

Note 4: Investment Securities (continued)

Gross Unrealized Losses and Fair Value

Table 4.2 shows the gross unrealized losses and fair value of securities in the investment securities portfolio by length of time that individual securities in each category have been in a continuous loss position. Debt securities on which we have taken credit-related OTTI write-downs are categorized as being “less

than 12 months” or “12 months or more” in a continuous loss position based on the point in time that the fair value declined to below the cost basis and not the period of time since the credit-related OTTI write-down.

Table 4.2: Gross Unrealized Losses and Fair Value

(in millions)	Less than 12 months		12 months or more		Total	
	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
September 30, 2016						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	\$ (2)	2,033	—	—	(2)	2,033
Securities of U.S. states and political subdivisions	(455)	21,306	(1,089)	12,596	(1,544)	33,902
Mortgage-backed securities:						
Federal agencies	(7)	4,785	(53)	3,697	(60)	8,482
Residential	(3)	379	(4)	210	(7)	589
Commercial	(23)	1,255	(44)	2,415	(67)	3,670
Total mortgage-backed securities	(33)	6,419	(101)	6,322	(134)	12,741
Corporate debt securities	(11)	758	(163)	1,683	(174)	2,441
Collateralized loan and other debt obligations	(6)	754	(42)	5,256	(48)	6,010
Other	(7)	1,107	(28)	1,304	(35)	2,411
Total debt securities	(514)	32,377	(1,423)	27,161	(1,937)	59,538
Marketable equity securities:						
Perpetual preferred securities	(1)	5	(2)	51	(3)	56
Other marketable equity securities	—	—	—	—	—	—
Total marketable equity securities	(1)	5	(2)	51	(3)	56
Total available-for-sale securities	(515)	32,382	(1,425)	27,212	(1,940)	59,594
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	—	—	—	—	—	—
Securities of U.S. states and political subdivisions	(5)	547	(3)	252	(8)	799
Federal agency and other mortgage-backed securities	—	—	—	—	—	—
Collateralized loan obligations	—	—	(2)	285	(2)	285
Other	(1)	739	—	—	(1)	739
Total held-to-maturity securities	(6)	1,286	(5)	537	(11)	1,823
Total	\$ (521)	33,668	(1,430)	27,749	(1,951)	61,417
December 31, 2015						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	\$ (148)	24,795	—	—	(148)	24,795
Securities of U.S. states and political subdivisions	(26)	3,453	(476)	12,377	(502)	15,830
Mortgage-backed securities:						
Federal agencies	(522)	36,329	(306)	9,888	(828)	46,217
Residential	(20)	1,276	(5)	285	(25)	1,561
Commercial	(32)	4,476	(53)	2,363	(85)	6,839
Total mortgage-backed securities	(574)	42,081	(364)	12,536	(938)	54,617
Corporate debt securities	(244)	4,941	(205)	1,057	(449)	5,998
Collateralized loan and other debt obligations	(276)	22,214	(92)	4,844	(368)	27,058
Other	(33)	2,768	(13)	425	(46)	3,193
Total debt securities	(1,301)	100,252	(1,150)	31,239	(2,451)	131,491
Marketable equity securities:						
Perpetual preferred securities	(1)	24	(12)	109	(13)	133
Other marketable equity securities	(2)	40	—	—	(2)	40
Total marketable equity securities	(3)	64	(12)	109	(15)	173
Total available-for-sale securities	(1,304)	100,316	(1,162)	31,348	(2,466)	131,664
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	(73)	5,264	—	—	(73)	5,264
Securities of U.S. states and political subdivisions	—	—	—	—	—	—
Federal agency and other mortgage-backed securities	(314)	23,115	—	—	(314)	23,115
Collateralized loan obligations	(20)	1,148	(4)	233	(24)	1,381
Other	(3)	1,096	—	—	(3)	1,096
Total held-to-maturity securities	(410)	30,623	(4)	233	(414)	30,856
Total	\$ (1,714)	130,939	(1,166)	31,581	(2,880)	162,520

We have assessed each security with gross unrealized losses included in the previous table for credit impairment. As part of that assessment we evaluated and concluded that we do not intend to sell any of the securities and that it is more likely than not that we will not be required to sell prior to recovery of the amortized cost basis. For debt securities, we evaluate, where necessary, whether credit impairment exists by comparing the present value of the expected cash flows to the securities' amortized cost basis. For equity securities, we consider numerous factors in determining whether impairment exists, including our intent and ability to hold the securities for a period of time sufficient to recover the cost basis of the securities.

For descriptions of the factors we consider when analyzing securities for impairment, see Note 1 (Summary of Significant Accounting Policies) and Note 5 (Investment Securities) to Financial Statements in our 2015 Form 10-K. There were no material changes to our methodologies for assessing impairment in the first nine months of 2016.

Table 4.3 shows the gross unrealized losses and fair value of debt and perpetual preferred investment securities by those rated investment grade and those rated less than investment grade,

according to their lowest credit rating by Standard & Poor's Rating Services (S&P) or Moody's Investors Service (Moody's). Credit ratings express opinions about the credit quality of a security. Securities rated investment grade, that is those rated BBB- or higher by S&P or Baa3 or higher by Moody's, are generally considered by the rating agencies and market participants to be low credit risk. Conversely, securities rated below investment grade, labeled as "speculative grade" by the rating agencies, are considered to be distinctively higher credit risk than investment grade securities. We have also included securities not rated by S&P or Moody's in the table below based on our internal credit grade of the securities (used for credit risk management purposes) equivalent to the credit rating assigned by major credit agencies. The unrealized losses and fair value of unrated securities categorized as investment grade based on internal credit grades were \$63 million and \$4.0 billion, respectively, at September 30, 2016, and \$17 million and \$3.7 billion, respectively, at December 31, 2015. If an internal credit grade was not assigned, we categorized the security as non-investment grade.

Table 4.3: Gross Unrealized Losses and Fair Value by Investment Grade

(in millions)	Investment grade		Non-investment grade	
	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
September 30, 2016				
Available-for-sale securities:				
Securities of U.S. Treasury and federal agencies	\$ (2)	2,033	—	—
Securities of U.S. states and political subdivisions	(1,509)	33,572	(35)	330
Mortgage-backed securities:				
Federal agencies	(60)	8,482	—	—
Residential	(1)	150	(6)	439
Commercial	(20)	3,041	(47)	629
Total mortgage-backed securities	(81)	11,673	(53)	1,068
Corporate debt securities	(78)	1,417	(96)	1,024
Collateralized loan and other debt obligations	(48)	6,010	—	—
Other	(30)	2,043	(5)	368
Total debt securities	(1,748)	56,748	(189)	2,790
Perpetual preferred securities	(3)	56	—	—
Total available-for-sale securities	(1,751)	56,804	(189)	2,790
Held-to-maturity securities:				
Securities of U.S. Treasury and federal agencies	—	—	—	—
Securities of U.S. states and political subdivisions	(8)	799	—	—
Federal agency and other mortgage-backed securities	—	—	—	—
Collateralized loan obligations	(2)	285	—	—
Other	(1)	739	—	—
Total held-to-maturity securities	(11)	1,823	—	—
Total	\$ (1,762)	58,627	(189)	2,790
December 31, 2015				
Available-for-sale securities:				
Securities of U.S. Treasury and federal agencies	\$ (148)	24,795	—	—
Securities of U.S. states and political subdivisions	(464)	15,470	(38)	360
Mortgage-backed securities:				
Federal agencies	(828)	46,217	—	—
Residential	(12)	795	(13)	766
Commercial	(59)	6,361	(26)	478
Total mortgage-backed securities	(899)	53,373	(39)	1,244
Corporate debt securities	(140)	4,167	(309)	1,831
Collateralized loan and other debt obligations	(368)	27,058	—	—
Other	(43)	2,915	(3)	278
Total debt securities	(2,062)	127,778	(389)	3,713
Perpetual preferred securities	(13)	133	—	—
Total available-for-sale securities	(2,075)	127,911	(389)	3,713
Held-to-maturity securities:				
Securities of U.S. Treasury and federal agencies	(73)	5,264	—	—
Securities of U.S. states and political subdivisions	—	—	—	—
Federal agency and other mortgage-backed securities	(314)	23,115	—	—
Collateralized loan obligations	(24)	1,381	—	—
Other	(3)	1,096	—	—
Total held-to-maturity securities	(414)	30,856	—	—
Total	\$ (2,489)	158,767	(389)	3,713

Note 4: Investment Securities (continued)

Contractual Maturities

Table 4.4 shows the remaining contractual maturities and contractual weighted-average yields (taxable-equivalent basis) of available-for-sale debt securities. The remaining contractual principal maturities for MBS do not consider

prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay obligations before the underlying mortgages mature.

Table 4.4: Contractual Maturities

	Total		Remaining contractual maturity							
			Within one year		After one year through five years		After five years through ten years		After ten years	
(in millions)	amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
September 30, 2016										
Available-for-sale debt securities (1):										
Fair value:										
Securities of U.S. Treasury and federal agencies	\$ 26,376	1.44%	\$ 110	1.39%	\$ 25,217	1.42%	\$ 1,049	1.80%	\$ —	—%
Securities of U.S. states and political subdivisions	55,366	5.76	2,985	1.70	9,305	2.80	2,885	5.06	40,191	6.79
Mortgage-backed securities:										
Federal agencies	135,692	3.11	—	—	133	2.95	2,930	3.37	132,629	3.10
Residential	8,527	3.86	—	—	27	5.19	37	4.29	8,463	3.86
Commercial	9,860	4.82	—	—	—	—	31	3.15	9,829	4.82
Total mortgage-backed securities	154,079	3.26	—	—	160	3.33	2,998	3.38	150,921	3.26
Corporate debt securities	12,721	4.78	2,264	3.12	4,210	5.50	4,956	4.77	1,291	5.36
Collateralized loan and other debt obligations	35,445	2.53	1	1.03	361	1.32	16,965	2.48	18,118	2.61
Other	6,371	2.09	57	3.00	916	2.34	1,163	2.02	4,235	2.04
Total available-for-sale debt securities at fair value	\$ 290,358	3.52%	\$ 5,417	2.30%	\$ 40,169	2.20%	\$ 30,016	3.16%	\$ 214,756	3.85%
December 31, 2015										
Available-for-sale debt securities (1):										
Fair value:										
Securities of U.S. Treasury and federal agencies	\$ 36,250	1.49%	\$ 216	0.77%	\$ 31,602	1.44%	\$ 4,432	1.86%	\$ —	—%
Securities of U.S. states and political subdivisions	49,990	5.82	1,969	2.09	7,709	2.02	3,010	5.25	37,302	6.85
Mortgage-backed securities:										
Federal agencies	104,546	3.29	3	6.55	373	1.58	1,735	3.84	102,435	3.29
Residential	8,558	4.17	—	—	34	5.11	34	6.03	8,490	4.16
Commercial	14,088	5.06	—	—	61	2.79	—	—	14,027	5.07
Total mortgage-backed securities	127,192	3.54	3	6.55	468	1.99	1,769	3.88	124,952	3.55
Corporate debt securities	15,411	4.57	1,960	3.84	6,731	4.47	5,459	4.76	1,261	5.47
Collateralized loan and other debt obligations	30,967	2.08	2	0.33	804	0.90	12,707	2.01	17,454	2.19
Other	5,911	2.05	68	2.47	1,228	2.57	953	1.94	3,662	1.89
Total available-for-sale debt securities at fair value	\$ 265,721	3.55%	\$ 4,218	2.84%	\$ 48,542	1.98%	\$ 28,330	2.98%	\$ 184,631	4.07%

(1) Weighted-average yields displayed by maturity bucket are weighted based on fair value and predominantly represent contractual coupon rates without effect for any related hedging derivatives.

Table 4.5 shows the amortized cost and weighted-average yields of held-to-maturity debt securities by contractual maturity.

Table 4.5: Amortized Cost by Contractual Maturity

Remaining contractual maturity															
(in millions)	Total amount	Yield	Within one year		After one year through five years		After five years through ten years		After ten years						
			Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield					
September 30, 2016															
Held-to-maturity securities (1):															
Amortized cost:															
Securities of U.S. Treasury and federal agencies	\$	44,682	2.12%	\$	—	—%	\$	24,638	2.08%	\$	20,044	2.16%	\$	—	—%
Securities of U.S. states and political subdivisions		2,994	5.86		—	—		—	—		203	7.25		2,791	5.76
Federal agency and other mortgage-backed securities		47,721	3.24		—	—		—	—		—	—		47,721	3.24
Collateralized loan obligations		1,406	2.42		—	—		—	—		1,406	2.42		—	—
Other		2,438	1.69		—	—		1,790	1.69		648	1.68		—	—
Total held-to-maturity debt securities at amortized cost	\$	99,241	2.76%	\$	—	—%	\$	26,428	2.05%	\$	22,301	2.21%	\$	50,512	3.38%
December 31, 2015															
Held-to-maturity securities (1):															
Amortized cost:															
Securities of U.S. Treasury and federal agencies	\$	44,660	2.12 %	\$	—	—%	\$	1,276	1.75 %	\$	43,384	2.13 %	\$	—	—%
Securities of U.S. states and political subdivisions		2,185	5.97		—	—		—	—		104	7.49		2,081	5.89
Federal agency and other mortgage-backed securities		28,604	3.47		—	—		—	—		—	—		28,604	3.47
Collateralized loan obligations		1,405	2.03		—	—		—	—		—	—		1,405	2.03
Other		3,343	1.68		—	—		2,351	1.74		992	1.53		—	—
Total held-to-maturity debt securities at amortized cost	\$	80,197	2.69 %	\$	—	—%	\$	3,627	1.74 %	\$	44,480	2.13 %	\$	32,090	3.57 %

(1) Weighted-average yields displayed by maturity bucket are weighted based on amortized cost and predominantly represent contractual coupon rates.

Table 4.6 shows the fair value of held-to-maturity debt securities by contractual maturity.

Table 4.6: Fair Value by Contractual Maturity

		Remaining contractual maturity			
	Total	Within one year	After one year through five years	After five years through ten years	After ten years
(in millions)	amount	Amount	Amount	Amount	Amount
September 30, 2016					
Held-to-maturity securities:					
Fair value:					
Securities of U.S. Treasury and federal agencies	\$ 46,891	—	25,782	21,109	—
Securities of U.S. states and political subdivisions	3,107	—	—	213	2,894
Federal agency and other mortgage-backed securities	48,690	—	—	—	48,690
Collateralized loan obligations	1,411	—	—	1,411	—
Other	2,448	—	1,795	653	—
Total held-to-maturity debt securities at fair value	\$ 102,547	—	27,577	23,386	51,584
December 31, 2015					
Held-to-maturity securities:					
Fair value:					
Securities of U.S. Treasury and federal agencies	\$ 45,167	—	1,298	43,869	—
Securities of U.S. states and political subdivisions	2,250	—	—	105	2,145
Federal agency and other mortgage-backed securities	28,421	—	—	—	28,421
Collateralized loan obligations	1,381	—	—	—	1,381
Other	3,348	—	2,353	995	—
Total held-to-maturity debt securities at fair value	\$ 80,567	—	3,651	44,969	31,947

Note 4: Investment Securities (continued)

Realized Gains and Losses

Table 4.7 shows the gross realized gains and losses on sales and OTTI write-downs related to the available-for-sale securities

portfolio, which includes marketable equity securities, as well as net realized gains and losses on nonmarketable equity investments (see Note 6 (Other Assets)).

Table 4.7: Realized Gains and Losses

(in millions)	Quarter ended Sep 30,		Nine months ended Sep 30,	
	2016	2015	2016	2015
Gross realized gains	\$ 266	530	1,215	1,133
Gross realized losses	(23)	(21)	(67)	(57)
OTTI write-downs	(52)	(74)	(147)	(125)
Net realized gains from available-for-sale securities	191	435	1,001	951
Net realized gains from nonmarketable equity investments	55	632	369	1,462
Net realized gains from debt securities and equity investments	\$ 246	1,067	1,370	2,413

Other-Than-Temporary Impairment

Table 4.8 shows the detail of total OTTI write-downs included in earnings for available-for-sale debt securities, marketable equity

securities and nonmarketable equity investments. There were no OTTI write-downs on held-to-maturity securities during the first nine months of 2016 and 2015.

Table 4.8: OTTI Write-downs

(in millions)	Quarter ended Sep 30,		Nine months ended Sep 30,	
	2016	2015	2016	2015
OTTI write-downs included in earnings				
Debt securities:				
Securities of U.S. states and political subdivisions	\$ 30	2	40	18
Mortgage-backed securities:				
Residential	4	9	28	43
Commercial	10	3	11	3
Corporate debt securities	7	59	57	59
Other debt securities	—	—	6	—
Total debt securities	51	73	142	123
Equity securities:				
Marketable equity securities:				
Other marketable equity securities	1	1	5	2
Total marketable equity securities	1	1	5	2
Total investment securities (1)	52	74	147	125
Nonmarketable equity investments (1)	84	66	317	183
Total OTTI write-downs included in earnings (1)	\$ 136	140	464	308

(1) The quarter ended September 30, 2016, includes \$32 million in OTTI write-downs of oil and gas investments, of which \$6 million related to investment securities and \$26 million related to nonmarketable equity investments. Oil and gas related OTTI for the first nine months of 2016 totaled \$185 million, of which \$57 million related to investment securities and \$128 million related to nonmarketable equity investments.

Other-Than-Temporarily Impaired Debt Securities

Table 4.9 shows the detail of OTTI write-downs on available-for-sale debt securities included in earnings and the related changes in OCI for the same securities.

Table 4.9: OTTI Write-downs Included in Earnings

(in millions)	Quarter ended Sep 30,		Nine months ended Sep 30,	
	2016	2015	2016	2015
OTTI on debt securities				
Recorded as part of gross realized losses:				
Credit-related OTTI	\$ 21	70	102	109
Intent-to-sell OTTI	30	3	40	14
Total recorded as part of gross realized losses	51	73	142	123
Changes to OCI for losses (reversal of losses) in non-credit-related OTTI (1):				
Securities of U.S. states and political subdivisions	—	—	—	(1)
Residential mortgage-backed securities	(4)	(6)	1	(37)
Commercial mortgage-backed securities	(11)	2	(9)	(13)
Corporate debt securities	—	1	(13)	1
Other debt securities	—	—	2	—
Total changes to OCI for non-credit-related OTTI	(15)	(3)	(19)	(50)
Total OTTI losses recorded on debt securities	\$ 36	70	123	73

(1) Represents amounts recorded to OCI for impairment, due to factors other than credit, on debt securities that have also had credit-related OTTI write-downs during the period. Increases represent initial or subsequent non-credit-related OTTI on debt securities. Decreases represent partial to full reversal of impairment due to recoveries in the fair value of securities due to non-credit factors.

Table 4.10 presents a rollforward of the OTTI credit loss that has been recognized in earnings as a write-down of available-for-sale debt securities we still own (referred to as "credit-impaired" debt securities) and do not intend to sell. Recognized credit loss

represents the difference between the present value of expected future cash flows discounted using the security's current effective interest rate and the amortized cost basis of the security prior to considering credit loss.

Table 4.10: Rollforward of OTTI Credit Loss

(in millions)	Quarter ended Sep 30,		Nine months ended Sep 30,	
	2016	2015	2016	2015
Credit loss recognized, beginning of period	\$ 1,080	993	1,092	1,025
Additions:				
For securities with initial credit impairments	16	64	54	64
For securities with previous credit impairments	5	6	48	45
Total additions	21	70	102	109
Reductions:				
For securities sold, matured, or intended/required to be sold	(22)	(23)	(111)	(89)
For recoveries of previous credit impairments (1)	(2)	(1)	(6)	(6)
Total reductions	(24)	(24)	(117)	(95)
Credit loss recognized, end of period	\$ 1,077	1,039	1,077	1,039

(1) Recoveries of previous credit impairments result from increases in expected cash flows subsequent to credit loss recognition. Such recoveries are reflected prospectively as interest yield adjustments using the effective interest method.

Note 5: Loans and Allowance for Credit Losses

Table 5.1 presents total loans outstanding by portfolio segment and class of financing receivable. Outstanding balances include a total net reduction of \$4.5 billion and \$3.8 billion at September 30, 2016, and December 31, 2015, respectively, for unearned income, net deferred loan fees, and unamortized

discounts and premiums. Outstanding balances at September 30, 2016 also reflect the acquisition of various loans and capital leases from GE Capital as described in Note 2 (Business Combinations).

Table 5.1: Loans Outstanding

(in millions)	Sep 30, 2016	Dec 31, 2015
Commercial:		
Commercial and industrial	\$ 324,020	299,892
Real estate mortgage	130,223	122,160
Real estate construction	23,340	22,164
Lease financing	18,871	12,367
Total commercial	496,454	456,583
Consumer:		
Real estate 1-4 family first mortgage	278,689	273,869
Real estate 1-4 family junior lien mortgage	48,105	53,004
Credit card	34,992	34,039
Automobile	62,873	59,966
Other revolving credit and installment	40,213	39,098
Total consumer	464,872	459,976
Total loans	\$ 961,326	916,559

Our foreign loans are reported by respective class of financing receivable in the table above. Substantially all of our foreign loan portfolio is commercial loans. Loans are classified as foreign primarily based on whether the borrower's primary

address is outside of the United States. Table 5.2 presents total commercial foreign loans outstanding by class of financing receivable.

Table 5.2: Commercial Foreign Loans Outstanding

(in millions)	Sep 30, 2016	Dec 31, 2015
Commercial foreign loans:		
Commercial and industrial	\$ 51,515	49,049
Real estate mortgage	8,466	8,350
Real estate construction	310	444
Lease financing	958	274
Total commercial foreign loans	\$ 61,249	58,117

Loan Purchases, Sales, and Transfers

Table 5.3 summarizes the proceeds paid or received for purchases and sales of loans and transfers from loans held for investment to mortgages/loans held for sale at lower of cost or fair value. This loan activity also includes participating interests, whereby we

receive or transfer a portion of a loan. The table excludes PCI loans and loans for which we have elected the fair value option, including loans originated for sale because their loan activity normally does not impact the allowance for credit losses.

Table 5.3: Loan Purchases, Sales, and Transfers

(in millions)	2016			2015		
	Commercial (1)	Consumer (2)	Total	Commercial	Consumer (2)	Total
Quarter ended September 30,						
Purchases	\$ 1,902	—	1,902	1,818	29	1,847
Sales	(324)	(306)	(630)	(286)	(130)	(416)
Transfers to MHFS/LHFS	(44)	(1)	(45)	(39)	(7)	(46)
Nine months ended September 30,						
Purchases	\$ 29,155	—	29,155	12,648	340	12,988
Sales	(932)	(985)	(1,917)	(649)	(160)	(809)
Transfers to MHFS/LHFS	(145)	(5)	(150)	(91)	(14)	(105)

(1) Purchases include loans and capital leases from the GE Capital business acquisitions as described in Note 2 (Business Combinations).

(2) Excludes activity in government insured/guaranteed real estate 1-4 family first mortgage loans. As servicer, we are able to buy delinquent insured/guaranteed loans out of the Government National Mortgage Association (GNMA) pools, and manage and/or resell them in accordance with applicable requirements. These loans are predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). Accordingly, these loans have limited impact on the allowance for loan losses.

Commitments to Lend

A commitment to lend is a legally binding agreement to lend funds to a customer, usually at a stated interest rate, if funded, and for specific purposes and time periods. We generally require a fee to extend such commitments. Certain commitments are subject to loan agreements with covenants regarding the financial performance of the customer or borrowing base formulas on an ongoing basis that must be met before we are required to fund the commitment. We may reduce or cancel consumer commitments, including home equity lines and credit card lines, in accordance with the contracts and applicable law.

We may, as a representative for other lenders, advance funds or provide for the issuance of letters of credit under syndicated loan or letter of credit agreements. Any advances are generally repaid in less than a week and would normally require default of both the customer and another lender to expose us to loss. These temporary advance arrangements totaled approximately \$75 billion at both September 30, 2016 and December 31, 2015.

We issue commercial letters of credit to assist customers in purchasing goods or services, typically for international trade. At both September 30, 2016, and December 31, 2015, we had \$1.1 billion of outstanding issued commercial letters of credit. We also originate multipurpose lending commitments under which borrowers have the option to draw on the facility for different purposes in one of several forms, including a standby letter of credit. See Note 10 (Guarantees, Pledged Assets and Collateral) for additional information on standby letters of credit.

When we make commitments, we are exposed to credit risk. The maximum credit risk for these commitments will generally be lower than the contractual amount because a significant portion of these commitments is expected to expire without being used by the customer. In addition, we manage the potential risk in commitments to lend by limiting the total amount of commitments, both by individual customer and in total, by monitoring the size and maturity structure of these commitments and by applying the same credit standards for these commitments as for all of our credit activities.

For loans and commitments to lend, we generally require collateral or a guarantee. We may require various types of collateral, including commercial and consumer real estate,

automobiles, other short-term liquid assets such as accounts receivable or inventory and long-lived assets, such as equipment and other business assets. Collateral requirements for each loan or commitment may vary based on the loan product and our assessment of a customer's credit risk according to the specific credit underwriting, including credit terms and structure.

The contractual amount of our unfunded credit commitments, including unissued standby and commercial letters of credit, is summarized by portfolio segment and class of financing receivable in Table 5.4. The table excludes the standby and commercial letters of credit and temporary advance arrangements described above.

Table 5.4: Unfunded Credit Commitments

(in millions)	Sep 30, 2016	Dec 31, 2015
Commercial:		
Commercial and industrial	\$ 309,075	296,710
Real estate mortgage	7,807	7,378
Real estate construction	18,735	18,047
Lease financing	17	—
Total commercial	335,634	322,135
Consumer:		
Real estate 1-4 family first mortgage	39,066	34,621
Real estate 1-4 family junior lien mortgage	41,974	43,309
Credit card	102,252	98,904
Other revolving credit and installment	28,584	27,899
Total consumer	211,876	204,733
Total unfunded credit commitments	\$ 547,510	526,868

Note 5: Loans and Allowance for Credit Losses (continued)

Allowance for Credit Losses

Table 5.5 presents the allowance for credit losses, which consists of the allowance for loan losses and the allowance for unfunded credit commitments.

Table 5.5: Allowance for Credit Losses

(in millions)	Quarter ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Balance, beginning of period	\$ 12,749	12,614	12,512	13,169
Provision for credit losses	805	703	2,965	1,611
Interest income on certain impaired loans (1)	(54)	(48)	(153)	(150)
Loan charge-offs:				
Commercial:				
Commercial and industrial	(324)	(172)	(1,110)	(459)
Real estate mortgage	(7)	(9)	(13)	(48)
Real estate construction	—	—	(1)	(2)
Lease financing	(4)	(5)	(25)	(11)
Total commercial	(335)	(186)	(1,149)	(520)
Consumer:				
Real estate 1-4 family first mortgage	(106)	(145)	(366)	(394)
Real estate 1-4 family junior lien mortgage	(119)	(159)	(385)	(501)
Credit card	(296)	(259)	(930)	(821)
Automobile	(215)	(186)	(602)	(531)
Other revolving credit and installment	(170)	(160)	(508)	(465)
Total consumer	(906)	(909)	(2,791)	(2,712)
Total loan charge-offs	(1,241)	(1,095)	(3,940)	(3,232)
Loan recoveries:				
Commercial:				
Commercial and industrial	65	50	210	192
Real estate mortgage	35	32	90	97
Real estate construction	18	8	30	25
Lease financing	2	2	10	6
Total commercial	120	92	340	320
Consumer:				
Real estate 1-4 family first mortgage	86	83	284	182
Real estate 1-4 family junior lien mortgage	70	70	200	195
Credit card	51	43	153	123
Automobile	78	73	248	249
Other revolving credit and installment	31	31	100	102
Total consumer	316	300	985	851
Total loan recoveries	436	392	1,325	1,171
Net loan charge-offs	(805)	(703)	(2,615)	(2,061)
Other	(1)	(4)	(15)	(7)
Balance, end of period	\$ 12,694	12,562	12,694	12,562
Components:				
Allowance for loan losses	\$ 11,583	11,659	11,583	11,659
Allowance for unfunded credit commitments	1,111	903	1,111	903
Allowance for credit losses	\$ 12,694	12,562	12,694	12,562
Net loan charge-offs (annualized) as a percentage of average total loans	0.33%	0.31	0.37	0.31
Allowance for loan losses as a percentage of total loans	1.20	1.29	1.20	1.29
Allowance for credit losses as a percentage of total loans	1.32	1.39	1.32	1.39

(1) Certain impaired loans with an allowance calculated by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize changes in allowance attributable to the passage of time as interest income.

Table 5.6 summarizes the activity in the allowance for credit losses by our commercial and consumer portfolio segments.

Table 5.6: Allowance Activity by Portfolio Segment

(in millions)	2016			2015		
	Commercial	Consumer	Total	Commercial	Consumer	Total
Quarter ended September 30,						
Balance, beginning of period	\$ 7,441	5,308	12,749	6,279	6,335	12,614
Provision for credit losses	158	647	805	348	355	703
Interest income on certain impaired loans	(14)	(40)	(54)	(3)	(45)	(48)
Loan charge-offs	(335)	(906)	(1,241)	(186)	(909)	(1,095)
Loan recoveries	120	316	436	92	300	392
Net loan charge-offs	(215)	(590)	(805)	(94)	(609)	(703)
Other	(1)	—	(1)	(4)	—	(4)
Balance, end of period	\$ 7,369	5,325	12,694	6,526	6,036	12,562
Nine months ended September 30,						
Balance, beginning of period	\$ 6,872	5,640	12,512	6,377	6,792	13,169
Provision for credit losses	1,350	1,615	2,965	368	1,243	1,611
Interest income on certain impaired loans	(29)	(124)	(153)	(12)	(138)	(150)
Loan charge-offs	(1,149)	(2,791)	(3,940)	(520)	(2,712)	(3,232)
Loan recoveries	340	985	1,325	320	851	1,171
Net loan charge-offs	(809)	(1,806)	(2,615)	(200)	(1,861)	(2,061)
Other	(15)	—	(15)	(7)	—	(7)
Balance, end of period	\$ 7,369	5,325	12,694	6,526	6,036	12,562

Table 5.7 disaggregates our allowance for credit losses and recorded investment in loans by impairment methodology.

Table 5.7: Allowance by Impairment Methodology

(in millions)	Allowance for credit losses			Recorded investment in loans		
	Commercial	Consumer	Total	Commercial	Consumer	Total
September 30, 2016						
Collectively evaluated (1)	\$ 6,254	3,531	9,785	489,945	430,259	920,204
Individually evaluated (2)	1,113	1,794	2,907	5,672	17,741	23,413
PCI (3)	2	—	2	837	16,872	17,709
Total	\$ 7,369	5,325	12,694	496,454	464,872	961,326
December 31, 2015						
Collectively evaluated (1)	\$ 5,999	3,436	9,435	452,063	420,705	872,768
Individually evaluated (2)	872	2,204	3,076	3,808	20,012	23,820
PCI (3)	1	—	1	712	19,259	19,971
Total	\$ 6,872	5,640	12,512	456,583	459,976	916,559

(1) Represents loans collectively evaluated for impairment in accordance with Accounting Standards Codification (ASC) 450-20, *Loss Contingencies* (formerly FAS 5), and pursuant to amendments by ASU 2010-20 regarding allowance for non-impaired loans.

(2) Represents loans individually evaluated for impairment in accordance with ASC 310-10, *Receivables* (formerly FAS 114), and pursuant to amendments by ASU 2010-20 regarding allowance for impaired loans.

(3) Represents the allowance and related loan carrying value determined in accordance with ASC 310-30, *Receivables – Loans and Debt Securities Acquired with Deteriorated Credit Quality* (formerly SOP 03-3) and pursuant to amendments by ASU 2010-20 regarding allowance for PCI loans.

Credit Quality

We monitor credit quality by evaluating various attributes and utilize such information in our evaluation of the appropriateness of the allowance for credit losses. The following sections provide the credit quality indicators we most closely monitor. The credit quality indicators are generally based on information as of our financial statement date, with the exception of updated Fair Isaac Corporation (FICO) scores and updated loan-to-value (LTV)/

combined LTV (CLTV). We obtain FICO scores at loan origination and the scores are generally updated at least quarterly, except in limited circumstances, including compliance with the Fair Credit Reporting Act (FCRA). Generally, the LTV and CLTV indicators are updated in the second month of each quarter, with updates no older than June 30, 2016. See the “Purchased Credit-Impaired Loans” section in this Note for credit quality information on our PCI portfolio.