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets						
Interest bearing deposits with banks	**$ 42,646**	**$ 352**	**1.10%**	$ 33,995	$ 128	.50%
Federal funds sold and securities purchased under resale agreements	**7,214**	**163**	**3.02**	11,613	140	1.61
Trading securities	**10,207**	**163**	**2.14**	11,313	197	2.33
Securities	**48,310**	**715**	**1.98**	52,314	722	1.84
Loans:						
Commercial	**51,103**	**1,125**	**2.94**	62,650	1,148	2.45
Consumer:						
Residential mortgages	**17,465**	**438**	**3.35**	17,983	447	3.32
Home equity mortgages	**1,316**	**38**	**3.86**	1,530	40	3.49
Credit cards	**651**	**52**	**10.68**	667	53	10.61
Other consumer	**459**	**20**	**5.83**	482	21	5.82
Total consumer	**19,891**	**548**	**3.68**	20,662	561	3.63
Total loans	**70,994**	**1,673**	**3.15**	83,312	1,709	2.74
Other	**2,953**	**38**	**1.72**	2,329	31	1.78
Total interest earning assets	**$ 182,324**	**$ 3,104**	**2.28%**	$ 194,876	$ 2,927	2.01%
Allowance for credit losses	**(920)**			(1,001)		
Cash and due from banks	**1,104**			973		
Other assets	**18,866**			13,091		
Total assets	**$ 201,374**			$ 207,939		
Liabilities and Equity						
Domestic deposits:						
Savings deposits	**$ 49,501**	**$ 170**	**.46%**	$ 50,622	$ 93	.25%
Time deposits	**22,818**	**257**	**1.51**	26,528	201	1.01
Other interest bearing deposits	**11,414**	**30**	**.35**	6,314	6	.13
Foreign deposits:						
Foreign banks deposits	**6,674**	**33**	**.66**	8,871	32	.48
Other interest bearing deposits	**3,696**	**17**	**.61**	4,500	12	.36
Deposits held for sale	**80**	**—**	**.58**	—	—	—
Total interest bearing deposits	**94,183**	**507**	**.72**	96,835	344	.47
Short-term borrowings	**10,380**	**94**	**1.21**	11,517	61	.71
Long-term debt	**37,730**	**749**	**2.65**	35,103	613	2.33
Total interest bearing deposits and debt	**142,293**	**1,350**	**1.27**	143,455	1,018	.95
Tax liabilities and other	**1,068**	**15**	**1.88**	814	12	1.97
Total interest bearing liabilities	**$ 143,361**	**$ 1,365**	**1.27%**	$ 144,269	$ 1,030	.95%
Net interest income/Interest rate spread		**$ 1,739**	**1.01%**		$ 1,897	1.06%
Noninterest bearing deposits	**29,998**			31,742		
Other liabilities	**7,266**			10,897		
Total equity	**20,749**			21,031		
Total liabilities and equity	**$ 201,374**			$ 207,939		
Net interest margin on average earning assets			**1.28%**			1.30%
Net interest income to average total assets			**1.15%**			1.22%

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 September 30, 2017 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 19, "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, HSBC USA Inc. 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. For those loans that remain outstanding, the HSBC Group continues to seek repayment in accordance with its obligations to the supporting export credit agencies. Details of these loans follow.

At September 30, 2017, the HSBC Group had five loans outstanding to an Iranian petrochemical company. These loans are supported by the official export credit agencies of the following countries: the United Kingdom, South Korea and Japan. The HSBC Group continues to seek repayments from the Iranian company under the outstanding loans in accordance with their original maturity profiles.

There was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2017 relating to the loans in repayment. While the HSBC Group intends to continue to seek repayment under the existing loans, all of which were entered into before the petrochemical sector of Iran became a target of U.S. sanctions, it does not currently intend to extend any new loans.

Additionally, the HSBC Group processed one payment related to the aforementioned loans for the benefit of the Japanese export credit agency. There was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2017 relating to that payment.

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 third quarter of 2017 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 third quarter of 2017 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 several accounts in the United Kingdom for an Iranian-owned, U.K.-regulated financial institution. These accounts are generally no longer restricted under U.K. law, though HSBC maintains restrictions on the accounts as a matter of policy. The HSBC Group is seeking to exit these accounts and has begun transferring the funds to the client's accounts at other financial institutions. Estimated gross revenue in the third quarter of 2017 on these accounts, which includes fees and/or commissions, was approximately $27,180.
- The HSBC Group acts as the trustee and administrator for a pension scheme involving six employees of a U.S.-sanctioned Iranian bank in Hong Kong. Under the rules of this scheme, the HSBC Group accepts contributions from the Iranian bank

each month and allocates the funds into the pension accounts of the Iranian bank's employees. The HSBC Group runs and operates this pension scheme in accordance with Hong Kong laws and regulations. Estimated gross revenue, which includes fees and/or commissions, generated by this pension scheme during the third quarter of 2017 was approximately $990.

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.

Other Activity The HSBC Group has an insurance company customer in the United Arab Emirates that made two 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 the payments to the hospital made by its customer. There was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2017 relating to these two payments.

The HSBC Group has a travel agent customer in Europe that made four payments to an airline owned by the Government of Iran for the purchase of airline tickets on behalf of a customer. There was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2017 relating to these payments.

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 third quarter of 2017. There was no measurable gross revenue or net profit to the HSBC Group and HSBC Bank USA during the third quarter of 2017 relating to these frozen accounts.

Item 6. Exhibits

3(i)	Articles of Incorporation and amendments and supplements thereto (incorporated by reference to Exhibit 3 (a) to HSBC USA Inc.'s Annual Report on Form 10-K for the year ended December 31, 1999, Exhibit 3 to HSBC USA Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2000, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed April 4, 2005, Exhibit 3.3 to HSBC USA Inc.'s Current Report on Form 8-K filed April 4, 2005, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed October 14, 2005, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed May 22, 2006 and Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed on May 31, 2016).
3(ii)	Bylaws of HSBC USA Inc., as Amended and Restated effective April 20, 2017 (incorporated by reference to Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed April 24, 2017).
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]

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(1) Pursuant to Rule 405 of Regulation S-T, includes the following financial information included in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, formatted in eXtensible Business Reporting Language ("XBRL") interactive data files: (i) the Consolidated Statement of Income for the three and nine months ended September 30, 2017 and 2016, (ii) the Consolidated Statement of Comprehensive Income (Loss) for the three and nine months ended September 30, 2017 and 2016, (iii) the Consolidated Balance Sheet at September 30, 2017 and December 31, 2016, (iv) the Consolidated Statement of Changes in Equity for the nine months ended September 30, 2017 and 2016, (v) the Consolidated Statement of Cash Flows for the nine months ended September 30, 2017 and 2016, and (vi) the Notes to Consolidated Financial Statements.

Signatures

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

Date: October 30, 2017

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

	Nine Months Ended September 30,	
	2017	**2016**
	(dollars are in millions)	
Ratios excluding interest on deposits:		
Income from continuing operations	**$ 594**	$ 166
Income tax expense	**321**	100
Fixed charges:		
Interest on:		
Short-term borrowings	**94**	61
Long-term debt	**749**	613
Others	**15**	12
One third of rents, net of income from subleases	**23**	19
Total fixed charges, excluding interest on deposits	**881**	705
Earnings from continuing operations before taxes and fixed charges, excluding interest on deposits	**$ 1,796**	$ 971
Ratio of earnings to fixed charges, excluding interest on deposits	**2.04**	1.38
Ratios including interest on deposits:		
Total fixed charges, excluding interest on deposits	**$ 881**	$ 705
Add: Interest on deposits	**507**	344
Total fixed charges, including interest on deposits	**1,388**	1,049
Earnings from continuing operations before taxes and fixed charges, excluding interest on deposits	**1,796**	971
Add: Interest on deposits	**507**	344
Earnings from continuing operations before taxes and fixed charges, including interest on deposits	**$ 2,303**	$ 1,315
Ratio of earnings to fixed charges, including interest on deposits	**1.66**	1.25

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: October 30, 2017

/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: October 30, 2017

/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 September 30, 2017 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: October 30, 2017

/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 September 30, 2017 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: October 30, 2017

/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.