

The components of the changes in net interest income on a fully tax-equivalent basis by volume and rate were as follows:

(In thousands)	Year Ended					
	December 31, 2016			December 31, 2015		
	Versus December 31, 2015			Versus December 31, 2014		
	Increase (Decrease) Due to			Increase (Decrease) Due to		
	Volume ⁽¹⁾	Rate ⁽¹⁾	Total	Volume ⁽¹⁾	Rate ⁽¹⁾	Total
Interest income:						
Investments and other	\$ (5,442)	\$ 2,462	\$ (2,980)	\$ (1,645)	\$ (1,451)	\$ (3,096)
Securities held to maturity	(415)	(422)	(837)	245	(40)	205
Securities available for sale:						
Taxable	3,588	(1,280)	2,308	2,952	(1,016)	1,936
Tax-exempt	13,306	(49)	13,257	2,643	—	2,643
Loans and leases held for sale	16,026	(2,144)	13,882	2,325	2,313	4,638
Loans and leases:						
Consumer real estate:						
Fixed-rate	(24,650)	(2,025)	(26,675)	(37,621)	4,076	(33,545)
Variable- and adjustable-rate	1,795	5,354	7,149	6,317	22	6,339
Total consumer real estate	(22,030)	2,504	(19,526)	(28,753)	1,547	(27,206)
Commercial:						
Fixed-rate	(9,963)	(1,629)	(11,592)	(14,924)	209	(14,715)
Variable- and adjustable-rate	7,496	1,823	9,319	11,580	(1,353)	10,227
Total commercial	(378)	(1,895)	(2,273)	(42)	(4,446)	(4,488)
Leasing and equipment finance	13,635	(6,171)	7,464	12,662	(4,071)	8,591
Inventory finance	14,769	2,885	17,654	15,346	(5,150)	10,196
Auto finance	16,747	(559)	16,188	29,633	(3,765)	25,868
Other	(50)	(114)	(164)	(128)	(91)	(219)
Total loans and leases	26,962	(7,619)	19,343	35,838	(23,096)	12,742
Total interest income	52,032	(7,059)	44,973	43,114	(24,046)	19,068
Interest expense:						
Deposits:						
Checking	12	(213)	(201)	26	(400)	(374)
Savings	(152)	(1,343)	(1,495)	(987)	(4,351)	(5,338)
Money market	1,342	(465)	877	5,817	1,388	7,205
Certificates of deposit	8,843	5,538	14,381	4,221	4,127	8,348
Total deposits	3,620	9,942	13,562	2,701	7,140	9,841
Borrowings:						
Short-term borrowings	(48)	46	(2)	(187)	(21)	(208)
Long-term borrowings	(5,116)	2,638	(2,478)	(3,191)	6,500	3,309
Total borrowings	(5,327)	2,847	(2,480)	(4,161)	7,262	3,101
Total interest expense	3,447	7,635	11,082	2,268	10,674	12,942
Net interest income	\$ 47,783	\$ (13,892)	\$ 33,891	\$ 40,037	\$ (33,911)	\$ 6,126

(1) Changes attributable to the combined impact of volume and rate have been allocated proportionately to the change due to volume and the change due to rate. Changes due to volume and rate are calculated independently for each line item presented.

Provision for Credit Losses The provision for credit losses is calculated as part of the determination of the allowance for loan and lease losses, which is a critical accounting estimate. TCF's evaluation of incurred losses is based upon historical loss rates multiplied by the respective portfolio's loss emergence period. Factors utilized in the determination and allocation of the allowance for loan and lease losses and the related provision for credit losses include historical trends in loss rates, a portfolio's overall risk characteristics, changes in its character or size, risk rating migration, delinquencies, collateral values, economic outlook and prevailing economic conditions.

The composition of TCF's provision for credit losses for the years ended December 31, 2016, 2015 and 2014 was as follows:

(Dollars in thousands)	Year Ended December 31,						Change			
	2016		2015		2014		2016 / 2015		2015 / 2014	
Consumer real estate	\$ 9,304	14.1%	\$ 12,697	24.0%	\$ 63,973	66.8 %	\$ (3,393)	(26.7)%	\$(51,276)	(80.2)%
Commercial	2,890	4.4	298	0.6	(259)	(0.3)	2,592	N.M.	557	N.M.
Leasing and equipment finance	7,706	11.7	5,411	10.2	3,324	3.5	2,295	42.4	2,087	62.8
Inventory finance	4,540	6.9	3,036	5.7	2,498	2.6	1,504	49.5	538	21.5
Auto finance	39,149	59.4	28,943	54.7	23,742	24.8	10,206	35.3	5,201	21.9
Other	2,285	3.5	2,559	4.8	2,459	2.6	(274)	(10.7)	100	4.1
Total	\$ 65,874	100.0%	\$ 52,944	100.0%	\$ 95,737	100.0 %	\$ 12,930	24.4	\$(42,793)	(44.7)

N.M. Not Meaningful.

TCF's provision for credit losses was \$65.9 million for 2016, compared with \$52.9 million and \$95.7 million for 2015 and 2014, respectively. The provision for credit losses increased \$12.9 million, or 24.4% in 2016 and decreased \$42.8 million, or 44.7% in 2015. The allowance as a percent of total loans and leases was 0.90%, 0.90% and 1.00% as of December 31, 2016, 2015 and 2014, respectively. The decrease in the allowance as a percent of total loans and leases from 2014 was driven primarily by reduced reserves in the consumer real estate portfolio resulting from improved home values. The 2015 provision includes the benefit from the reduced reserves. The increase in the provision for credit losses in 2016 was primarily due to the benefit from reduced reserves in 2015 and growth in the overall loan and lease portfolio, partially offset by decreased net charge-offs. The decrease in 2015 was primarily driven by the sale of consumer real estate troubled debt restructuring ("TDR") loans in the fourth quarter of 2014 and improved credit quality in the consumer real estate portfolio, partially offset by an increase in provision for credit losses in the auto finance portfolio due to growth and maturation of the portfolio.

Net loan and lease charge-offs for 2016 were \$45.2 million, or 0.26% of average loans and leases, compared with \$51.5 million, or 0.30% of average loans and leases for 2015 and \$79.3 million, or 0.49% of average loans and leases for 2014. The decrease in 2016 was primarily due to improved credit quality in the consumer real estate portfolio, partially offset by increased net charge-offs in the auto finance portfolio. The decrease in 2015 was primarily due to lower incidents of default and improved home values in the consumer real estate portfolio due to the improving economy.

For additional information, see "Consolidated Financial Condition Analysis — Credit Quality" in this Management's Discussion and Analysis and Note 6, Allowance for Loan and Lease Losses and Credit Quality Information of Notes to Consolidated Financial Statements.

Non-interest Income Non-interest income is a significant source of revenue for TCF, representing 35.5% of total revenue for 2016, compared with 35.0% and 34.7% for 2015 and 2014, respectively, and is an important factor in TCF's results of operations. Non-interest income was \$465.9 million for 2016, compared with \$442.0 million and \$433.3 million for 2015 and 2014, respectively. Non-interest income increased \$23.9 million, or 5.4 percent in 2016 and increased \$8.7 million, or 2.0 percent in 2015.

The components of non-interest income were as follows:

(Dollars in thousands)	Year Ended December 31,			Change	
	2016	2015	2014	2016 / 2015	2015 / 2014
Fees and service charges	\$ 137,664	\$ 144,999	\$ 154,386	(5.1)%	(6.1)%
Card revenue	54,882	54,387	51,323	0.9	6.0
ATM revenue	20,445	21,544	22,225	(5.1)	(3.1)
Subtotal	212,991	220,930	227,934	(3.6)	(3.1)
Gains on sales of auto loans, net	34,832	30,580	43,565	13.9	(29.8)
Gains on sales of consumer real estate loans, net	50,427	40,964	34,794	23.1	17.7
Servicing fee income	40,182	31,229	21,444	28.7	45.6
Subtotal	125,441	102,773	99,803	22.1	3.0
Leasing and equipment finance	119,166	108,129	93,799	10.2	15.3
Other	8,883	10,463	10,704	(15.1)	(2.3)
Fees and other revenue	466,481	442,295	432,240	5.5	2.3
Gains (losses) on securities, net	(581)	(297)	1,027	(95.6)	N.M.
Total non-interest income	\$ 465,900	\$ 441,998	\$ 433,267	5.4	2.0
Total non-interest income as a percentage of total revenue	35.5%	35.0%	34.7%		

N.M. Not Meaningful.

Fees and Service Charges Fees and service charges totaled \$137.7 million for 2016, compared with \$145.0 million and \$154.4 million for 2015 and 2014, respectively. The decreases in both periods were primarily due to ongoing consumer behavior changes, as well as higher average checking account balances per customer.

Gains on Sales of Auto Loans, Net Net gains on sales of auto loans totaled \$34.8 million for 2016, compared with \$30.6 million and \$43.6 million for 2015 and 2014, respectively. The increase in 2016 was primarily due to increased volume of loans sold, partially offset by a strong competitive environment and challenging market conditions. The decrease in 2015 was primarily due to a stronger competitive environment and an increase in transaction costs, partially offset by an increase in auto loans sold. See Note 5, Loans and Leases of Notes to Consolidated Financial Statements for additional information.

Gains on Sales of Consumer Real Estate Loans, Net Net gains on sales of consumer real estate loans totaled \$50.4 million for 2016, compared with \$41.0 million and \$34.8 million for 2015 and 2014, respectively. The increase in 2016 was primarily due to increased volume of loans sold. The increase in 2015 was primarily due to a net loss of \$4.8 million in 2014 related to the TDR loan sale. See Note 5, Loans and Leases of Notes to Consolidated Financial Statements for additional information.

Servicing Fee Income Servicing fee income totaled \$40.2 million for 2016, compared with \$31.2 million and \$21.4 million for 2015 and 2014, respectively. The increases from both periods were primarily due to the cumulative effect of the increases in the portfolios of auto and consumer real estate loans sold with servicing retained by TCF. Average loans and leases serviced for others was \$4.9 billion for 2016, compared with \$3.8 billion and \$2.7 billion for 2015 and 2014, respectively.

Leasing and Equipment Finance Leasing and equipment finance income totaled \$119.2 million for 2016, compared with \$108.1 million and \$93.8 million for 2015 and 2014, respectively. The increase in 2016 was primarily due to higher operating lease and sales-type lease revenue. The increase in 2015 was primarily due to higher operating lease revenue.

Non-interest Expense Non-interest expense totaled \$909.9 million for 2016, compared with \$894.7 million and \$871.8 million for 2015 and 2014, respectively. Non-interest expense increased \$15.1 million, or 1.7%, in 2016 and increased \$23.0 million, or 2.6%, in 2015.

The components of non-interest expense were as follows:

(Dollars in thousands)	Year Ended December 31,			Change	
	2016	2015	2014	2016 / 2015	2015 / 2014
Compensation and employee benefits	\$ 474,722	\$ 457,743	\$ 452,942	3.7%	1.1%
Occupancy and equipment	149,980	144,962	139,023	3.5	4.3
Other	231,420	229,255	227,970	0.9	0.6
Subtotal	856,122	831,960	819,935	2.9	1.5
Operating lease depreciation	40,359	39,409	27,152	2.4	45.1
Foreclosed real estate and repossessed assets, net	13,187	23,193	24,567	(43.1)	(5.6)
Other credit costs, net	219	185	123	18.4	50.4
Total non-interest expense	\$ 909,887	\$ 894,747	\$ 871,777	1.7	2.6

Compensation and Employee Benefits Compensation and employee benefits expense totaled \$474.7 million for 2016, compared with \$457.7 million and \$452.9 million for 2015 and 2014, respectively. The increase in 2016 was primarily due to higher commissions and incentives, partially offset by the annual pension plan valuation adjustment. The increase in 2015 was primarily due to the increased staff levels to support the growth of auto finance and further build-out of the risk management function, partially offset by non-recurring items, including the annual pension plan valuation adjustment resulting from an increase to the discount rate.

Other Non-interest Expense Other non-interest expense totaled \$231.4 million for 2016, compared with \$229.3 million and \$228.0 million for 2015 and 2014, respectively. The increase in 2016 was primarily due to increases in (i) branch realignment expense related to the closure of two traditional branches and 33 supermarket branches and the pending closures of 17 supermarket branches, (ii) loan and lease processing expense due to increases in loan and lease originations and (iii) outside processing expense, partially offset by decreased FDIC insurance expense due to a lower assessment rate. The increase in 2015 was primarily due to increased loan and lease processing expense due to increases in loan originations, partially offset by decreased FDIC insurance expense due to a lower assessment rate primarily as a result of the TDR loan sale and improved credit metrics. See Note 21, Other Expense of Notes to Consolidated Financial Statements for additional information.

Foreclosed Real Estate and Repossessed Assets, Net Net expenses related to foreclosed real estate and repossessed assets totaled \$13.2 million for 2016, compared with \$23.2 million and \$24.6 million for 2015 and 2014, respectively. The decrease in 2016 was primarily due to lower operating costs associated with maintaining fewer properties, lower write-downs on existing foreclosed commercial and consumer properties and higher gains on sales of commercial and consumer properties, partially offset by higher repossessed assets expense. The decrease in 2015 was primarily due to lower operating costs associated with maintaining fewer properties and lower write-downs on existing foreclosed commercial properties.

Income Taxes Income tax expense was 34.5% of income before income tax expense for 2016, compared with 34.6% and 35.5% for 2015 and 2014, respectively. The lower effective income tax rates in 2016 and 2015 were primarily due to increased investments in tax-exempt securities.

Reportable Segment Results

Effective January 1, 2016, the Company changed its reportable segments to align with the way the Company is now managed. The revised presentation of previously reported segment data has been applied retroactively to all periods presented in these financial statements. The new reportable segments are Consumer Banking, Wholesale Banking and Enterprise Services. Previously, the Company's reportable segments were Lending, Funding and Support Services. See Note 22, Business Segments of Notes to Consolidated Financial Statements for information regarding net income (loss), assets and revenues for each of TCF's reportable segments.

Consumer Banking

Consumer Banking is comprised of all of the Company's consumer-facing businesses and includes retail banking, consumer real estate and auto finance. TCF's consumer banking strategy is primarily to generate deposits to use for funding high credit quality secured loans and leases. Loans are originated for investment and for sale. Deposits are generated from consumers and small businesses to provide a source of low cost funds, with a focus on building and maintaining quality customer relationships. The Consumer Banking reportable segment generates a significant portion of the Company's net interest income and non-interest income from fees and service charges, card revenue, ATM revenue, gains on sales of loans and servicing fee income and incurs a significant portion of the Company's provision for credit losses and non-interest expense.

Consumer Banking generated net income available to common stockholders of \$124.0 million for 2016, compared with \$105.5 million and \$80.4 million for 2015 and 2014, respectively.

Consumer Banking net interest income totaled \$559.9 million for 2016, compared with \$536.7 million and \$511.7 million for 2015 and 2014, respectively. Net interest income increased \$23.1 million, or 4.3% in 2016 and increased \$25.1 million, or 4.9% in 2015. The increase in 2016 was primarily due to higher interest income related to funds transfer pricing driven by an increase in deposits and higher average balances of auto finance loans and loans held for sale, partially offset by lower interest income from consumer real estate first mortgage lien loan balances due to run-off and higher interest expense on certificates of deposit due to growth and higher rates paid as a result of special campaigns to fund loan growth. The increase in 2015 was primarily due to higher average balances of auto finance loans, partially offset by margin reduction resulting from the competitive, low interest rate environment and lower interest income from consumer real estate first mortgage lien loan balances due to run-off.

Consumer Banking provision for credit losses totaled \$50.8 million for 2016, compared with \$44.3 million and \$89.9 million for 2015 and 2014, respectively. The provision for credit losses increased \$6.5 million, or 14.6% in 2016 and decreased \$45.6 million, or 50.7% in 2015. The allowance for credit losses as a percent of consumer banking loans was 1.19% and 1.18% at December 31, 2016 and 2015, respectively. The increase in the provision for credit losses in 2016 was primarily due to the benefit from reduced reserve requirements in 2015 for the consumer real estate portfolio partially offset by decreased net charge-offs. The decrease in the provision for credit losses in 2015 was primarily driven by the sale of consumer real estate TDR loans in the fourth quarter of 2014 and improved credit quality in the consumer real estate portfolio, partially offset by an increase in provision for credit losses in the auto finance portfolio due to growth and maturation of the portfolio.

Consumer Banking non-interest income totaled \$337.0 million for 2016, compared with \$320.4 million and \$326.0 million for 2015 and 2014, respectively. Non-interest income increased \$16.6 million, or 5.2% in 2016 and decreased \$5.6 million, or 1.7% in 2015. The increase in 2016 was primarily due to increases in net gains on sales of consumer real estate and auto loans and an increase in servicing fee income due to the cumulative effect of the increase in the portfolio of loans sold with servicing retained by TCF, partially offset by a decrease in fees and service charges. The decrease in 2015 was primarily due to decreases in net gains on sales of auto loans and fees and service charges, partially offset by increases in servicing fee income and net gains on sales of consumer real estate loans. Fees and service charges attributable to the Consumer Banking segment totaled \$130.5 million for 2016, compared with \$138.7 million and \$148.6 million for 2015 and 2014, respectively. The decreases in both periods were primarily due to ongoing consumer behavior changes, as well as higher average checking account balances per customer. Net gains on sales of auto loans totaled \$34.8 million for 2016, compared with \$30.6 million and \$43.6 million for 2015 and 2014, respectively. Net gains on sales of consumer real estate loans totaled \$50.4 million for 2016, compared with \$41.0 million and \$34.3 million for 2015 and 2014, respectively. Servicing fee income attributable to the Consumer Banking segment totaled \$38.6 million for 2016, compared with \$29.0 million and \$19.2 million for 2015 and 2014, respectively. Average consumer real estate and auto finance loans serviced for others were \$4.7 billion for 2016, compared with \$3.6 billion in 2015 and \$2.5 billion in 2014.

Consumer Banking non-interest expense totaled \$652.5 million for 2016, compared with \$645.9 million and \$619.5 million for 2015 and 2014, respectively. Non-interest expense increased \$6.5 million, or 1.0% in 2016 and increased \$26.4 million, or 4.3% in 2015. The increase in 2016 was primarily due to higher occupancy and equipment expense and branch realignment expense of \$3.9 million related to the closure of two traditional branches and 33 supermarket branches and the pending closures of 17 supermarket branches. There was no branch realignment expense in 2015. These increases were partially offset by a decrease in net expense related to foreclosed real estate and repossessed assets due to lower operating costs associated with maintaining fewer consumer properties, higher gains on sales of consumer properties and lower write-downs on existing foreclosed consumer properties, as well as a decrease in FDIC insurance expense due to a lower assessment rate. The increase in 2015 was primarily due to increased staff levels to support the growth of auto finance and further build out of the risk management function and an increase in net expense related to foreclosed real estate and repossessed assets due to higher write-downs on existing foreclosed consumer properties.

Wholesale Banking

Wholesale Banking is comprised of commercial real estate and business lending, leasing and equipment finance and inventory finance. TCF's wholesale banking strategy is primarily to originate high credit quality secured loans and leases for investment.

Wholesale Banking generated net income available to common stockholders of \$130.0 million for 2016, compared with \$127.3 million and \$114.9 million for 2015 and 2014, respectively.

Wholesale Banking net interest income totaled \$343.7 million for 2016, compared with \$339.9 million and \$326.3 million for 2015 and 2014, respectively. Net interest income increased \$3.7 million, or 1.1% in 2016 and increased \$13.6 million, or 4.2% in 2015. The increase in 2016 was primarily due to higher average loan and lease balances in the leasing and equipment finance and inventory finance portfolios, partially offset by higher interest expense related to funds transfer pricing driven by a combination of higher average loan and lease balances and an increase in funds transfer pricing rates. The increase in 2015 was primarily driven by higher average loan and lease balances in the leasing and equipment finance and inventory finance portfolios, partially offset by margin reduction resulting from the competitive, low interest rate environment.

Wholesale Banking provision for credit losses totaled \$15.1 million for 2016, compared with \$8.6 million and \$5.8 million for 2015 and 2014, respectively. The provision for credit losses increased \$6.4 million, or 74.7% in 2016 and increased \$2.8 million, or 47.5% in 2015. The increases from both periods were primarily due to increased reserve requirements related to overall growth in the Wholesale Banking loan and lease portfolio.

Wholesale Banking non-interest income totaled \$128.9 million for 2016, compared with \$119.8 million and \$105.6 million for 2015 and 2014, respectively. Non-interest income increased \$9.1 million, or 7.6% in 2016 and increased \$14.2 million, or 13.4% in 2015. The increase in 2016 was primarily due to an increase in leasing and equipment finance income due to higher operating lease and sales-type lease revenue. The increase in 2015 was primarily due to an increase in leasing and equipment finance income related to higher operating lease revenue.

Wholesale Banking non-interest expense totaled \$247.1 million for 2016, compared with \$244.9 million and \$237.2 million for 2015 and 2014, respectively. Non-interest expense increased \$2.2 million, or 0.9% in 2016 and increased \$7.7 million, or 3.2% in 2015. The increase in 2016 was primarily due to an increase in allocated costs due to the further build-out of risk management and credit, partially offset by a decrease in compensation and benefits expense, a decrease in net expense related to foreclosed real estate and repossessed assets due to lower write-downs on existing foreclosed commercial properties and lower operating costs associated with maintaining fewer commercial properties and a decrease in occupancy and equipment expense. The increase in 2015 was primarily due to increased operating lease depreciation resulting from increased leasing and equipment finance operating lease revenue.

Enterprise Services

Enterprise Services is comprised of (i) corporate treasury, which includes the Company's investment and borrowing portfolios and management of capital, debt and market risks, (ii) corporate functions, such as information technology, risk and credit management, bank operations, finance, investor relations, corporate development, legal and human resources, that provide services to the operating segments, (iii) the Holding Company and (iv) eliminations. The Company's investment portfolio accounts for the earning assets within this segment. Borrowings may be used to offset reductions in deposits or to support lending activities. This segment also includes residual revenues and expenses representing the difference between actual amounts incurred by Enterprise Services and amounts allocated to the operating segments, including interest rate risk residuals, such as funds transfer pricing mismatches.

Enterprise Services generated a net loss available to common stockholders of \$61.3 million for 2016, compared with \$55.1 million and \$40.5 million for 2015 and 2014, respectively.

Enterprise Services net interest expense totaled \$55.4 million for 2016, compared with \$56.3 million and \$22.3 million for 2015 and 2014, respectively. Net interest expense decreased \$0.9 million, or 1.5% in 2016 and increased \$33.9 million, or 152.0% in 2015. The decrease in 2016 was primarily driven by an increase in interest income attributable to higher average balances of securities available for sale and a decrease in borrowing expense, partially offset by an increase in funds transfer pricing mismatches. The increase in 2015 was primarily driven by an increase in funds transfer pricing mismatches and an increase in borrowing expense, partially offset by an increase in interest income attributable to higher average balances of securities available for sale.

Enterprise Services non-interest income totaled \$28.0 thousand for 2016, compared with \$1.8 million and \$1.6 million for 2015 and 2014, respectively. Non-interest income decreased \$1.8 million, or 98.5% in 2016 and increased \$0.2 million, or 14.1% in 2015. The decrease in 2016 was primarily due to a gain of \$1.7 million related to appreciation of an investment that was donated to the TCF Foundation in the first quarter of 2015.

Enterprise Services non-interest expense totaled \$10.3 million for 2016, compared with \$3.9 million and \$15.0 million for 2015 and 2014, respectively. Non-interest expense increased \$6.4 million, or 165.3% in 2016 and decreased \$11.1 million, or 74.1% in 2015. The increase in 2016 was primarily due to an increase in compensation and benefits expense, partially offset by an increase in recoveries of allocated expenses, a decrease in occupancy and equipment expense and the annual pension plan valuation adjustment. The decrease in 2015 was primarily due to an increase in recoveries of allocated expenses, partially offset by an increase in occupancy and equipment expense.

Consolidated Financial Condition Analysis

Securities Available for Sale and Securities Held to Maturity Total securities available for sale were \$1.4 billion at December 31, 2016, an increase of 60.1% from \$0.9 billion at December 31, 2015. TCF's securities available for sale portfolio consists primarily of fixed-rate mortgage-backed securities issued by the Federal National Mortgage Association ("Fannie Mae") and obligations of states and political subdivisions. Total securities held to maturity were \$181.3 million at December 31, 2016, a decrease of 10.2% from \$201.9 million at December 31, 2015. TCF's securities held to maturity portfolio consists primarily of fixed-rate mortgage-backed securities issued by Fannie Mae. TCF may, from time to time, sell securities available for sale and utilize the proceeds to reduce borrowings, fund growth in loans and leases or for other corporate purposes.

The amortized cost, fair value and fully tax-equivalent yield of securities available for sale and securities held to maturity by final contractual maturity at December 31, 2016 and 2015 were as follows. The remaining contractual principal maturities do not consider possible prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay.

(Dollars in thousands)	At December 31,					
	2016			2015		
	Amortized Cost	Fair Value	Tax-equivalent Yield	Amortized Cost	Fair Value	Tax-equivalent Yield
Securities available for sale:						
Mortgage-backed securities:						
Due in one year or less	\$ 1	\$ 1	8.02%	\$ 1	\$ 1	9.00%
Due in 1-5 years	18	18	2.28	38	38	2.65
Due in 5-10 years	54,202	54,429	1.93	70,338	70,350	1.93
Due after 10 years	773,519	756,461	2.25	557,178	551,575	2.46
Obligations of states and political subdivisions:						
Due in 5-10 years	277,228	274,576	3.13	198,300	202,161	3.19
Due after 10 years	351,744	337,950	3.20	63,889	64,760	3.40
Total securities available for sale	\$ 1,456,712	\$ 1,423,435	2.63	\$ 889,744	\$ 888,885	2.65
Securities held to maturity:						
Mortgage-backed securities:						
Due after 10 years	\$ 178,514	\$ 181,146	2.54%	\$ 198,520	\$ 203,553	2.64%
Other securities:						
Due in one year or less	—	—	—	100	100	2.00
Due in 1-5 years	1,400	1,400	2.86	1,900	1,900	2.63
Due in 5-10 years	1,400	1,400	3.36	1,400	1,400	3.36
Total securities held to maturity	\$ 181,314	\$ 183,946	2.55	\$ 201,920	\$ 206,953	2.64

Loans and Leases Information about loans and leases held in TCF's portfolio was as follows:

(Dollars in thousands)	At December 31,					Compound Annual Growth Rate	
	2016	2015	2014	2013	2012	1-Year	5-Year
						2016 / 2015	2016 / 2011
Consumer real estate:							
First mortgage lien	\$ 2,292,596	\$ 2,624,956	\$ 3,139,152	\$ 3,766,421	\$ 4,239,524	(12.7)%	(13.5)%
Junior lien	2,791,756	2,839,316	2,543,212	2,572,905	2,434,977	(1.7)	5.3
Total consumer real estate	5,084,352	5,464,272	5,682,364	6,339,326	6,674,501	(7.0)	(5.9)
Commercial:							
Commercial real estate	2,634,191	2,593,429	2,624,255	2,743,697	3,080,942	1.6	(3.8)
Commercial business	652,287	552,403	533,410	404,655	324,293	18.1	21.1
Total commercial	3,286,478	3,145,832	3,157,665	3,148,352	3,405,235	4.5	(1.0)
Leasing and equipment finance	4,336,310	4,012,248	3,745,322	3,428,755	3,198,017	8.1	6.7
Inventory finance	2,470,175	2,146,754	1,877,090	1,664,377	1,567,214	15.1	31.6
Auto finance	2,647,741	2,647,596	1,915,061	1,239,386	552,833	—	N.M.
Other	18,771	19,297	24,144	26,743	27,924	(2.7)	(11.7)
Total loans and leases	\$ 17,843,827	\$ 17,435,999	\$ 16,401,646	\$ 15,846,939	\$ 15,425,724	2.3	4.7

N.M. Not Meaningful.

(In thousands)	At December 31, 2016						
	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Geographic Distribution:							
Minnesota	\$ 1,247,499	\$ 730,183	\$ 108,963	\$ 81,739	\$ 51,267	\$ 5,723	\$ 2,225,374
California	935,607	139,176	594,705	95,218	430,076	4	2,194,786
Illinois	1,154,721	421,081	169,240	67,928	102,043	4,108	1,919,121
Michigan	480,280	505,823	116,787	100,601	50,399	3,888	1,257,778
Texas	—	72,726	416,109	154,098	228,468	8	871,409
Wisconsin	225,522	425,345	60,828	78,067	27,058	818	817,638
Florida	106,045	90,469	225,065	124,910	142,799	39	689,327
Colorado	248,863	251,983	76,536	29,756	50,256	3,762	661,156
New York	33,424	19,238	259,034	86,746	126,754	48	525,244
Canada	—	—	1,196	458,138	—	—	459,334
Ohio	8,102	81,902	159,133	97,999	74,445	—	421,581
Pennsylvania	36,302	15,190	152,459	74,682	107,298	55	385,986
Georgia	50,499	49,003	112,304	58,767	90,032	—	360,605
Arizona	102,255	14,966	126,367	19,678	77,064	213	340,543
North Carolina	4,162	19,860	159,240	60,097	94,307	7	337,673
New Jersey	45,061	—	166,568	22,777	85,216	—	319,622
Indiana	19,423	68,119	82,116	56,266	37,440	4	263,368
Washington	108,478	10,065	69,882	33,011	36,418	3	257,857
Massachusetts	35,253	17,453	118,681	19,072	53,655	—	244,114
Tennessee	3,413	55,229	78,532	40,972	54,640	2	232,788
Virginia	23,720	4,633	87,000	36,706	70,068	10	222,137
Other	215,723	294,034	995,565	672,947	658,038	79	2,836,386
Total	\$ 5,084,352	\$ 3,286,478	\$ 4,336,310	\$ 2,470,175	\$ 2,647,741	\$ 18,771	\$ 17,843,827

The contractual maturities of loans and leases outstanding at December 31, 2016 were as follows:

At December 31, 2016 ⁽¹⁾							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Amounts due:							
Within 1 year	\$ 115,397	\$ 516,649	\$ 1,438,018	\$ 2,470,175	\$ 621,370	\$ 9,861	\$ 5,171,470
1 to 5 years	503,863	2,323,078	2,758,773	—	1,929,904	1,808	7,517,426
Over 5 years	4,465,092	446,751	139,519	—	96,467	7,102	5,154,931
Total	\$ 5,084,352	\$ 3,286,478	\$ 4,336,310	\$ 2,470,175	\$ 2,647,741	\$ 18,771	\$ 17,843,827
Amounts due after 1 year:							
Fixed-rate loans and leases	\$ 2,039,349	\$ 854,300	\$ 2,887,119	\$ —	\$ 2,026,371	\$ 8,753	\$ 7,815,892
Variable- and adjustable-rate loans and leases	2,929,606	1,915,529	11,173	—	—	157	4,856,465
Total after 1 year	\$ 4,968,955	\$ 2,769,829	\$ 2,898,292	\$ —	\$ 2,026,371	\$ 8,910	\$ 12,672,357

(1) This table does not include the effect of prepayments, which is an important consideration in management's interest-rate risk analysis. Company experience indicates that loans and leases remain outstanding for significantly shorter periods than their contractual terms.

Consumer Real Estate TCF's consumer real estate portfolio represented 28.5% and 31.3% of TCF's total loan and lease portfolio at December 31, 2016 and 2015, respectively. The consumer real estate portfolio is secured by mortgages on residential real estate and consisted of \$2.3 billion of first mortgage lien loans with an average loan size of \$100 thousand and \$2.8 billion of junior lien loans with an average loan size of \$47 thousand at December 31, 2016, compared to first mortgage lien loans of \$2.6 billion and junior lien loans of \$2.8 billion at December 31, 2015. The decrease of \$379.9 million in the consumer real estate portfolio was primarily due to run-off of the first mortgage lien loans. Loans are originated for investment and for sale. TCF sold \$1.6 billion and \$1.3 billion of consumer real estate loans in 2016 and 2015, respectively. Consumer real estate originations increased to \$2.6 billion in 2016 compared to \$2.4 billion in 2015. At December 31, 2016 and 2015, 68.1% and 74.0%, respectively, of the consumer real estate portfolio were in TCF's primary banking markets. At December 31, 2016 and 2015, 58.0% and 54.6%, respectively, of the consumer real estate portfolio carried a variable or adjustable interest rate generally tied to the prime rate. At December 31, 2016 and 2015, 47.3% and 51.0%, respectively, of TCF's consumer real estate loans consisted of closed-end loans. TCF's closed-end consumer real estate loans require payments of principal and interest over a fixed term.

The average Fair Isaac Corporation ("FICO[®]") credit score at loan origination for the consumer real estate portfolio was 735 and 734 at December 31, 2016 and 2015, respectively. As part of TCF's credit risk monitoring, TCF obtains updated FICO score information quarterly. The average updated FICO score for the consumer real estate portfolio was 733 and 731 at December 31, 2016 and 2015, respectively.

TCF's consumer real estate underwriting standards are intended to produce adequately secured loans to customers with good credit scores at the origination date. Beginning in 2008, TCF generally has not made new loans in excess of 90% loan-to-value at origination. TCF also has not originated consumer real estate loans with multiple payment options or loans with "teaser" interest rates. At December 31, 2016, 62.2% of the consumer real estate portfolio had been originated since January 1, 2009 with net charge-offs of 0.01% in 2016. TCF's consumer real estate portfolio is subject to the risk of falling home values and to the general economic environment, particularly unemployment.

The consumer real estate junior lien portfolio was comprised of \$2.5 billion of home equity lines of credit ("HELOCs") and \$272.9 million of amortizing consumer real estate junior lien mortgage loans at December 31, 2016, compared with \$2.5 billion and \$345.3 million at December 31, 2015, respectively. At December 31, 2016 and 2015, \$2.0 billion and \$1.8 billion, respectively, of the consumer real estate junior lien HELOCs had a 10-year interest-only draw period and a 20-year amortization repayment period and all were within the 10-year interest-only draw period and will not convert to amortizing loans until 2021 or later. At December 31, 2016 and 2015, \$525.4 million and \$664.5 million, respectively, of the consumer real estate junior lien HELOCs were interest-only revolving draw loans with no defined amortization period and original draw periods of 5 to 40 years. As of December 31, 2016, 18.1% of these loans mature prior to 2021. Outstanding balances on consumer real estate lines of credit were 67.1% of total lines of credit in 2016, compared to 68.0% in 2015.

Commercial Real Estate and Business Lending TCF's commercial portfolio represented 18.4% and 18.0% of TCF's total loan and lease portfolio at December 31, 2016 and 2015, respectively. The commercial portfolio consisted of \$2.6 billion of commercial real estate loans and \$652.3 million of commercial business loans at December 31, 2016, increases of 1.6% and 18.1%, respectively, from \$2.6 billion and \$552.4 million, respectively, at December 31, 2015. The increase of \$99.9 million in commercial business loans was primarily due to an increase in originations. Total commercial originations were \$1.9 billion in both 2016 and 2015. At December 31, 2016 and 2015, 77.8% and 84.1%, respectively, of TCF's commercial real estate loans outstanding were secured by properties located in TCF's primary banking markets. While commercial real estate collateral is generally located in TCF's primary banking markets, commercial real estate lending follows its strong, proven sponsors into other markets. With an emphasis on secured lending, essentially all of TCF's commercial loans were secured either by properties or other business assets at December 31, 2016 and 2015. At December 31, 2016 and 2015, variable- and adjustable-rate loans represented 69.0% and 67.2%, respectively, of total commercial loans outstanding.

TCF's commercial real estate loan portfolio by property and loan type was as follows:

(In thousands)	At December 31,					
	2016			2015		
	Permanent	Construction and Development	Total	Permanent	Construction and Development	Total
Multi-family housing	\$ 718,562	\$ 152,693	\$ 871,255	\$ 770,325	\$ 203,518	\$ 973,843
Warehouse/industrial buildings	362,092	3,156	365,248	339,160	28,462	367,622
Health care facilities	326,536	37,372	363,908	290,418	35,610	326,028
Office buildings	321,970	22,058	344,028	316,326	12,615	328,941
Retail services ⁽¹⁾	292,036	3,662	295,698	264,253	4,189	268,442
Self-storage	184,543	29,771	214,314	141,844	20,215	162,059
Hotels and motels	117,312	25,739	143,051	112,386	6,666	119,052
Other	33,236	3,453	36,689	32,506	14,936	47,442
Total	\$ 2,356,287	\$ 277,904	\$ 2,634,191	\$ 2,267,218	\$ 326,211	\$ 2,593,429

(1) Primarily retail strip shopping centers and malls, convenience stores, supermarkets, restaurants and automobile related businesses.

Leasing and Equipment Finance TCF's leasing and equipment finance portfolio represented 24.3% and 23.0% of TCF's total loan and lease portfolio at December 31, 2016 and 2015, respectively. The leasing and equipment finance portfolio consisted of \$2.3 billion of leases and \$2.0 billion of loans at December 31, 2016, increases of 10.3% and 5.6%, respectively, from \$2.1 billion of leases and \$1.9 billion of loans at December 31, 2015. The increase of \$324.1 million, or 8.1%, in total loans and leases was primarily due to growth in the specialty vehicles and furniture and fixtures product types. Leasing and equipment finance originations increased to \$2.1 billion in 2016 compared to \$2.0 billion in 2015. The uninstalled backlog of approved transactions was \$453.6 million and \$446.3 million at December 31, 2016 and 2015, respectively. The average loan and lease size was \$77 thousand and \$76 thousand at December 31, 2016 and 2015, respectively. TCF's leasing and equipment finance activity is subject to risk of cyclical downturns and other adverse economic developments. In an adverse economic environment, there may be a decline in the demand for some types of equipment, resulting in a decline in the amount of new equipment being placed into service as well as a decline in equipment values for equipment previously placed in service. Declines in the value of leased equipment increase the potential for impairment losses and credit losses due to diminished collateral value and may result in lower sales-type revenue at the end of the contractual lease term. See Note 1, Basis of Presentation of Notes to Consolidated Financial Statements for information on lease accounting.

At December 31, 2016 and 2015, \$140.1 million and \$126.0 million, respectively, of TCF's lease portfolio was discounted with third-party financial institutions on a non-recourse basis, which is recorded in long-term borrowings. The leasing and equipment finance portfolio table below includes lease residuals, including those related to non-recourse debt. Lease residuals represent the estimated fair value of the leased equipment at the expiration of the initial term of the transaction and are reviewed on an ongoing basis. Any downward revisions in estimated fair value are recorded to expense in the periods in which they become known. At December 31, 2016, lease residuals totaled \$123.4 million, or 10.0% of original equipment value, including \$7.5 million related to non-recourse sales, compared with \$118.9 million, or 9.9% of original equipment value, including \$11.6 million related to non-recourse sales at December 31, 2015.

TCF's leasing and equipment finance portfolio by equipment type was as follows:

(Dollars in thousands)	At December 31,			
	2016		2015	
	Balance	Percent of Total	Balance	Percent of Total
Specialty vehicles	\$ 1,252,951	28.9%	\$ 1,110,836	27.7%
Construction	483,231	11.1	447,502	11.1
Golf cart and turf	429,382	9.9	394,939	9.8
Furniture and fixtures	384,975	8.9	296,823	7.4
Medical	336,566	7.8	355,326	8.9
Technology and data processing	321,562	7.4	304,845	7.6
Manufacturing	300,368	6.9	318,750	7.9
Trucks and trailers	271,870	6.3	263,512	6.6
Agricultural	149,192	3.4	151,894	3.8
Other	406,213	9.4	367,821	9.2
Total	\$ 4,336,310	100.0%	\$ 4,012,248	100.0%

Inventory Finance TCF's inventory finance portfolio represented 13.8% and 12.3% of TCF's total loan and lease portfolio at December 31, 2016 and 2015, respectively. The inventory finance portfolio totaled \$2.5 billion and \$2.1 billion at December 31, 2016 and 2015, respectively. The increase of \$323.4 million, or 15.1%, was primarily due to strong originations and the expansion of the number of active dealers. TCF's inventory finance customers included more than 10,800 and 10,500 active dealers at December 31, 2016 and 2015, respectively. Inventory finance originations increased to \$6.7 billion in 2016 compared to \$5.8 billion in 2015. Origination levels are impacted by the velocity of fundings and repayments with dealers.

TCF's inventory finance portfolio by marketing segment was as follows:

(Dollars in thousands)	At December 31,			
	2016		2015	
	Balance	Percent of Total	Balance	Percent of Total
Powersports	\$ 1,143,226	46.3%	\$ 1,038,741	48.4%
Lawn and garden	567,452	23.0	487,541	22.7
Other	759,497	30.7	620,472	28.9
Total	\$ 2,470,175	100.0%	\$ 2,146,754	100.0%

Auto Finance TCF's auto finance portfolio represented 14.8% and 15.2% of TCF's total loan and lease portfolio at December 31, 2016 and 2015, respectively. The auto finance portfolio totaled \$2.6 billion at both December 31, 2016 and 2015. Loans are originated for investment and for sale, including securitizations. TCF sold \$2.1 billion and \$1.3 billion of auto finance loans in 2016 and 2015, respectively. Auto finance originations increased to \$3.6 billion in 2016 compared to \$3.2 billion in 2015. The auto finance network included dealers in all 50 states and more than 11,400 and 11,800 active dealers at December 31, 2016 and 2015, respectively. The auto finance portfolio consisted of 23.3% new auto loans and 76.7% used auto loans at December 31, 2016, compared with 24.4% and 75.6%, respectively, at December 31, 2015. The average original FICO score for the auto finance held for investment portfolio was 733 and 725 at December 31, 2016 and 2015, respectively.

Credit Quality The following summarizes TCF's loan and lease portfolio based on the credit quality factors that TCF believes are the most important and should be considered to understand the overall condition of the portfolio. The following items should be considered throughout this section:

- Loans and leases that are over 60-days delinquent have a higher potential to become non-accrual and generally are a leading indicator for future charge-off trends.
- TDR loans are loans to financially troubled borrowers that have been modified such that TCF has granted a concession in terms to improve the likelihood of collection of all principal and modified interest owed.
- Non-accrual loans and leases have been charged down to the estimated fair value of the collateral less selling costs, or reserved for expected loss upon workout.
- Within the performing loans and leases, TCF classifies customers within regulatory classification guidelines. Loans and leases that are "classified" are loans or leases that management has concerns regarding the ability of the borrowers to meet existing loan or lease terms and conditions, but may never become non-accrual or result in a loss.

Included in Note 1, Basis of Presentation and in Note 6, Allowance for Loan and Lease Losses and Credit Quality Information of Notes to Consolidated Financial Statements are disclosures of loans considered to be "impaired" for accounting purposes. Impairment is generally based upon the present value of the expected future cash flows discounted at the loan's initial effective interest rate or for collateral dependent loans at the fair value of collateral less selling expense; however, if payment or satisfaction of the loan is dependent on the operation, rather than the sale of the collateral, the impairment does not include selling costs. Impaired loans include non-accrual commercial loans, non-accrual equipment finance loans, non-accrual inventory finance loans, as well as all TDR loans. Impaired loan accounting policies prescribe specific methodologies for determining a portion of the allowance for loan and lease losses.

Past Due Loans and Leases Over 60-day delinquent loans and leases by type, excluding non-accrual loans and leases, were as follows. Delinquent balances are determined based on the contractual terms of the loan or lease. See Note 6, Allowance for Loan and Lease Losses and Credit Quality Information of Notes to Consolidated Financial Statements for additional information.

(Dollars in thousands)	At December 31,			
	2016		2015	
	60 Days or More Delinquent and Accruing	Percentage of Average Portfolio ⁽¹⁾	60 Days or More Delinquent and Accruing	Percentage of Average Portfolio ⁽¹⁾
Consumer real estate:				
First mortgage lien	\$ 8,725	0.40%	\$ 11,565	0.46%
Junior lien	1,404	0.05	1,519	0.05
Total consumer real estate	10,129	0.21	13,084	0.25
Commercial	—	—	1	—
Leasing and equipment finance	4,523	0.10	2,292	0.06
Inventory finance	55	—	118	0.01
Auto finance	6,102	0.23	3,573	0.14
Other	20	0.10	20	0.10
Subtotal	20,829	0.12	19,088	0.11
Portfolios acquired with deteriorated credit quality	—	—	1	0.43
Total	\$ 20,829	0.12	\$ 19,089	0.11

(1) Excludes average non-accrual loans and leases by portfolio.

Loan Modifications TDR loans were as follows:

(Dollars in thousands)	At December 31, 2016		
	Accruing TDR Loans	Non-accrual TDR Loans	Total TDR Loans
Consumer real estate	\$ 98,606	\$ 71,961	\$ 170,567
Commercial	20,304	2,170	22,474
Leasing and equipment finance	4,802	1,350	6,152
Inventory finance	—	357	357
Auto finance	2,323	5,504	7,827
Other	6	—	6
Total	\$ 126,041	\$ 81,342	\$ 207,383
Over 60-day delinquent accruing TDR loans as a percentage of total accruing TDR loans	1.19%	N.A.	N.A.

(Dollars in thousands)	At December 31, 2015		
	Accruing TDR Loans	Non-accrual TDR Loans	Total TDR Loans
Consumer real estate	\$ 106,787	\$ 79,055	\$ 185,842
Commercial	24,731	7,016	31,747
Leasing and equipment finance	2,904	641	3,545
Inventory finance	51	172	223
Auto finance	799	8,440	9,239
Other	11	—	11
Total	\$ 135,283	\$ 95,324	\$ 230,607
Over 60-day delinquent accruing TDR loans as a percentage of total accruing TDR loans	1.54%	N.A.	N.A.

N.A. Not applicable.

Total TDR loans at December 31, 2016 decreased \$23.2 million, or 10.1%, from December 31, 2015. Accruing TDR loans at December 31, 2016 decreased \$9.2 million, or 6.8%, from December 31, 2015, primarily due to fewer additions in the consumer real estate and commercial portfolios and continued strong customer payment performance in the consumer real estate portfolio. Non-accrual TDR loans at December 31, 2016 decreased \$14.0 million, or 14.7%, from December 31, 2015 primarily due to improved credit quality trends in the consumer real estate and commercial portfolios, as well as a decrease in auto finance non-accrual TDR loans due to fewer TDR loans being placed on non-accrual status.

TCF modifies loans through reductions in interest rates, extension of payment dates, term extensions or term extensions with a reduction of contractual payments, but generally not through reductions of principal.

Loan modifications to borrowers who have not been granted concessions are not included in the table above. Loan modifications to troubled borrowers are not reported as TDR loans in the calendar years after modification if the loans were modified to an interest rate equal to or greater than the yields of new loan originations with comparable risk at the time of restructuring and if the loan is performing based on the restructured terms; however, these loans are still considered impaired and follow TCF's impaired loan reserve policies.

TCF typically reduces a consumer real estate customer's contractual payments by reducing the interest rate by an amount appropriate for the borrower's financial condition. Loans discharged in Chapter 7 bankruptcy where the borrower did not reaffirm the debt are reported as non-accrual TDR loans upon discharge as a result of the removal of the borrower's personal liability on the loan. These loans may return to accrual status when TCF expects full repayment of the remaining pre-discharged contractual principal and interest. At December 31, 2016, 57.8% of total consumer real estate TDR loans were accruing and TCF recognized more than 62% of the original contractual interest due on accruing consumer real estate TDR loans in 2016, yielding 4.2%, by modifying the loans to qualified customers instead of foreclosing on the property. At December 31, 2016, collection of principal and interest under the modified terms was reasonably assured on all accruing consumer real estate TDR loans.

Commercial loans modified when on non-accrual status continue to be reported as non-accrual loans until there is sustained repayment performance for a reasonable period of at least six consecutive months. At December 31, 2016, 90.3% of total commercial TDR loans were accruing and TCF recognized more than 92% of the original contractual interest due on accruing commercial TDR loans in 2016, yielding 4.7%. At December 31, 2016, collection of principal and interest under the modified terms was reasonably assured on all accruing commercial TDR loans.

TCF may utilize a multiple note structure as a workout alternative for certain commercial loans, which restructures a troubled loan into two notes. The first note is established at an amount and with market terms that provide reasonable assurance of payment and performance and is classified as a TDR loan. The second note is a separate and distinct legal contract and is still outstanding; however it has been charged-off and may become recoverable if the borrower's financial position improves. At December 31, 2016, one TDR loan restructured as multiple notes with a combined total contractual balance of \$9.1 million and a remaining book balance of \$8.6 million was included in the preceding table.

See Note 6, Allowance for Loan and Lease Losses and Credit Quality Information of Notes to Consolidated Financial Statements for additional information regarding TCF's loan modifications.

Non-performing Assets TCF's non-accrual loans and leases and other real estate owned were as follows:

(Dollars in thousands)	At December 31,				
	2016	2015	2014	2013	2012
Consumer real estate:					
First mortgage lien	\$ 106,125	\$ 124,156	\$ 137,790	\$ 180,811	\$ 199,631
Junior lien	46,346	44,113	35,481	38,222	35,269
Total consumer real estate	152,471	168,269	173,271	219,033	234,900
Commercial:					
Commercial real estate	5,564	6,737	24,554	36,178	118,300
Commercial business	355	3,588	481	4,361	9,446
Total commercial	5,919	10,325	25,035	40,539	127,746
Leasing and equipment finance	10,880	11,262	12,670	14,041	13,652
Inventory finance	5,134	1,098	2,082	2,529	1,487
Auto finance	7,038	9,509	3,676	470	101
Other	3	3	—	410	1,571
Total non-accrual loans and leases	181,445	200,466	216,734	277,022	379,457
Other real estate owned:					
Consumer real estate	34,070	42,912	44,932	47,637	69,599
Commercial real estate	12,727	7,070	20,718	21,237	27,379
Total other real estate owned	46,797	49,982	65,650	68,874	96,978
Total non-accrual loans and leases and other real estate owned	\$ 228,242	\$ 250,448	\$ 282,384	\$ 345,896	\$ 476,435
Non-accrual loans and leases as a percentage of total loans and leases	1.02%	1.15%	1.32%	1.75%	2.46%
Non-accrual loans and leases and other real estate owned as a percentage of total loans and leases and other real estate owned	1.28	1.43	1.71	2.17	3.07
Allowance for loan and lease losses as a percentage of non-accrual loans and leases	88.33	77.85	75.75	91.05	70.40

Non-accrual loans and leases at December 31, 2016 decreased \$19.0 million, or 9.5%, from December 31, 2015, primarily due to improved credit quality trends in the consumer real estate and commercial portfolios and lower non-accrual TDR loans in the auto finance portfolio, partially offset by an increase in non-accrual loans in the inventory finance portfolio. Other real estate owned at December 31, 2016 decreased \$3.2 million, or 6.4%, from December 31, 2015, primarily due to sales of other real estate owned outpacing additions. Consumer real estate loans in process of foreclosure were \$32.1 million and \$44.5 million at December 31, 2016 and 2015, respectively. See Note 1, Basis of Presentation of Notes to Consolidated Financial Statements for additional information.

Loans and leases are generally placed on non-accrual status when the collection of interest or principal is 90 days or more past due unless, in the case of commercial loans, they are well secured and in process of collection. Delinquent consumer real estate junior lien loans are also placed on non-accrual status when there is evidence that the related third-party first lien mortgage may be 90 days or more past due, or foreclosure, charge-off or collection action has been initiated. TDR loans are placed on non-accrual status prior to the past due thresholds outlined above if repayment under the modified terms is not likely after performing a well-documented credit analysis. Loans on non-accrual status are generally reported as non-accrual loans until there is sustained repayment performance for six consecutive months, with the exception of loans not reaffirmed upon discharge under Chapter 7 bankruptcy, which remain on non-accrual status until a well-documented credit analysis indicates full repayment of the remaining pre-discharged contractual principal and interest is likely. Most of TCF's non-accrual loans and past due loans are secured by real estate. Given the nature of these assets and the related mortgage foreclosure, property sale and, if applicable, mortgage insurance claims processes, it can take 18 months or longer for a loan to migrate from initial delinquency to final disposition. This resolution process generally takes much longer for loans secured by real estate than for unsecured loans or loans secured by other property primarily due to state real estate foreclosure laws.

Changes in the amount of non-accrual loans and leases for the years ended December 31, 2016 and 2015 were as follows:

At or For the Year Ended December 31, 2016							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Balance, beginning of period	\$ 168,269	\$ 10,325	\$ 11,262	\$ 1,098	\$ 9,509	\$ 3	\$ 200,466
Additions	89,484	5,325	20,714	12,963	5,762	156	134,404
(Charge-offs) recoveries	(12,674)	(727)	(5,074)	(1,498)	(2,675)	(91)	(22,739)
Transfers to other assets	(43,965)	—	(4,541)	(1,496)	(1,455)	—	(51,457)
Return to accrual status	(19,522)	—	(3,614)	(1,242)	—	—	(24,378)
Payments received	(28,949)	(15,812)	(7,867)	(4,784)	(4,044)	(65)	(61,521)
Sales	—	(3,664)	—	—	—	—	(3,664)
Other, net	(172)	10,472	—	93	(59)	—	10,334
Balance, end of period	\$ 152,471	\$ 5,919	\$ 10,880	\$ 5,134	\$ 7,038	\$ 3	\$ 181,445

At or For the Year Ended December 31, 2015							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Balance, beginning of period	\$ 173,271	\$ 25,035	\$ 12,670	\$ 2,082	\$ 3,676	\$ —	\$ 216,734
Additions	131,585	13,723	16,797	12,242	11,003	35	185,385
(Charge-offs) recoveries	(25,409)	(5,247)	(5,483)	(1,271)	(1,667)	49	(39,028)
Transfers to other assets	(59,203)	(245)	(2,648)	(1,482)	(953)	—	(64,531)
Return to accrual status	(25,981)	(2,827)	(2,352)	(6,278)	—	—	(37,438)
Payments received	(26,368)	(19,644)	(7,722)	(4,976)	(2,550)	(81)	(61,341)
Sales	—	(4,083)	—	—	—	—	(4,083)
Other, net	374	3,613	—	781	—	—	4,768
Balance, end of period	\$ 168,269	\$ 10,325	\$ 11,262	\$ 1,098	\$ 9,509	\$ 3	\$ 200,466

Loan Credit Classifications TCF assesses the risk of its loan and lease portfolio utilizing numerous risk characteristics as outlined in the previous sections. Loan credit classifications are an additional characteristic that is closely monitored in the overall credit risk process. Loan credit classifications are derived from standard regulatory rating definitions, which include: non-classified (pass and special mention) and classified (substandard and doubtful). Classified loans and leases have well-defined weaknesses, but may never result in a loss.

Loans and leases by portfolio and regulatory classification were as follows:

(In thousands)	At December 31, 2016				
	Non-classified		Classified		Total
	Pass	Special Mention	Substandard	Doubtful	
Consumer real estate	\$ 4,877,740	\$ 40,253	\$ 166,359	\$ —	\$ 5,084,352
Commercial	3,190,241	61,771	34,466	—	3,286,478
Leasing and equipment finance	4,285,065	23,441	27,804	—	4,336,310
Inventory finance	2,163,764	139,385	167,026	—	2,470,175
Auto finance	2,631,406	244	16,091	—	2,647,741
Other	18,750	—	21	—	18,771
Total loans and leases	\$ 17,166,966	\$ 265,094	\$ 411,767	\$ —	\$ 17,843,827

(In thousands)	At December 31, 2015				
	Non-classified		Classified		Total
	Pass	Special Mention	Substandard	Doubtful	
Consumer real estate	\$ 5,210,975	\$ 62,722	\$ 190,575	\$ —	\$ 5,464,272
Commercial	3,035,320	65,382	45,130	—	3,145,832
Leasing and equipment finance	3,969,191	19,806	23,251	—	4,012,248
Inventory finance	1,887,505	138,945	120,304	—	2,146,754
Auto finance	2,632,589	—	15,007	—	2,647,596
Other	19,274	—	23	—	19,297
Total loans and leases	\$ 16,754,854	\$ 286,855	\$ 394,290	\$ —	\$ 17,435,999

Total classified loans and leases were \$411.8 million and \$394.3 million at December 31, 2016 and 2015, respectively. The increase of \$17.5 million from December 31, 2015 was primarily due to an increase in the inventory finance portfolio, partially offset by a decrease in the consumer real estate and commercial portfolios due to improved credit quality trends.

Allowance for Loan and Lease Losses The determination of the allowance for loan and lease losses is a critical accounting estimate. TCF's evaluation of incurred losses is based upon historical loss rates multiplied by the respective portfolio's loss emergence period. Factors utilized in the determination of the amount of the allowance include historical trends in loss rates, a portfolio's overall risk characteristics, changes in its character or size, risk rating migration, delinquencies, collateral values, economic outlook and prevailing economic conditions. The various factors used in the methodologies are reviewed on a periodic basis.

The Company considers the allowance for loan and lease losses of \$160.3 million appropriate to cover losses incurred in the loan and lease portfolios at December 31, 2016. However, no assurance can be given that TCF will not, in any particular period, sustain loan and lease losses that are sizable in relation to the amount reserved or will not require significant changes in the balance of the allowance for loan and lease losses due to subsequent evaluations of the loan and lease portfolios, in light of factors then prevailing, including economic conditions, information obtained during TCF's ongoing credit review process or regulatory requirements. Among other factors, an economic slowdown, increasing levels of unemployment and/or a decline in collateral values may have an adverse impact on the current adequacy of the allowance for loan and lease losses by increasing credit risk and the risk of potential loss.

The total allowance for loan and lease losses is generally available to absorb losses from any segment of the portfolio. The allocation of TCF's allowance for loan and lease losses disclosed in the following table is subject to change based on changes in the criteria used to evaluate the allowance and is not necessarily indicative of the trend of future losses in any particular portfolio.

In conjunction with Note 6, Allowance for Loan and Lease Losses and Credit Quality Information of Notes to Consolidated Financial Statements, detailed information regarding TCF's allowance for loan and lease losses was as follows:

(Dollars in thousands)	Credit Loss Reserves					Credit Loss Reserves as a Percentage of Portfolio				
	At December 31,					At December 31,				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Consumer real estate:										
First mortgage lien	\$ 33,828	\$ 36,888	\$ 55,319	\$ 133,009	\$ 119,957	1.48%	1.41%	1.76%	3.53%	2.83%
Junior lien	25,620	31,104	30,042	43,021	62,056	0.92	1.10	1.18	1.67	2.55
Consumer real estate	59,448	67,992	85,361	176,030	182,013	1.17	1.24	1.50	2.78	2.73
Commercial:										
Commercial real estate	22,785	22,215	24,616	32,405	47,821	0.86	0.86	0.94	1.18	1.55
Commercial business	9,910	7,970	6,751	5,062	3,754	1.52	1.44	1.27	1.25	1.16
Total commercial	32,695	30,185	31,367	37,467	51,575	0.99	0.96	0.99	1.19	1.51
Leasing and equipment finance										
Inventory finance	21,350	19,018	18,446	18,733	21,037	0.49	0.47	0.49	0.55	0.66
Auto finance	13,932	11,128	10,020	8,592	7,569	0.56	0.52	0.53	0.52	0.48
Other	32,310	26,486	18,230	10,623	4,136	1.22	1.00	0.95	0.86	0.75
Other	534	1,245	745	785	798	2.84	6.45	3.09	2.94	2.86
Total allowance for loan and lease losses	160,269	156,054	164,169	252,230	267,128	0.90	0.90	1.00	1.59	1.73
Other credit loss reserves:										
Reserves for unfunded commitments	1,115	1,044	943	980	2,456	N.A.	N.A.	N.A.	N.A.	N.A.
Total credit loss reserves	\$ 161,384	\$ 157,098	\$ 165,112	\$ 253,210	\$ 269,584	0.90	0.90	1.01	1.60	1.75

N.A. Not Applicable.

Reconciliations of changes in the allowance for loan and lease losses were as follows:

(Dollars in thousands)	Year Ended December 31,				
	2016	2015	2014	2013	2012
Balance, beginning of period	\$ 156,054	\$ 164,169	\$ 252,230	\$ 267,128	\$ 255,672
Charge-offs:					
Consumer real estate:					
First mortgage lien	(10,413)	(19,448)	(43,632)	(60,363)	(101,595)
Junior lien	(8,211)	(14,239)	(19,494)	(37,145)	(83,190)
Total consumer real estate	(18,624)	(33,687)	(63,126)	(97,508)	(184,785)
Commercial:					
Commercial real estate	(752)	(5,225)	(8,646)	(28,287)	(34,642)
Commercial business	(1)	(24)	(11)	(657)	(6,194)
Total commercial	(753)	(5,249)	(8,657)	(28,944)	(40,836)
Leasing and equipment finance	(7,738)	(7,631)	(7,316)	(7,277)	(15,248)
Inventory finance	(2,623)	(2,501)	(1,653)	(1,141)	(1,838)
Auto finance	(26,994)	(18,386)	(11,856)	(5,305)	(1,164)
Other	(7,353)	(7,093)	(8,359)	(9,115)	(10,239)
Total charge-offs	(64,085)	(74,547)	(100,967)	(149,290)	(254,110)
Recoveries:					
Consumer real estate:					
First mortgage lien	1,206	1,578	1,513	2,055	1,067
Junior lien	5,859	5,850	5,354	6,589	4,582
Total consumer real estate	7,065	7,428	6,867	8,644	5,649
Commercial:					
Commercial real estate	308	2,032	754	2,667	1,762
Commercial business	65	1,737	2,133	103	197
Total commercial	373	3,769	2,887	2,770	1,959
Leasing and equipment finance	2,386	2,792	3,705	3,968	5,058
Inventory finance	816	1,019	826	373	333
Auto finance	3,853	2,971	1,491	607	30
Other	4,357	5,034	5,860	6,518	7,314
Total recoveries	18,850	23,013	21,636	22,880	20,343
Net charge-offs	(45,235)	(51,534)	(79,331)	(126,410)	(233,767)
Provision for credit losses	65,874	52,944	95,737	118,368	247,443
Other ⁽¹⁾	(16,424)	(9,525)	(104,467)	(6,856)	(2,220)
Balance, end of period	\$ 160,269	\$ 156,054	\$ 164,169	\$ 252,230	\$ 267,128
Net charge-offs as a percentage of average loans and leases	0.26%	0.30%	0.49%	0.81%	1.54%

(1) Included in Other in 2014 is the transfer of \$95.3 million, comprised of \$77.0 million of previously established allowance for loan and lease losses and an additional \$18.3 million of write-downs arising from the transfer to loans held for sale in conjunction with the portfolio sale of consumer real estate TDR loans.

During 2016, total net charge-offs decreased \$6.3 million primarily due to a decrease in consumer real estate net charge-offs, partially offset by an increase in auto finance net charge-offs. The decrease in net charge-offs in the consumer real estate portfolio was primarily due to improved credit quality and increased home values. The increase in net charge-offs in the auto finance portfolio was primarily due to the maturation of the portfolio and an industry decline in used auto values. During 2015, total net charge-offs decreased \$27.8 million primarily due to a decrease in consumer real estate net charge-offs as a result of the improving economy, as incidents of default decreased and home values increased and a decrease in commercial net charge-offs due to improved credit quality and continued efforts to actively work out problem loans. These decreases were partially offset by an increase in net charge-offs in the auto finance portfolio primarily due to growth and maturation of the portfolio.

Liquidity Management TCF manages its liquidity to ensure that the funding needs of depositors and borrowers are met both promptly and in a cost-effective manner. Asset liquidity arises from the amortization, prepayment or maturity of assets and from the ability of TCF to sell or securitize loans. Liability liquidity results from the ability of TCF to maintain a diverse set of funding sources to promptly meet funding requirements.

TCF's Asset & Liability Committee ("ALCO") and the Finance Committee of TCF Financial's Board of Directors have adopted a Liquidity Management Policy for TCF Bank to direct management of the Company's liquidity risk. See "Item 7A. Quantitative and Qualitative Disclosures about Market Risk" for more information.

TCF Bank had \$256.6 million and \$538.7 million of net liquidity qualifying interest-bearing deposits at the Federal Reserve Bank at December 31, 2016 and 2015, respectively. Interest-bearing deposits held at the Federal Reserve Bank and unencumbered U.S. Government sponsored enterprises and federal agencies mortgage-backed securities were \$1.2 billion and \$1.3 billion at December 31, 2016 and 2015, respectively. In addition, TCF held unencumbered obligations of states and political subdivisions totaling \$612.5 million and \$266.9 million at December 31, 2016 and 2015, respectively.

ALCO and the Finance Committee of TCF Financial's Board of Directors have adopted a Holding Company Investment and Liquidity Management Policy, which establishes a minimum target amount of cash or liquid investments TCF Financial will hold. See "Item 7A. Quantitative and Qualitative Disclosures about Market Risk" for more information. TCF Financial had cash and due from bank of \$69.7 million and \$69.5 million at December 31, 2016 and 2015, respectively.

Deposits are the primary source of TCF's funds for use in lending and for other general business purposes. In addition to deposits, TCF receives funds from loan and lease repayments, loan sales and securitizations, and borrowings. Lending activities, such as loan originations and purchases and equipment purchases for lease financing, are the primary uses of TCF's funds. Deposit inflows and outflows are significantly influenced by general interest rates, money market conditions, competition for funds, customer service and other factors. TCF's deposit inflows and outflows have been and will continue to be affected by these factors. Borrowings may be used to compensate for reductions in normal sources of funds, such as deposit inflows at less than projected levels, net deposit outflows or to fund balance sheet growth. Historically, TCF has borrowed primarily from the Federal Home Loan Bank ("FHLB") of Des Moines, institutional sources under repurchase agreements and other sources. TCF had \$1.9 billion of additional borrowing capacity at the FHLB of Des Moines at December 31, 2016, as well as access to the Federal Reserve Discount Window. In addition, TCF maintains a diversified set of unsecured and uncommitted funding sources, including access to overnight federal funds purchased lines, brokered deposits and capital markets.

The primary source of funding for TCF Commercial Finance Canada, Inc. ("TCFCFC") is a line of credit with TCF Bank. TCFCFC also maintains a \$20.0 million Canadian dollar-denominated line of credit facility with a counterparty, which is guaranteed by TCF Bank. At December 31, 2016, TCFCFC had \$2.2 million (USD) outstanding under the line of credit with the counterparty and it was unused at December 31, 2015.

Deposits Deposits totaled \$17.2 billion at December 31, 2016, an increase of \$0.5 billion, or 3.1%, from December 31, 2015, primarily due to an increase in checking account balances and certificates of deposit.

Non-interest bearing checking accounts represented 20.0% of total deposits at December 31, 2016, compared with 19.1% at December 31, 2015. TCF's weighted-average rate for deposits, including non-interest bearing deposits, was 0.36% at December 31, 2016, compared with 0.30% at December 31, 2015. The increase was primarily due to increased average rates resulting from promotions for certificates of deposit.

Checking, savings and certain money market deposits are an important source of low or no interest cost funds for TCF. The average balance of these types of deposits was \$10.6 billion and \$10.0 billion for 2016 and 2015, respectively. These deposits comprised 62.1% of total average deposits for 2016, compared with 62.6% of total average deposits for 2015.

Certificates of deposit totaled \$4.1 billion at December 31, 2016, compared with \$3.9 billion at December 31, 2015. The maturities of certificates of deposit with denominations equal to or greater than \$100,000 at December 31, 2016 were as follows:

(In thousands)	Denominations \$100 Thousand or Greater at December 31, 2016
Maturity:	
Three months or less	\$ 388,777
Over three through six months	331,697
Over six through 12 months	1,003,841
Over 12 months	309,419
Total	\$ 2,033,734

Borrowings Borrowings totaled \$1.1 billion and \$1.0 billion at December 31, 2016 and 2015, respectively. Historically, TCF has borrowed primarily from the FHLB of Des Moines, institutional sources under repurchase agreements and other sources.

See Note 10, Short-term Borrowings and Note 11, Long-term Borrowings of Notes to Consolidated Financial Statements for additional information regarding TCF's borrowings.

Contractual Obligations and Commitments As discussed further in Note 7, Premises and Equipment; Note 9, Deposits; Note 10, Short-term Borrowings; Note 11, Long-term Borrowings and Note 17, Financial Instruments with Off-Balance Sheet Risk of Notes to Consolidated Financial Statements, TCF has certain obligations and commitments to make future payments under contracts.

At December 31, 2016, the aggregate contractual obligations and commitments were as follows:

(In thousands)	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Contractual Obligations:					
Certificates of deposit	\$ 4,092,423	\$ 3,392,044	\$ 662,411	\$ 24,063	\$ 13,905
Total borrowings	1,078,921	64,236	741,803	16,176	256,706
Annual rental commitments under non-cancelable operating leases	191,931	28,264	55,076	37,853	70,738
Contractual interest payments ⁽¹⁾	149,413	55,680	39,930	28,678	25,125
Campus marketing agreement	28,404	2,829	5,642	5,643	14,290
Investments in affordable housing limited liability entities	12,565	9,746	2,819	—	—
Construction contracts and land purchase commitments for future branch sites	3,447	3,447	—	—	—
Total	\$ 5,557,104	\$ 3,556,246	\$ 1,507,681	\$ 112,413	\$ 380,764

(1) Includes accrued interest and future contractual interest obligations on borrowings and time deposits.

(In thousands)	Amount of Commitment - Expiration by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Commitments:					
Commitments to extend credit:					
Consumer real estate and other	\$ 1,425,585	\$ 44,511	\$ 115,134	\$ 21,986	\$ 1,243,954
Commercial	898,809	127,913	490,833	254,665	25,398
Leasing and equipment finance	125,648	125,648	—	—	—
Total commitments to extend credit	2,450,042	298,072	605,967	276,651	1,269,352
Standby letters of credit and guarantees on industrial revenue bonds	8,782	7,926	281	575	—
Total	\$ 2,458,824	\$ 305,998	\$ 606,248	\$ 277,226	\$ 1,269,352

Unrecognized tax benefits, projected benefit obligations, demand deposits with indeterminate maturities and discretionary credit facilities that do not obligate the Company to lend have been excluded from the contractual obligations table above.

TCF's campus marketing agreement consists of fixed and minimum obligations for exclusive marketing rights and naming rights with one university. TCF is obligated to make annual payments for the exclusive marketing rights through 2023 with a renewal option to extend the terms through 2029. TCF is obligated to make annual payments for the exclusive naming rights through 2023.

Commitments to extend credit are agreements to lend to a customer provided there is no violation of any condition in the contract. These commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since certain of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. Collateral to secure any funding of these commitments predominantly consists of residential and commercial real estate.

Standby letters of credit and guarantees on industrial revenue bonds are conditional commitments issued by TCF guaranteeing the performance of a customer to a third party. These conditional commitments expire in various years through 2020. Collateral held consists primarily of commercial real estate mortgages. Since the conditions under which TCF is required to fund these commitments may not materialize, the cash requirements are expected to be less than the total outstanding commitments.

Capital Management TCF is committed to managing capital to maintain protection for stockholders, depositors and creditors. TCF employs a variety of capital management tools to achieve its capital goals, including, but not limited to, dividends, public offerings of preferred and common stock, common stock repurchases and the issuance or redemption of subordinated debt and other capital instruments. TCF maintains a Capital Planning and Dividend Policy which applies to TCF Financial and incorporates TCF Bank's Capital Planning and Dividend Policy. These policies ensure that capital strategy actions, including the addition of new capital, if needed, common stock repurchases, or the declaration of preferred stock, common stock and bank dividends are prudent, efficient and provide value to TCF's stockholders, while ensuring that past and prospective earnings retention is consistent with TCF's capital needs, asset quality and overall financial condition. TCF and TCF Bank manage their capital levels to exceed all regulatory capital requirements, which were exceeded at December 31, 2016 and 2015. See Note 14, Regulatory Capital Requirements of Notes to Consolidated Financial Statements.

Preferred Stock At December 31, 2016, there were 6,900,000 depository shares outstanding, each representing a 1/1,000th interest in a share of the Series A Non-Cumulative Perpetual Preferred Stock of TCF Financial Corporation, par value \$.01 per share, with a liquidation preference of \$25,000 per share (equivalent to \$25 per depository share) (the "Series A Preferred Stock"). Dividends are payable on the Series A Preferred Stock if, as and when declared by TCF's Board of Directors on a non-cumulative basis on March 1, June 1, September 1 and December 1 of each year at a per annum rate of 7.5%. The Series A Preferred Stock may be redeemed at TCF's option in whole or in part on or after June 25, 2017.

At December 31, 2016, there were 4,000,000 shares outstanding of the 6.45% Series B Non-Cumulative Perpetual Preferred Stock of TCF Financial Corporation, par value \$.01 per share, with a liquidation preference of \$25 per share (the "Series B Preferred Stock"). Dividends are payable on the Series B Preferred Stock if, as and when declared by TCF's Board of Directors on a non-cumulative basis on March 1, June 1, September 1 and December 1 of each year at a per annum rate of 6.45%. The Series B Preferred Stock may be redeemed at TCF's option in whole or in part on or after December 19, 2017.

Equity Total equity at December 31, 2016 was \$2.4 billion, or 11.4% of total assets, compared with \$2.3 billion, or 11.2% of total assets, at December 31, 2015. Dividends to common stockholders on a per share basis totaled 7.5 cents for each quarter of the year ended December 31, 2016 and the quarter ended December 31, 2015, an increase of 50% from a per share basis of 5 cents for each of the first three quarters of 2015. TCF's common dividend payout ratio for the quarters ended December 31, 2016 and 2015 was 27.8% and 25.9%, respectively. TCF Financial's primary funding sources for dividends are earnings and dividends received from TCF Bank.

At December 31, 2016, TCF had 5.4 million shares remaining in its stock repurchase program authorized by its Board of Directors, which has no expiration. Prior consultation with the Federal Reserve is required before TCF could repurchase any shares of its common stock.

Common equity at December 31, 2016 was \$2.2 billion, or 10.09% of total assets, compared with \$2.0 billion, or 9.80% of total assets, at December 31, 2015. Tangible common equity at December 31, 2016 was \$1.9 billion, or 9.13% of total tangible assets, compared with \$1.8 billion, or 8.79% of total tangible assets, at December 31, 2015. Tangible common equity is not a financial measure recognized under generally accepted accounting principles in the United States ("GAAP") (i.e., non-GAAP). Tangible common equity represents total equity less preferred stock, goodwill, other intangible assets and non-controlling interest in subsidiaries. Tangible assets represent total assets less goodwill and other intangible assets. When evaluating capital adequacy and utilization, management considers financial measures such as tangible common equity to tangible assets. This non-GAAP financial measure is viewed by management as a useful indicator of capital levels available to withstand unexpected market or economic conditions and also provide investors, regulators and other users with information to be viewed in relation to other banking institutions.

Reconciliations of the non-GAAP financial measures of tangible common equity and tangible assets to the GAAP measures of total equity and total assets, respectively, were as follows:

(Dollars in thousands)	At December 31,				
	2016	2015	2014	2013	2012
Computation of tangible common equity to tangible assets:					
Total equity	\$ 2,444,645	\$ 2,306,917	\$ 2,135,364	\$ 1,964,759	\$ 1,876,643
Less: Non-controlling interest in subsidiaries	17,162	16,001	13,715	11,791	13,270
Total TCF Financial Corporation stockholders' equity	2,427,483	2,290,916	2,121,649	1,952,968	1,863,373
Less: Preferred stock	263,240	263,240	263,240	263,240	263,240
Total common stockholders' equity (a)	2,164,243	2,027,676	1,858,409	1,689,728	1,600,133
Less:					
Goodwill	225,640	225,640	225,640	225,640	225,640
Other intangibles ⁽¹⁾	1,738	3,126	4,641	6,326	8,674
Tangible common equity (b)	\$ 1,938,605	\$ 1,798,910	\$ 1,628,128	\$ 1,457,762	\$ 1,365,819
Total assets (c)	\$ 21,441,326	\$ 20,689,609	\$ 19,393,656	\$ 18,378,769	\$ 18,224,736
Less:					
Goodwill	225,640	225,640	225,640	225,640	225,640
Other intangibles ⁽¹⁾	1,738	3,126	4,641	6,326	8,674
Tangible assets (d)	\$ 21,213,948	\$ 20,460,843	\$ 19,163,375	\$ 18,146,803	\$ 17,990,422
Common equity to assets (a) / (c)	10.09%	9.80%	9.58%	9.19%	8.78%
Tangible common equity to tangible assets (b) / (d)	9.13%	8.79%	8.50%	8.03%	7.59%

(1) Includes non-mortgage servicing assets.

Critical Accounting Estimates

Critical accounting estimates occur in certain accounting policies and procedures and are particularly susceptible to significant change. Policies that contain critical accounting estimates include the determination of the allowance for loan and lease losses, the determination of lease classification and the determination of current and deferred income taxes. See Note 1, Basis of Presentation of Notes to Consolidated Financial Statements for further discussion of critical accounting policies.

Recent Accounting Developments

In January 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2017-04: *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which eliminates Step 2 from the goodwill impairment test. Under the new guidance, if a reporting unit’s carrying amount exceeds its fair value, an entity will record an impairment charge based on that difference. The impairment charge will be limited to the amount of goodwill allocated to that reporting unit. The standard eliminates the requirement to calculate an implied goodwill value using Step 2 to measure impairment. The ASU does not change the guidance on completing Step 1 of the goodwill impairment test. An entity will still be able to perform today’s optional qualitative goodwill impairment assessment before determining whether to proceed to Step 1. The adoption of this ASU will be required on a prospective basis for annual or any interim goodwill impairment tests performed by TCF after January 1, 2020. Early adoption is allowed. The adoption of this ASU will not have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, which clarifies the definition of a business with the objective of adding guidance to assist companies with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The ASU provides a more robust framework to use in determining when a set of assets and activities is a business. The adoption of this ASU will be required on a prospective basis beginning with TCF’s Quarterly Report on Form 10-Q for the quarter ending March 31, 2018. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which requires entities to show changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. The adoption of this ASU will be required on a retrospective basis beginning with TCF’s Quarterly Report on Form 10-Q for the quarter ending March 31, 2018. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice in how certain types of cash receipts and cash payments are presented in the statement of cash flows. The adoption of this ASU will be required on a retrospective basis beginning with TCF’s Quarterly Report on Form 10-Q for the quarter ending March 31, 2018. Early adoption is allowed. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which changes the impairment model for most financial assets, including trade and other receivables, held to maturity debt securities, loans and purchased financial assets with credit deterioration. The adoption of this ASU will be required on a modified retrospective basis with a cumulative-effect adjustment required beginning with TCF’s Quarterly Report on Form 10-Q for the quarter ending March 31, 2020. Early adoption is allowed. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which simplifies several aspects of the accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. The most significant change made will be the recognition of all excess tax benefits and deficiencies as income tax expense or benefit in the statement of income. Certain amendments in the ASU will be required to be applied on a prospective basis and others will be required to be applied on a retrospective basis. This ASU is effective beginning with TCF’s Quarterly Report on Form 10-Q for the quarter ending March 31, 2017. Early adoption is allowed. The adoption of this ASU will not have a material impact on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-07, *Investments - Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting*, which eliminates the requirement to retrospectively apply the equity method in previous periods when an investor initially obtains significant influence over the investee. The adoption of this ASU will be required on a prospective basis beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2017. Early adoption is allowed. The adoption of this ASU will not have a material impact on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-06, *Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments*, which clarifies the requirements for assessing whether contingent put and call options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. The adoption of this ASU will be required on a modified retrospective basis beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2017. Early adoption is allowed. The adoption of this ASU will not have a material impact on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-05, *Derivatives and Hedging (Topic 815): Effects of Derivative Contract Novations on Existing Hedge Accounting Relationships*, which clarifies that the novation of a derivative contract in a hedge accounting relationship does not, in and of itself, require dedesignation of that hedge accounting relationship. The adoption of this ASU will be required on a prospective or modified retrospective basis beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2017. Early adoption is allowed. The adoption of this ASU will not have a material impact on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-04, *Liabilities - Extinguishment of Liabilities (Subtopic 405-20): Recognition of Breakage for Certain Prepaid Stored-Value Products*, which requires issuers of prepaid stored-value products redeemable for goods, services or cash at third-party merchants to derecognize liabilities related to those products for breakage. The adoption of this ASU will be required on a retrospective or modified retrospective basis beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2018. Early adoption is allowed. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which, among other amendments, requires lessees to recognize most leases on their balance sheet. Lessor accounting is largely unchanged. The ASU requires both quantitative and qualitative disclosure regarding key information about leasing arrangements from both lessees and lessors. The adoption of this ASU will be required on a modified retrospective basis beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2019. Early adoption is allowed. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which amends the classification and measurement of investments in equity securities, simplifies the impairment analysis of equity investments without readily determinable fair values, requires separate presentation of certain fair value changes for financial liabilities measured at fair value and eliminates certain disclosure requirements associated with the fair value of financial instruments. The adoption of this ASU will be required on a prospective basis with a cumulative-effect adjustment required beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2018. With limited exceptions, early adoption is prohibited. The adoption of this ASU will not have a material impact on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which requires revenue recognition 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. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which delays the effective date of the new revenue recognition requirements in ASU No. 2014-09 by one-year. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, which clarifies how an entity should identify the unit of accounting for the principal versus agent evaluation, and how it should apply the control principle to certain types of arrangements by explaining what a principal controls before the specified good or service is transferred to the customer. In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, which amends the guidance for identifying performance obligations and accounting for a license which grants the right to use intellectual property. In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, which provides narrow-scope improvements to transition, collectability, noncash consideration and the presentation of sales and other similar taxes. In December 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, which provides guidance that affects narrow aspects of the guidance issued in ASU No. 2014-09. The adoption of these ASUs will be required using one of two retrospective application methods beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2018. Management is currently evaluating the potential impact of this guidance on our consolidated financial statements. In evaluating this standard, management has determined that the majority of revenue earned by the Company is from revenue streams not included in the scope of this standard and therefore management does not expect the new revenue recognition guidance to have a material impact on our consolidated financial statements.

Legislative and Regulatory Developments

Federal and state legislation impose numerous legal and regulatory requirements on financial institutions. Future legislative or regulatory change, or changes in enforcement practices or court rulings, may have a dramatic and potentially adverse impact on TCF.

Forward-looking Information

Any statements contained in this Annual Report on Form 10-K regarding the outlook for the Company's businesses and their respective markets, such as projections of future performance, guidance, statements of the Company's plans and objectives, forecasts of market trends and other matters, are forward-looking statements based on the Company's assumptions and beliefs. Such statements may be identified by such words or phrases as "will likely result," "are expected to," "will continue," "outlook," "will benefit," "is anticipated," "estimate," "project," "management believes" or similar expressions. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those discussed in such statements and no assurance can be given that the results in any forward-looking statement will be achieved. For these statements, TCF claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Any forward-looking statement speaks only as of the date on which it is made, and we disclaim any obligation to subsequently revise any forward-looking statement to reflect events or circumstances after such date or to reflect the occurrence of anticipated or unanticipated events.

Certain factors could cause the Company's future results to differ materially from those expressed or implied in any forward-looking statements contained herein. These factors include the factors discussed in Part I, Item 1A of this Annual Report on Form 10-K under the heading "Risk Factors," the factors discussed below and any other cautionary statements, written or oral, which may be made or referred to in connection with any such forward-looking statements. Since it is not possible to foresee all such factors, these factors should not be considered as complete or exhaustive.

Adverse Economic or Business Conditions; Competitive Conditions; Credit and Other Risks. Deterioration in general economic and banking industry conditions, including those arising from government shutdowns, defaults, anticipated defaults or rating agency downgrades of sovereign debt (including debt of the U.S.), or increases in unemployment; adverse economic, business and competitive developments such as shrinking interest margins, reduced demand for financial services and loan and lease products, deposit outflows, increased deposit costs due to competition for deposit growth and evolving payment system developments, deposit account attrition or an inability to increase the number of deposit accounts; customers completing financial transactions without using a bank; adverse changes in credit quality and other risks posed by TCF's loan, lease, investment, securities held to maturity and securities available for sale portfolios, including declines in commercial or residential real estate values, changes in the allowance for loan and lease losses dictated by new market conditions or regulatory requirements, or the inability of home equity line borrowers to make increased payments caused by increased interest rates or amortization of principal; deviations from estimates of prepayment rates and fluctuations in interest rates that result in decreases in the value of assets such as interest-only strips that arise in connection with TCF's loan sales activity; interest rate risks resulting from fluctuations in prevailing interest rates or other factors that result in a mismatch between yields earned on TCF's interest-earning assets and the rates paid on its deposits and borrowings; foreign currency exchange risks; counterparty risk, including the risk of defaults by our counterparties or diminished availability of counterparties who satisfy our credit quality requirements; decreases in demand for the types of equipment that TCF leases or finances; the effect of any negative publicity.

Legislative and Regulatory Requirements. New consumer protection and supervisory requirements and regulations, including those resulting from action by the Consumer Financial Protection Bureau and changes in the scope of Federal preemption of state laws that could be applied to national banks and their subsidiaries; the imposition of requirements that adversely impact TCF's deposit, lending, loan collection and other business activities such as mortgage foreclosure moratorium laws, further regulation of financial institution campus banking programs, use by municipalities of eminent domain on property securing troubled residential mortgage loans, or imposition of underwriting or other limitations that impact the ability to offer certain variable-rate products; changes affecting customer account charges and fee income, including changes to interchange rates; regulatory actions or changes in customer opt-in preferences with respect to overdrafts, which may have an adverse impact on TCF; changes to bankruptcy laws which would result in the loss of all or part of TCF's security interest due to collateral value declines; deficiencies in TCF's compliance programs, including under the Bank Secrecy Act in past or future periods, which may result in regulatory enforcement action including monetary penalties; increased health care costs resulting from Federal health care reform; regulatory criticism and resulting enforcement actions or other adverse consequences such as increased capital requirements, higher deposit insurance assessments or monetary damages or penalties; heightened regulatory practices, requirements or expectations, including, but not limited to, requirements related to enterprise risk management, the Bank Secrecy Act and anti-money laundering compliance activity.

Earnings/Capital Risks and Constraints, Liquidity Risks. Limitations on TCF's ability to pay dividends or to increase dividends because of financial performance deterioration, regulatory restrictions or limitations; increased deposit insurance premiums, special assessments or other costs related to adverse conditions in the banking industry; the impact on banks of regulatory reform, including additional capital, leverage, liquidity and risk management requirements or changes in the composition of qualifying regulatory capital; adverse changes in securities markets directly or indirectly affecting TCF's ability to sell assets or to fund its operations; diminished unsecured borrowing capacity resulting from TCF credit rating downgrades or unfavorable conditions in the credit markets that restrict or limit various funding sources; costs associated with new regulatory requirements or interpretive guidance relating to liquidity; uncertainties relating to future retail deposit account changes, including limitations on TCF's ability to predict customer behavior and the impact on TCF's fee revenues.

Branching Risk; Growth Risks. Adverse developments affecting TCF's supermarket banking relationships or either of the primary supermarket chains in which TCF maintains supermarket branches; costs related to closing underperforming branches; inability to timely close underperforming branches due to long-term lease obligations; slower than anticipated growth in existing or acquired businesses; inability to successfully execute on TCF's growth strategy through acquisitions or expanding existing business relationships; failure to expand or diversify TCF's balance sheet through new or expanded programs or opportunities; failure to successfully attract and retain new customers, including the failure to attract and retain manufacturers and dealers to expand the inventory finance business; failure to effectuate, and risks of claims related to, sales and securitizations of loans; risks related to new product additions and addition of distribution channels (or entry into new markets) for existing products.

Technological and Operational Matters. Technological or operational difficulties, loss or theft of information, cyber-attacks and other security breaches, counterparty failures and the possibility that deposit account losses (fraudulent checks, etc.) may increase; failure to keep pace with technological change, including the failure to develop and maintain technology necessary to satisfy customer demands; ability to attract and retain employees given competitive conditions.

Litigation Risks. Results of litigation or government enforcement actions, including class action litigation or enforcement actions concerning TCF's lending or deposit activities, including account opening/origination, servicing practices, fees or charges, employment practices, or checking account overdraft program "opt in" requirements; and possible increases in indemnification obligations for certain litigation against Visa U.S.A.

Accounting, Audit, Tax and Insurance Matters. Changes in accounting standards or interpretations of existing standards; federal or state monetary, fiscal or tax policies, including adoption of state legislation that would increase state taxes; ineffective internal controls; adverse federal, state or foreign tax assessments or findings in tax audits; lack of or inadequate insurance coverage for claims against TCF; potential for claims and legal action related to TCF's fiduciary responsibilities.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

TCF's results of operations depend, to a large degree, on its net interest income and its ability to manage interest rate risk. Although TCF manages other risks in the normal course of business, such as credit risk, liquidity risk, foreign currency risk and operational risk, the Company considers interest rate risk to be one of its more significant market risks.

Interest Rate Risk

TCF's ALCO and the Finance Committee of TCF Financial's Board of Directors have adopted interest rate risk policy limits which are incorporated into the Company's investment policy. Interest rate risk is defined as the exposure of net interest income and fair value of financial instruments (interest-earning assets, deposits and borrowings) to movements in interest rates. Since TCF does not hold a trading portfolio, the Company is not exposed to market risk from trading activities. As such, the major sources of the Company's interest rate risk are timing differences in the maturity and repricing characteristics of assets and liabilities, changes in the shape of the yield curve, changes in consumer behavior and changes in relationships between rate indices (basis risk). Management measures these risks and their impact in various ways, including through the use of simulation and valuation analyses. The interest rate scenarios may include gradual or rapid changes in interest rates, spread narrowing and widening, yield curve twists and changes in assumptions about consumer behavior in various interest rate scenarios. A mismatch between maturities, interest rate sensitivities and prepayment characteristics of assets and liabilities results in interest rate risk. TCF, like most financial institutions, has material interest rate risk exposure to changes in both short- and long-term interest rates, as well as variable interest rate indices (e.g., the prime rate or the London InterBank Offered Rate).

TCF's ALCO is responsible for reviewing the Company's interest rate sensitivity position and establishing policies to monitor and limit exposure to interest rate risk. ALCO manages TCF's interest rate risk based on interest rate expectations and other factors. The principal objective of TCF in managing its assets and liabilities is to provide maximum levels of net interest income and facilitate the funding needs of the Company, while maintaining acceptable levels of interest rate risk and liquidity risk.

ALCO primarily uses two interest rate risk tools with policy limits to evaluate TCF's interest rate risk: net interest income simulation and economic value of equity ("EVE") analysis. In addition, the interest rate gap is reviewed periodically to monitor asset and liability repricing over various time periods.

Management utilizes net interest income simulation models to estimate the near-term effects of changing interest rates on its net interest income. Net interest income simulation involves forecasting net interest income under a variety of scenarios, including the level of interest rates, the shape of the yield curve and the spreads between market interest rates. Management exercises its best judgment in making assumptions regarding events that management can influence, such as non-contractual deposit repricings and events outside management's control, such as consumer behavior on loan and deposit activity and the effect that competition has on both loan and deposit pricing. These assumptions are subjective and, as a result, net interest income simulation results will differ from actual results due to the timing, magnitude and frequency of interest rate changes and changes in market conditions, consumer behavior and management strategies, among other factors. TCF performs various sensitivity analyses on assumptions of new loan spreads, prepayment rates, basis risk, deposit attrition and deposit repricing.

The following table presents changes in TCF's net interest income over a twelve month period if short- and long-term interest rates were to sustain an immediate increase of 100 basis points and 200 basis points. The impact of planned growth and new business activities is factored into the simulation model.

(Dollars in millions)	Impact on Net Interest Income			
	December 31,			
	2016		2015	
Immediate Change in Interest Rates:				
+200 basis points	\$ 97.2	10.9%	\$ 93.9	11.1%
+100 basis points	52.1	5.9	50.4	5.9

As of December 31, 2016, 59.0% of TCF's loan and lease balances are expected to reprice, amortize or prepay in the next 12 months and 62.1% of TCF's deposit balances are low cost or no cost deposits. TCF believes that the mix of assets repricing compared with low cost or no cost deposits positions TCF well for rising interest rates.

Management also uses EVE and interest rate gap analyses to measure risk in the balance sheet that might not be taken into account in the net interest income simulation analysis. Net interest income simulation highlights exposure over a relatively short time period, while EVE analysis incorporates all cash flows over the estimated remaining life of all balance sheet positions. The valuation of the balance sheet, at a point in time, is defined as the discounted present value of asset cash flows minus the discounted present value of liability cash flows. EVE analysis addresses only the current balance sheet and does not incorporate the growth assumptions that are used in the net interest income simulation model. As with the net interest income simulation model, EVE analysis is based on key assumptions about the timing and variability of balance sheet cash flows and does not take into account any potential responses by management to anticipated changes in interest rates.

Interest rate gap is primarily the difference between interest-earning assets and interest-bearing liabilities repricing within a given period and represents the net asset or liability sensitivity at a point in time. An interest rate gap measure could be significantly affected by external factors such as loan prepayments, early withdrawals of deposits, changes in the correlation of various interest-bearing instruments, competition, or a rise or decline in interest rates.

Credit Risk

Credit risk is defined as the risk to earnings or capital if an obligor fails to meet the terms of any contract with the Company or otherwise fails to perform as agreed, such as the failure of customers and counterparties to meet their contractual obligations, as well as contingent exposures from unfunded loan commitments and letters of credit.

TCF's Enterprise Risk Management Committee meets at least quarterly and is responsible for monitoring the loan and lease portfolio composition and risk tolerance within the various segments of the portfolio. The Enterprise Risk Management Committee and the Board of Directors have adopted a Risk Appetite Statement to manage the Company's credit risk by setting (i) a desired balance between asset classes, (ii) concentration limits based on loan type, business line and geographic region and (iii) maximum tolerances for credit performance. To manage credit risk arising from lending and leasing activities, management has adopted and maintains underwriting policies and procedures and periodically reviews the appropriateness of these policies and procedures. Customers and guarantors or recourse providers are evaluated as part of initial underwriting processes and through periodic reviews. For consumer loans, credit scoring models are used to help determine eligibility for credit and terms of credit. These models are periodically reviewed to verify that they are predictive of borrower performance. Limits are established on the exposure to a single customer (including affiliates) and on concentrations for certain categories of customers. Loan and lease credit approval levels are established so that larger credit exposures receive managerial review at the appropriate level through the credit committees.

Management continuously monitors asset quality in order to manage the Company's credit risk and to determine the appropriateness of valuation allowances, including, in the case of commercial loans, inventory finance loans and equipment finance loans and leases, a risk rating methodology under which a rating of one through nine is assigned to each loan or lease. The rating reflects management's assessment of the potential impact on repayment of the customer's financial and operational condition. Asset quality is monitored separately based on the type or category of loan or lease. The rating process allows management to better define the Company's loan and lease portfolio risk profile. Management also uses various risk models to estimate probable impact on payment performance under various scenarios, both expected and unexpected.

The Company also has credit risk in its securities portfolio related to obligations of states and political subdivisions. The Company maintains a restrictive set of underwriting criteria and regularly monitors credit performance under the direction and supervision of the TCF Bank Credit Committee to manage this risk. Credit risk in the remainder of the securities portfolio is minimal. The remainder of the securities available for sale and securities held to maturity portfolios as of December 31, 2016 consist primarily of fixed-rate mortgage-backed securities issued and guaranteed by Fannie Mae. All investment related counterparties and transaction limits are reviewed and approved annually by both ALCO and the TCF Bank Credit Committee.

Liquidity Risk

Liquidity risk is defined as the risk to earnings or capital arising from the Company's inability to meet its obligations when they come due without incurring unacceptable losses.

ALCO and the Finance Committee of TCF Financial's Board of Directors have adopted a Holding Company Investment and Liquidity Management Policy, which establishes a minimum target amount of cash or liquid investments TCF Financial will hold. TCF Financial's primary source of cash flow is capital distributions from TCF Bank. TCF Bank may be required to receive regulatory approval prior to making any such distributions in the future and such distributions may be restricted by its regulatory authorities. TCF Bank's ability to make any such distributions will also depend on its earnings and ability to meet minimum regulatory capital requirements in effect during future periods. See "Item 1. Business - Regulation - Restrictions on Distributions", Note 14, Regulatory Capital Requirements and Note 23, Parent Company Financial Information of Notes to Consolidated Financial Statements for further information.

ALCO and the Finance Committee of TCF Financial's Board of Directors have adopted a Liquidity Management Policy for TCF Bank to direct management of the Company's liquidity risk. The objective of the Liquidity Management Policy is to ensure that TCF meets its cash and collateral obligations promptly, in a cost-effective manner and with the highest degree of reliability. The maintenance of adequate levels of asset and liability liquidity will provide TCF with the ability to meet both expected and unexpected cash flows and collateral needs. Key liquidity ratios, asset liquidity levels and the amount available from funding sources are reported to ALCO on a monthly basis. TCF's Liquidity Management Policy defines liquidity stress scenarios and establishes asset liquidity target ranges based upon those stress scenarios that are deemed appropriate for its risk profile.

TCF's asset liquidity may be held in the form of on-balance sheet cash invested with the Federal Reserve Bank or other highly liquid marketable securities that are not pledged and can be sold or pledged to various counterparties under established agreements. Interest-bearing deposits held at the Federal Reserve Bank and unencumbered U.S. Government sponsored enterprises and federal agencies mortgage-backed securities were \$1.2 billion at December 31, 2016. In addition, TCF held unencumbered obligations of states and political subdivisions totaling \$612.5 million at December 31, 2016.

Deposits are TCF's primary source of funding. TCF also maintains secured sources of funding, which primarily include \$1.9 billion of additional borrowing capacity at the FHLB of Des Moines, as well as access to the Federal Reserve Discount Window. Collateral pledged by TCF to the FHLB and the Federal Reserve Bank may consist of consumer and commercial real estate loans and mortgage-backed securities. The FHLB relies upon its own internal credit analysis of TCF when determining TCF's secured borrowing capacity. In addition to the above, TCF maintains a diversified set of unsecured and uncommitted funding sources, including access to overnight federal funds purchased lines, brokered deposits and capital markets. TCF has developed and maintains a contingency funding plan should certain liquidity needs arise.

Foreign Currency Risk

The Company is also exposed to foreign currency risk as changes in the exchange rate of the Canadian dollar may impact the Company's investment in TCFFCFC. TCF enters into forward foreign exchange contracts in order to minimize the risk of changes in foreign exchange rates on its investment in and loans to TCFFCFC. The values of forward foreign exchange contracts vary over their contractual lives as the related currency exchange rates fluctuate. TCF may also experience realized and unrealized gains or losses on forward foreign exchange contracts as a result of changes in foreign exchange rates. See Note 1, Basis of Presentation and Note 18, Derivative Instruments of Notes to Consolidated Financial Statements for further information.

Item 8. Financial Statements and Supplementary Data



Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
TCF Financial Corporation:

We have audited the accompanying consolidated statements of financial condition of TCF Financial Corporation and subsidiaries (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of TCF Financial Corporation and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), TCF Financial Corporation's internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 21, 2017 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

KPMG LLP

Minneapolis, Minnesota
February 21, 2017

Consolidated Statements of Financial Condition

(Dollars in thousands, except per-share data)	At December 31,	
	2016	2015
Assets:		
Cash and due from banks	\$ 609,603	\$ 889,337
Investments	74,714	70,537
Securities held to maturity	181,314	201,920
Securities available for sale	1,423,435	888,885
Loans and leases held for sale	268,832	157,625
Loans and leases:		
Consumer real estate:		
First mortgage lien	2,292,596	2,624,956
Junior lien	2,791,756	2,839,316
Total consumer real estate	5,084,352	5,464,272
Commercial	3,286,478	3,145,832
Leasing and equipment finance	4,336,310	4,012,248
Inventory finance	2,470,175	2,146,754
Auto finance	2,647,741	2,647,596
Other	18,771	19,297
Total loans and leases	17,843,827	17,435,999
Allowance for loan and lease losses	(160,269)	(156,054)
Net loans and leases	17,683,558	17,279,945
Premises and equipment, net	418,372	445,934
Goodwill	225,640	225,640
Other assets	555,858	529,786
Total assets	\$ 21,441,326	\$ 20,689,609
Liabilities and Equity:		
Deposits:		
Checking	\$ 6,009,151	\$ 5,690,559
Savings	4,719,481	4,717,457
Money market	2,421,467	2,408,180
Certificates of deposit	4,092,423	3,903,793
Total deposits	17,242,522	16,719,989
Short-term borrowings	4,391	5,381
Long-term borrowings	1,073,181	1,034,557
Total borrowings	1,077,572	1,039,938
Accrued expenses and other liabilities	676,587	622,765
Total liabilities	18,996,681	18,382,692
Equity:		
Preferred stock, par value \$0.01 per share, 30,000,000 shares authorized; 4,006,900 shares issued	263,240	263,240
Common stock, par value \$0.01 per share, 280,000,000 shares authorized; 171,034,506 and 169,887,030 shares issued, respectively	1,710	1,699
Additional paid-in capital	862,776	851,836
Retained earnings, subject to certain restrictions	1,382,901	1,240,347
Accumulated other comprehensive income (loss)	(33,725)	(15,346)
Treasury stock at cost, 42,566 shares, and other	(49,419)	(50,860)
Total TCF Financial Corporation stockholders' equity	2,427,483	2,290,916
Non-controlling interest in subsidiaries	17,162	16,001
Total equity	2,444,645	2,306,917
Total liabilities and equity	\$ 21,441,326	\$ 20,689,609

See accompanying notes to consolidated financial statements.

Consolidated Statements of Income

(In thousands, except per-share data)	Year Ended December 31,		
	2016	2015	2014
Interest income:			
Loans and leases	\$ 850,546	\$ 832,736	\$ 820,436
Securities available for sale	26,573	15,648	11,994
Securities held to maturity	4,649	5,486	5,281
Loans held for sale and other	48,962	38,060	36,518
Total interest income	930,730	891,930	874,229
Interest expense:			
Deposits	61,788	48,226	38,385
Borrowings	20,836	23,316	20,215
Total interest expense	82,624	71,542	58,600
Net interest income	848,106	820,388	815,629
Provision for credit losses	65,874	52,944	95,737
Net interest income after provision for credit losses	782,232	767,444	719,892
Non-interest income:			
Fees and service charges	137,664	144,999	154,386
Card revenue	54,882	54,387	51,323
ATM revenue	20,445	21,544	22,225
Subtotal	212,991	220,930	227,934
Gains on sales of auto loans, net	34,832	30,580	43,565
Gains on sales of consumer real estate loans, net	50,427	40,964	34,794
Servicing fee income	40,182	31,229	21,444
Subtotal	125,441	102,773	99,803
Leasing and equipment finance	119,166	108,129	93,799
Other	8,883	10,463	10,704
Fees and other revenue	466,481	442,295	432,240
Gains (losses) on securities, net	(581)	(297)	1,027
Total non-interest income	465,900	441,998	433,267
Non-interest expense:			
Compensation and employee benefits	474,722	457,743	452,942
Occupancy and equipment	149,980	144,962	139,023
Other	231,420	229,255	227,970
Subtotal	856,122	831,960	819,935
Operating lease depreciation	40,359	39,409	27,152
Foreclosed real estate and repossessed assets, net	13,187	23,193	24,567
Other credit costs, net	219	185	123
Total non-interest expense	909,887	894,747	871,777
Income before income tax expense	338,245	314,695	281,382
Income tax expense	116,528	108,872	99,766
Income after income tax expense	221,717	205,823	181,616
Income attributable to non-controlling interest	9,593	8,700	7,429
Net income attributable to TCF Financial Corporation	212,124	197,123	174,187
Preferred stock dividends	19,388	19,388	19,388
Net income available to common stockholders	\$ 192,736	\$ 177,735	\$ 154,799
Earnings per common share:			
Basic	\$ 1.15	\$ 1.07	\$ 0.95
Diluted	\$ 1.15	\$ 1.07	\$ 0.94

See accompanying notes to consolidated financial statements.

Consolidated Statements of Comprehensive Income

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Net income attributable to TCF Financial Corporation	\$ 212,124	\$ 197,123	\$ 174,187
Other comprehensive income (loss), net of tax:			
Net unrealized gains (losses) on securities available for sale and interest-only strips	(18,894)	(816)	18,092
Net unrealized gains (losses) on net investment hedges	(756)	4,713	1,945
Foreign currency translation adjustment	1,300	(8,304)	(3,704)
Recognized postretirement prior service cost	(29)	(29)	(30)
Total other comprehensive income (loss), net of tax	(18,379)	(4,436)	16,303
Comprehensive income	\$ 193,745	\$ 192,687	\$ 190,490

See accompanying notes to consolidated financial statements.

Consolidated Statements of Equity

TCF Financial Corporation

(Dollars in thousands)	Number of Shares Issued		Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock and Other	Total	Non-controlling Interest	Total Equity
	Preferred	Common									
Balance, December 31, 2013	4,006,900	165,164,861	\$ 263,240	\$ 1,652	\$ 779,641	\$ 977,846	\$ (27,213)	\$ (42,198)	\$ 1,952,968	\$ 11,791	\$ 1,964,759
Net income	—	—	—	—	—	174,187	—	—	174,187	7,429	181,616
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	16,303	—	16,303	—	16,303
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(5,505)	(5,505)
Dividends on preferred stock	—	—	—	—	—	(19,388)	—	—	(19,388)	—	(19,388)
Dividends on common stock	—	—	—	—	—	(32,731)	—	—	(32,731)	—	(32,731)
Common shares purchased by TCF employee benefit plans	—	1,452,837	—	15	23,068	—	—	—	23,083	—	23,083
Stock compensation plans, net of tax	—	885,870	—	8	7,219	—	—	—	7,227	—	7,227
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	7,202	—	—	(7,202)	—	—	—
Balance, December 31, 2014	4,006,900	167,503,568	263,240	1,675	817,130	1,099,914	(10,910)	(49,400)	2,121,649	13,715	2,135,364
Net income	—	—	—	—	—	197,123	—	—	197,123	8,700	205,823
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	(4,436)	—	(4,436)	—	(4,436)
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(6,414)	(6,414)
Dividends on preferred stock	—	—	—	—	—	(19,388)	—	—	(19,388)	—	(19,388)
Dividends on common stock	—	—	—	—	—	(37,302)	—	—	(37,302)	—	(37,302)
Common shares purchased by TCF employee benefit plans	—	1,588,111	—	16	24,819	—	—	—	24,835	—	24,835
Stock compensation plans, net of tax	—	795,351	—	8	8,427	—	—	—	8,435	—	8,435
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	1,460	—	—	(1,460)	—	—	—
Balance, December 31, 2015	4,006,900	169,887,030	263,240	1,699	851,836	1,240,347	(15,346)	(50,860)	2,290,916	16,001	2,306,917
Net income	—	—	—	—	—	212,124	—	—	212,124	9,593	221,717
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	(18,379)	—	(18,379)	—	(18,379)
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(8,432)	(8,432)
Dividends on preferred stock	—	—	—	—	—	(19,388)	—	—	(19,388)	—	(19,388)
Dividends on common stock	—	—	—	—	—	(50,182)	—	—	(50,182)	—	(50,182)
Common shares purchased by TCF employee benefit plans	—	511,420	—	5	5,833	—	—	—	5,838	—	5,838
Stock compensation plans, net of tax	—	636,056	—	6	6,548	—	—	—	6,554	—	6,554
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	(1,441)	—	—	1,441	—	—	—
Balance, December 31, 2016	4,006,900	171,034,506	\$ 263,240	\$ 1,710	\$ 862,776	\$ 1,382,901	\$ (33,725)	\$ (49,419)	\$ 2,427,483	\$ 17,162	\$ 2,444,645

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net income	\$ 221,717	\$ 205,823	\$ 181,616
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Provision for credit losses	65,874	52,944	95,737
Depreciation and amortization	182,226	157,287	128,701
Provision for deferred income taxes	32,966	20,786	37,432
Proceeds from sales of loans and leases held for sale	1,044,282	970,467	571,551
Originations of loans and leases held for sale, net of repayments	(1,207,227)	(965,712)	(626,172)
Gains on sales of assets, net	(97,383)	(80,471)	(90,736)
Net change in other assets and accrued expenses and other liabilities	71,495	31,975	46,192
Other, net	(24,667)	(29,439)	(32,571)
Net cash provided by (used in) operating activities	289,283	363,660	311,750
Cash flows from investing activities:			
Proceeds from sales of securities	—	177	2,813
Proceeds from maturities of and principal collected on securities	145,782	94,250	58,151
Purchases of securities	(692,996)	(510,675)	(139,080)
Redemption of Federal Home Loan Bank stock	156,967	153,005	105,931
Purchases of Federal Home Loan Bank stock	(161,080)	(138,000)	(97,000)
Proceeds from sales of loans and leases	2,830,807	1,795,602	2,304,280
Loan and lease originations and purchases, net of principal collected on loans and leases	(2,200,776)	(1,968,134)	(2,190,753)
Proceeds from sales of lease equipment	11,650	10,041	7,737
Purchases of lease equipment	(1,197,281)	(1,087,438)	(920,985)
Proceeds from sales of real estate owned	65,235	71,709	67,049
Purchases of premises and equipment	(34,513)	(53,594)	(45,469)
Other, net	23,002	16,416	22,403
Net cash provided by (used in) investing activities	(1,053,203)	(1,616,641)	(824,923)
Cash flows from financing activities:			
Net change in deposits	518,468	1,256,646	997,661
Net change in short-term borrowings	(1,192)	1,072	(493)
Proceeds from long-term borrowings	5,582,983	4,471,086	2,808,612
Payments on long-term borrowings	(5,542,831)	(4,666,595)	(3,059,948)
Net investment by (distribution to) non-controlling interest	(8,432)	(6,414)	(5,505)
Dividends paid on preferred stock	(19,388)	(19,388)	(19,388)
Dividends paid on common stock	(50,182)	(37,302)	(32,731)
Stock compensation tax (expense) benefit	(377)	558	1,316
Common shares sold to TCF employee benefit plans	5,838	24,835	23,083
Exercise of stock options	(701)	2,570	740
Net cash provided by (used in) financing activities	484,186	1,027,068	713,347
Net change in cash and due from banks	(279,734)	(225,913)	200,174
Cash and due from banks at beginning of period	889,337	1,115,250	915,076
Cash and due from banks at end of period	\$ 609,603	\$ 889,337	\$ 1,115,250
Supplemental disclosures of cash flow information:			
Cash paid (received) for:			
Interest on deposits and borrowings	\$ 78,930	\$ 64,855	\$ 55,954
Income taxes, net	23,064	79,687	113,562
Transfer of loans to other assets	107,768	107,403	91,180
Transfer of securities available for sale to securities held to maturity	—	—	191,665

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1. Basis of Presentation

Basis of Presentation TCF Financial Corporation (together with its direct and indirect subsidiaries, "we," "us," "our," "TCF" or the "Company"), a Delaware corporation, is a national bank holding company based in Wayzata, Minnesota. References herein to "TCF Financial" or the "Holding Company" refer to TCF Financial Corporation on an unconsolidated basis. TCF's principal subsidiary, TCF National Bank ("TCF Bank"), is headquartered in Sioux Falls, South Dakota. All significant intercompany accounts and transactions have been eliminated in consolidation.

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. These estimates are based on information available to management at the time the estimates are made. Actual results could differ from those estimates.

Effective January 1, 2016, the Company retrospectively adopted Accounting Standards Update ("ASU") No. 2015-03, *Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs*, which required that debt issuance costs be presented as a direct deduction from debt. Accordingly, the Company reclassified unamortized debt issuance costs of \$2.1 million from Other assets to a reduction in Long-term borrowings on the Consolidated Statement of Financial Condition as of December 31, 2015. The adoption of this ASU did not impact results of operations, retained earnings or cash flows.

Effective January 1, 2016, the Company changed its reportable segments to align with the way the Company is now managed. The revised presentation of previously reported segment data has been applied retroactively to all periods presented in these financial statements. The new reportable segments are Consumer Banking, Wholesale Banking and Enterprise Services. Previously, the Company's reportable segments were Lending, Funding and Support Services. The reportable segments follow GAAP as described below, except for the accounting for intercompany interest income and interest expense, which are eliminated in consolidation, and presenting net interest income on a fully tax-equivalent basis. See Note 22, Business Segments for a description of the new segments.

Critical Accounting Estimates Critical accounting estimates occur in certain accounting policies and procedures and are particularly susceptible to significant change. Policies that contain critical accounting estimates include the determination of the allowance for loan and lease losses, the determination of lease classification and the determination of current and deferred income taxes.

Allowance for Loan and Lease Losses The allowance for loan and lease losses is maintained at a level appropriate to provide for probable loan and lease losses incurred in the portfolio as of the balance sheet date, including known or anticipated problem loans and leases, as well as for loans and leases which are not currently known to require specific allowances. Loans classified as troubled debt restructuring ("TDR") loans are considered impaired loans, along with non-accrual commercial loans, non-accrual equipment finance loans and non-accrual inventory finance loans. TCF individually evaluates impairment on all impaired loans and all non-accrual leases and other consumer real estate, commercial and auto finance loans specifically identified for evaluation. All other loans and leases are evaluated collectively for impairment.

Loan impairment on consumer real estate TDR loans is a key component of the allowance for loan and lease losses. Impairment is generally based upon the present value of the expected future cash flows discounted at the loan's initial effective interest rate, unless the loans are collateral dependent, in which case loan impairment is based upon the fair value of the collateral less selling expenses. See Note 6, Allowance for Loan and Lease Losses and Credit Quality Information for further information on the determination of the allowance for losses on accruing consumer real estate TDR loans.

Impairment on commercial and inventory finance loans and on leasing and equipment finance loans and leases is generally based upon the present value of the expected future cash flows discounted at the initial effective interest rate of the loan or lease, unless the loan or lease is collateral dependent, in which case impairment is based upon the fair value of collateral less estimated selling costs; however, if payment or satisfaction of the loan or lease is dependent on the operation, rather than the sale of the collateral, the impairment does not include selling costs.

Impairment on auto finance loans is generally based upon the fair value of collateral less estimated selling costs. The impairment for all other loans and leases is evaluated collectively by various characteristics. The collective evaluation of incurred losses in these portfolios is based upon their historical loss rates multiplied by the respective loss emergence period. Factors utilized in the determination of the amount of the allowance include historical trends in loss rates, a portfolio's overall risk characteristics, changes in its character or size, risk rating migration, delinquencies, collateral values, economic outlook and prevailing economic conditions. The various factors used in the methodologies are reviewed on a periodic basis.

Loans and leases are charged off to the extent they are deemed to be uncollectible. Charge-offs related to losses are utilized in the historical data in calculating the allowance for loan and lease losses. Consumer real estate loans are charged off to the estimated fair value of the underlying collateral, less estimated selling costs, no later than 150 days past due. Additional review of the fair value, less estimated costs to sell, compared with the recorded value occurs upon foreclosure and additional charge-offs are recorded if necessary. Commercial loans, leasing and equipment finance loans and leases and inventory finance loans which are considered collateral dependent are charged off to estimated fair value, less estimated selling costs when it becomes probable, based on current information and events, that all principal and interest amounts will not be collectible in accordance with their contractual terms. Auto finance loans will be charged off in full no later than 120 days past due, unless repossession is reasonably assured and in process, in which case the loan would be charged off to the fair value of the collateral, less estimated selling costs. Consumer real estate and auto finance loans in bankruptcy status may be charged down to the fair value of the collateral, less estimated selling costs, within 60 days past due based on specific criteria. Deposit account overdrafts are reported in other loans. Net losses on uncollectible overdrafts are reported as net charge-offs in the allowance for loan and lease losses within 60 days from the date of overdraft. Loans which are not collateral dependent are charged off when deemed uncollectible based on specific facts and circumstances.

The amount of the allowance for loan and lease losses significantly depends upon management's estimates of variables affecting valuation, appraisals of collateral, evaluations of performance and status and the amounts and timing of future cash flows expected to be received. Such estimates, appraisals, evaluations and cash flows may be subject to frequent adjustments due to changing economic prospects of borrowers, lessees or properties. These estimates are reviewed periodically and adjustments, if necessary, are recorded in the provision for credit losses in the periods in which they become known.

Lease Financing TCF provides various types of commercial lease financing that are classified for accounting purposes as direct financing, sales-type or operating leases. Leases that transfer substantially all of the benefits and risks of ownership to the lessee are classified as direct financing or sales-type leases and are included in loans and leases. Direct financing and sales-type leases are carried at the combined present value of future minimum lease payments and lease residual values. The determination of lease classification requires various judgments and estimates by management including the fair value of the equipment at lease inception, useful life of the equipment under lease, estimate of the lease residual value and collectability of minimum lease payments.

Sales-type leases generate dealer profit which is recognized at lease inception by recording lease revenue net of lease cost. Lease revenue consists of the present value of the future minimum lease payments. Lease cost consists of the leased equipment's book value, less the present value of its residual. Interest income on direct financing and sales-type leases is recognized using methods which approximate a level yield over the fixed, non-cancelable term of the lease. TCF receives pro rata rent payments for the interim period until the lease contract commences and the fixed, non-cancelable lease term begins. TCF recognizes these interim payments in the month they are earned and records the income in interest income on direct finance leases. Management has policies and procedures in place for the determination of lease classification and review of the related judgments and estimates for all lease financings.

Some lease financings include a residual value component, which represents the estimated fair value of the leased equipment at the expiration of the initial term of the transaction. The estimation of residual values involves judgment regarding product and technology changes, customer behavior, shifts in supply and demand and other economic assumptions. TCF reviews residual assumptions in the portfolio at least annually and downward adjustments, if necessary, are charged to non-interest expense in the periods in which they become known. TCF may sell minimum lease payments primarily as a credit risk reduction tool to third-party financial institutions at fixed rates on a non-recourse basis with its underlying equipment as collateral. For those transactions which achieve sale treatment, the related lease cash flow stream and the non-recourse financing are derecognized. For those transactions which do not achieve sale treatment, the underlying lease remains on TCF's Consolidated Statements of Financial Condition and non-recourse debt is recorded in the amount of the proceeds received. TCF retains servicing of these leases and bills, collects and remits funds to the third-party financial institution. Upon default by the lessee, the third-party financial institutions may take control of the underlying collateral which TCF would otherwise retain as residual value.

Leases that do not transfer substantially all benefits and risks of ownership to the lessee are classified as operating leases. Such leased equipment and related initial direct costs are included in other assets on the Consolidated Statements of Financial Condition and depreciated on a straight-line basis over the term of the lease to its estimated salvage value. Depreciation expense is recorded as operating lease expense and included in non-interest expense. Operating lease rental income is recognized when it is due and is reflected as a component of non-interest income. An allowance for lease losses is not provided on operating leases.

Income Taxes Income taxes are accounted for using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis carrying amounts. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recorded in income tax expense in the Consolidated Statements of Income in the period in which the enactment date occurs. Also, if current period income tax rates change, the impact on the annual effective income tax rate is applied year to date in the period of enactment.

The determination of current and deferred income taxes is a critical accounting estimate which is based on complex analyses of many factors, including interpretation of income tax laws, the evaluation of uncertain tax positions, differences between the tax and financial reporting bases of assets and liabilities (temporary differences), estimates of amounts due or owed, the timing of reversals of temporary differences and current financial accounting standards. Additionally, there can be no assurance that estimates and interpretations used in determining income tax assets or liabilities will not be challenged by taxing authorities. Actual results could differ significantly from the estimates and tax law interpretations used in determining the current and deferred income tax assets and liabilities.

In the preparation of income tax returns, tax positions are taken based on interpretation of income tax laws for which the outcome is uncertain. Management periodically reviews and evaluates the status of uncertain tax positions and makes estimates of amounts ultimately due or owed. The benefits of tax positions are recorded in income tax expense in the Consolidated Statements of Income, net of the estimates of ultimate amounts due or owed, including any applicable interest and penalties. Changes in the estimated amounts due or owed may result from closing of the statute of limitations on tax returns, new legislation, clarification of existing legislation through government pronouncements, judicial action and through the examination process. TCF's policy is to report interest and penalties, if any, related to unrecognized tax benefits in income tax expense in the Consolidated Statements of Income.

Other Significant Accounting Policies

Securities Held to Maturity Securities held to maturity are carried at cost and adjusted for amortization of premiums or accretion of discounts using a level yield method; however, transfers of securities available for sale to securities held to maturity are made at fair value at the date of transfer. The unrealized holding gain or loss at the date of each transfer is retained in accumulated other comprehensive income (loss) and in the carrying value of the held to maturity investment security. Such amounts are then amortized over the remaining life of the transferred security as an adjustment of the yield on those securities. TCF periodically evaluates securities held to maturity for other than temporary impairment. Declines in value considered other than temporary, if any, would be recorded in non-interest income within gains (losses) on securities, net.

Securities Available for Sale Securities available for sale are carried at fair value with the unrealized gains or losses, net of related deferred income taxes, reported within accumulated other comprehensive income (loss), a separate component of equity. The cost of securities sold is determined on a specific identification basis and gains or losses on sales of securities available for sale are recognized on trade dates. TCF evaluates securities available for sale for other than temporary impairment on a quarterly basis. Declines in the value of securities available for sale that are considered other than temporary are recorded in non-interest income within gains (losses) on securities, net. Discounts and premiums on securities available for sale are amortized using a level yield method over the expected life of the security, or to the call date for securities with call features.

Loans and Leases Held for Sale Loans and leases designated as held for sale are generally carried at the lower of cost or fair value. Any amount by which cost exceeds fair value is initially recorded as a valuation allowance and subsequently reflected in the gain or loss on sale when sold. Certain other loans and leases held for sale are recorded at fair value under the elected fair value option. From time to time, management identifies and designates primarily consumer real estate and auto finance loans held in the loan portfolios for sale. These loans are transferred to loans and leases held for sale at the lower of cost or fair value at the time of transfer net of any associated allowance for loan and lease losses.

Loans and Leases Loans and leases are reported at historical cost including net direct fees and costs associated with originating and acquiring loans and leases. The net direct fees and costs for sales-type leases are offset against revenues recorded at the commencement of sales-type leases. Discounts and premiums on acquired loans, net direct fees and costs, unearned discounts and finance charges and unearned lease income are amortized to interest income using methods that approximate a level yield over the estimated remaining lives of the loans and leases. Net direct fees and costs on all lines of credit are amortized on a straight line basis over the contractual life of the line of credit and adjusted for payoffs. Net deferred fees and costs on consumer real estate lines of credit are amortized to fees and service charges.

Non-accrual Loans and Leases Loans and leases are generally placed on non-accrual status when the collection of interest or principal is 90 days or more past due unless, in the case of commercial loans, they are well secured and in the process of collection. Delinquent consumer real estate junior lien loans are placed on non-accrual status when there is evidence that the related third-party first lien mortgage may be 90 days or more past due, or foreclosure, charge-off or collection action has been initiated. TDR loans are placed on non-accrual status prior to the past due thresholds outlined above if repayment under the modified terms is not likely after performing a well-documented credit analysis.

Loans on non-accrual status are generally reported as non-accrual loans until there is sustained repayment performance for six consecutive months, with the exception of loans not reaffirmed upon discharge under Chapter 7 bankruptcy, which remain on non-accrual status until a well-documented credit analysis indicates full repayment of the remaining pre-discharged contractual principal and interest is likely. Income on these loans is recognized on a cash basis when there is sustained repayment performance for six or 12 consecutive months based on the credit evaluation and the loan is not more than 60 days delinquent.

Generally, when a loan or lease is placed on non-accrual status, uncollected interest accrued in prior years is charged-off against the allowance for loan and lease losses and interest accrued in the current year is reversed against interest income. For non-accrual leases that have been discounted with third-party financial institutions on a non-recourse basis, the related liability is also placed on non-accrual status. Interest payments received on loans and leases in non-accrual status are generally applied to principal unless the remaining principal balance has been determined to be fully collectible, in which case interest income is recognized on a cash basis.

Premises and Equipment Premises and equipment, including leasehold improvements, are carried at cost and are depreciated or amortized on a straight-line basis over estimated useful lives of owned assets and for leasehold improvements over the estimated useful life of the related asset or the lease term, whichever is shorter. Maintenance and repairs are charged to expense as incurred. Rent expense for leased land with facilities is recognized in occupancy and equipment expense. Rent expense for leases with free rent periods or scheduled rent increases is recognized on a straight-line basis over the lease term.

Other Real Estate Owned and Repossessed and Returned Assets Assets acquired through foreclosure, repossession or returned to TCF are initially recorded at the lower of the loan or lease carrying amount or fair value of the collateral less estimated selling costs at the time of transfer to real estate owned or repossessed and returned assets. The fair value of other real estate owned is based on independent appraisals, real estate brokers' price opinions or automated valuation methods, less estimated selling costs. The fair value of repossessed and returned assets is based on available pricing guides, auction results or price opinions, less estimated selling costs. Any carrying amount in excess of the fair value less estimated selling costs is charged off to the allowance for loan and lease losses upon transfer. Subsequently, if the fair value of an asset, less the estimated costs to sell, declines to less than the carrying amount of the asset, the shortfall is recognized in the period in which it becomes known and is included in foreclosed real estate and repossessed assets, net expense. Operating expenses of properties and recoveries on sales of other real estate owned are also recorded in non-interest expense within foreclosed real estate and repossessed assets, net expense. Operating revenue from foreclosed property is included in other non-interest income. Other real estate owned at December 31, 2016 and 2015, was \$46.8 million and \$50.0 million, respectively. Repossessed and returned assets at December 31, 2016 and 2015, were \$10.0 million and \$8.0 million, respectively. Other real estate owned and repossessed and returned assets were written down \$8.3 million and \$12.8 million, which was included in foreclosed real estate and repossessed assets, net expense for the years ended December 31, 2016 and 2015, respectively.

Investments in Affordable Housing Limited Liability Entities TCF has investments in affordable housing limited liability entities that operate qualified affordable housing projects or that invest in other limited liability entities formed to operate affordable housing projects, which TCF generally accounts for under the proportional amortization method. However, depending on circumstances, the effective yield, equity or cost methods may be utilized. The amount of the investments, along with any unfunded equity contributions that are unconditional and legally binding, are recorded in other assets. A liability for the unfunded equity contributions is recorded in other liabilities. The tax credits and amortization of the investments are reflected in the Consolidated Statements of Income as a reduction of income tax expense. TCF's investments in affordable housing limited liability entities at December 31, 2016 and 2015 were \$30.3 million and \$35.2 million, respectively.

At December 31, 2016 and 2015, four and six, respectively, of these investments in affordable housing limited liability entities were considered variable interest entities ("VIE"). These limited liability entities are not consolidated with TCF. At December 31, 2016 and 2015, the carrying amount of the VIE investments was \$29.8 million and \$34.7 million, respectively. The maximum exposure to loss on the VIE investments was \$29.8 million and \$34.7 million at December 31, 2016 and 2015, respectively, however the limited liability entity provides various guarantees to TCF including guaranteed minimum returns. These guarantees are backed by an investment grade credit-rated company, which further reduces the risk of loss. In addition to the guarantees, the investments are supported by the performance of the underlying real estate properties which also mitigates the risk of loss. Tax credits and other tax benefits of \$7.1 million, \$3.9 million and \$3.5 million in 2016, 2015 and 2014, respectively, are recorded in income tax expense. At December 31, 2016, the expected payments for unfunded affordable housing commitments were \$12.6 million. The commitments are expected to be fully funded by December 31, 2018.

Interest-only Strips TCF sells fixed or variable-rate consumer real estate and auto finance loans with or without interest-only strips to third party financial institutions. For those transactions which achieve sale treatment, the underlying loans are removed from TCF's Consolidated Statements of Financial Condition. The Company may receive as part of the sale consideration an interest in the future cash flows of borrower loan payments, known as an interest-only strip. The interest-only strip is recorded at fair value in other assets with the unrealized gains or losses, net of deferred income taxes, reported within accumulated other comprehensive income (loss), a separate component of equity. The fair value of the interest-only strip represents the present value of future cash flows expected to be received by TCF. After initial recording of the interest-only strip, the accretable yield is measured as the difference between the initial investment, or fair value, and the cash flows expected to be collected. The accretable yield is amortized into interest income over the life of the interest-only strip using the effective yield method. The expected cash flows are evaluated quarterly to determine if they have changed from previous projections. Declines in the value of interest-only strips that are considered other than temporary are recorded in other non-interest expense.

Intangible Assets All assets and liabilities acquired in purchase acquisitions, including other intangibles, are initially recorded at fair value. Goodwill is recorded when the purchase price of an acquisition is greater than the fair value of net assets, including identifiable intangible assets. Goodwill is not amortized, but assessed for impairment on at least an annual basis at the reporting unit level. Interim impairment analysis may be required if events occur or circumstances change that would more likely than not reduce a reporting unit's fair value below its carrying amount. Other intangible assets are amortized on a straight-line or effective yield basis over their estimated useful lives and are subject to impairment if events or circumstances indicate a possible inability to realize their carrying amounts.

When testing for goodwill impairment, TCF initially performs a qualitative assessment. Based on the results of this qualitative assessment, if TCF concludes it is more likely than not that a reporting unit's fair value is less than its carrying amount, a quantitative analysis is performed. Quantitative valuation methodologies primarily include discounted cash flow analysis in determining fair value of reporting units. If the fair value is less than the carrying amount, additional analysis is required to measure the amount of impairment. Impairment losses, if any, are recorded as a charge to non-interest expense and an adjustment to the carrying value of goodwill.

Other intangible assets are reviewed for impairment whenever events or changes in circumstances indicate their carrying amount may not be recoverable. Impairment is indicated if the sum of the undiscounted estimated future net cash flows is less than the carrying value of the intangible asset. Impairment losses, if any, permanently reduce the carrying value of the other intangible assets.

Derivatives All derivative instruments are recognized within other assets or other liabilities at fair value within the Consolidated Statements of Financial Condition. The Company's derivative instruments may be subject to master netting arrangements and collateral arrangements and qualify for offset in the Consolidated Statements of Financial Condition. A master netting arrangement with a counterparty creates a right of offset for amounts due to and from that same counterparty that is enforceable in the event of a default or bankruptcy. The Company's policy is to recognize amounts subject to master netting arrangements and collateral arrangements on a net basis in the Consolidated Statements of Financial Condition. The value of derivative instruments will vary over their contractual terms as the related underlying rates fluctuate. The accounting for changes in the fair value of a derivative instrument depends on whether or not the contract has been designated and qualifies as a hedge. To qualify as a hedge, a contract must be highly effective at reducing the risk associated with the exposure being hedged. In addition, for a contract to be designated as a hedge, the risk management objective and strategy must be documented at inception. Hedge documentation must also identify the hedging instrument, the asset or liability and type of risk to be hedged and how the effectiveness of the contract is assessed prospectively and retrospectively. To assess effectiveness, TCF uses statistical methods such as regression analysis. A contract that has been, and is expected to continue to be, effective at offsetting changes in fair values or the net investment must be assessed and documented at least quarterly. If it is determined that a contract is not highly effective at hedging the designated exposure, hedge accounting is discontinued.

Upon origination of a derivative instrument, the contract is designated either as a hedge of the exposure to changes in the fair value of an asset or liability due to changes in market risk ("fair value hedge"), a hedge of the volatility of an investment in foreign operations driven by changes in foreign currency exchange rates ("net investment hedge"), or is not designated as a hedge.

Fair Value Hedges During the first quarter of 2015, TCF Bank entered into an interest rate swap agreement related to its contemporaneously issued subordinated debt, which settles through a central clearing house. The swap was designated as a fair value hedge and effectively converts the fixed interest rate to a floating rate based on the three-month London InterBank Offered Rate plus a fixed number of basis points on the \$150.0 million notional amount through February 27, 2025, the maturity date of the subordinated debt. In exchange, TCF Bank will receive 4.60% fixed-rate interest on the \$150.0 million notional amount from the swap counterparty.

The interest rate swap substantially offsets the change in fair value of the hedged underlying debt that is attributable to the changes in market risk. The gains and losses related to changes in the fair value of the interest rate swap as well as the offsetting changes in fair value of the hedged debt are reflected in other non-interest income.

Net Investment Hedges Forward foreign exchange contracts, which generally settle within 34 days, are used to manage the foreign exchange risk associated with the Company's net investment in TCF Commercial Finance Canada, Inc., a wholly-owned indirect Canadian subsidiary of TCF Bank. Changes in net investment hedges recorded within other comprehensive income (loss) are subsequently reclassified to non-interest expense during the period in which the foreign investment is substantially liquidated or when other elements of the currency translation adjustment are reclassified to income.

Derivatives Not Designated as Hedges Certain of TCF's forward foreign exchange contracts are not designated as hedges and are generally settled within 34 days. Changes in the fair value of these forward foreign exchange contracts are reflected in other non-interest expense.

TCF executes interest rate swap agreements with commercial banking customers to facilitate their respective risk management strategies. Those interest rate swaps are simultaneously hedged with offsetting interest rate swaps that TCF executes with a third party and settles through a central clearing house, minimizing TCF's net risk exposure resulting from such transactions. As the interest rate swaps associated with this program do not meet hedge accounting requirements, changes in the fair value of both the customer swaps and the offsetting swaps are reflected in other non-interest income. These contracts have original fixed maturity dates ranging from three to 10 years.

TCF enters into interest rate lock commitments in conjunction with the sale of certain consumer real estate loans. These interest rate lock commitments are agreements to extend credit under certain specified terms and conditions at fixed rates and have original lock expirations of up to 60 days. They are not designated as hedges and accordingly, changes in the valuation of these commitments are reflected in gains on sales of consumer real estate loans, net.

During the second quarter of 2012, TCF sold its Visa[®] Class B stock. In conjunction with the sale, TCF and the purchaser entered into a derivative transaction whereby TCF may receive or be required to make cash payments whenever the conversion ratio of the Visa Class B stock into Visa Class A stock is adjusted. The fair value of this derivative has been determined using estimated future cash flows using probability weighted scenarios for multiple estimates of Visa's aggregate exposure to covered litigation matters, which include consideration of amounts funded by Visa into its escrow account for the covered litigation matters. Changes, if any, in the valuation of this swap agreement, which has no determinable maturity date, are reflected in other non-interest expense.

Stock-based Compensation The fair value of restricted stock, stock options and restricted stock units is determined on the date of grant and amortized to compensation expense, with a corresponding increase to additional paid-in capital, over the longer of the service period or performance period, but in no event beyond an employee's retirement date or date of employment termination. For performance-based restricted stock or stock units, TCF estimates the degree to which performance conditions will be met to determine the number of shares or units that will vest and the related compensation expense. Compensation expense is adjusted in the period such estimates change. Non-forfeitable dividends, if any, paid on shares of restricted stock are recorded to retained earnings for shares that are expected to vest and to compensation expense for shares that are not expected to vest.

Income tax benefits related to stock compensation, where the fair value on vesting or exercise of the award exceeds the grant date value less any proceeds on exercise, are recognized as an increase to additional paid-in capital. Any income tax detriments, where the fair value on vesting or exercise of the award is less than grant date value less any proceeds on exercise, are recognized as a reduction to additional paid-in capital to the extent of previously recognized income tax benefits and then as income tax expense for any remaining amount.

Earnings Per Common Share TCF's restricted stock awards that pay non-forfeitable common stock dividends meet the criteria of a participating security. Accordingly, earnings per share is calculated using the two-class method, under which earnings are allocated to both common shares and participating securities.

All shares of restricted stock are deducted from weighted-average shares outstanding for the computation of basic earnings per common share. Shares of performance-based restricted stock and restricted stock units are included in the calculation of diluted earnings per common share, using the treasury stock method, at the beginning of the quarter in which the performance goals have been achieved. All other shares of restricted stock, which vest over specified time periods, stock options and warrants are included in the calculation of diluted earnings per common share, using the treasury stock method.

Note 2. Cash and Due from Banks

At December 31, 2016 and 2015, TCF Bank was required by Federal Reserve regulations to maintain reserves of \$103.7 million and \$101.6 million, respectively, in cash on hand or at the Federal Reserve Bank.

TCF maintains cash balances that are restricted as to their use in accordance with certain contractual agreements primarily related to the sale and servicing of auto finance loans. Cash payments received on loans serviced for third parties are generally held in separate accounts until remitted. TCF may also retain cash balances for collateral on certain borrowings, forward foreign exchange contracts, interest rate contracts and other contracts. TCF maintained restricted cash totaling \$51.3 million and \$58.3 million at December 31, 2016 and 2015, respectively.

TCF had cash held in interest-bearing accounts of \$326.5 million and \$609.5 million at December 31, 2016 and 2015, respectively.

Note 3. Investments

Investments were as follows:

(In thousands)	At December 31,	
	2016	2015
Federal Home Loan Bank stock, at cost	\$ 37,022	\$ 32,909
Federal Reserve Bank stock, at cost	37,692	37,628
Total investments	\$ 74,714	\$ 70,537

The investments in Federal Home Loan Bank ("FHLB") stock are required investments related to TCF's membership in and current borrowings from the FHLB of Des Moines. TCF's investments in the FHLB of Des Moines could be adversely impacted by the financial operations of the Federal Home Loan Banks and actions of their regulator, the Federal Housing Finance Agency. The amount of Federal Reserve Bank stock that TCF Bank is required to hold is based on TCF Bank's capital structure. TCF periodically evaluates investments for other than temporary impairment. There was no impairment of these investments in 2016, 2015 or 2014.

The yield on these investments, which have no stated contractual maturity, was 2.59% and 4.41% at December 31, 2016 and 2015, respectively.

Note 4. Securities Available for Sale and Securities Held to Maturity

Securities were as follows:

(In thousands)	At December 31,							
	2016				2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Securities available for sale:								
Mortgage-backed securities:								
U.S. Government sponsored enterprises and federal agencies	\$ 827,722	\$ 423	\$ 17,254	\$ 810,891	\$ 627,521	\$ 655	\$ 6,246	\$ 621,930
Other	18	—	—	18	34	—	—	34
Obligations of states and political subdivisions	628,972	394	16,840	612,526	262,189	4,732	—	266,921
Total securities available for sale	\$1,456,712	\$ 817	\$ 34,094	\$ 1,423,435	\$ 889,744	\$ 5,387	\$ 6,246	\$ 888,885
Securities held to maturity:								
Mortgage-backed securities:								
U.S. Government sponsored enterprises and federal agencies	\$ 178,514	\$ 3,072	\$ 440	\$ 181,146	\$ 197,410	\$ 5,247	\$ 214	\$ 202,443
Other	—	—	—	—	1,110	—	—	1,110
Other securities	2,800	—	—	2,800	3,400	—	—	3,400
Total securities held to maturity	\$ 181,314	\$ 3,072	\$ 440	\$ 183,946	\$ 201,920	\$ 5,247	\$ 214	\$ 206,953

There were no sales of securities available for sale in 2016. In 2015, TCF sold \$0.2 million of securities available for sale and received cash proceeds of \$0.2 million. In 2014, TCF recognized gross realized gains of \$1.2 million on sales of securities available for sale. There were no impairment charges recognized on securities available for sale in 2016, 2015 or 2014. At December 31, 2016 and 2015, mortgage-backed securities with a carrying value of \$7.5 million and \$17.1 million, respectively, were pledged as collateral to secure certain deposits and borrowings. Unrealized losses on securities available for sale are due to changes in interest rates. TCF has the ability and intent to hold these investments until a recovery of fair value occurs.

TCF recorded \$0.7 million, \$0.3 million and \$0.1 million of impairment charges in 2016, 2015 and 2014, respectively, on securities held to maturity.

Gross unrealized losses and fair value of securities available for sale and securities held to maturity aggregated by investment category and the length of time the securities were in a continuous loss position were as follows:

(In thousands)	At December 31, 2016					
	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Securities available for sale:						
Mortgage-backed securities:						
U.S. Government sponsored enterprises and federal agencies	\$ 732,724	\$ 17,254	\$ —	\$ —	\$ 732,724	\$ 17,254
Obligations of states and political subdivisions	501,620	16,840	—	—	501,620	16,840
Total securities available for sale	\$ 1,234,344	\$ 34,094	\$ —	\$ —	\$ 1,234,344	\$ 34,094

Securities held to maturity:						
Mortgage-backed securities:						
U.S. Government sponsored enterprises and federal agencies	\$ 27,090	\$ 440	\$ —	\$ —	\$ 27,090	\$ 440
Total securities held to maturity	\$ 27,090	\$ 440	\$ —	\$ —	\$ 27,090	\$ 440

(In thousands)	At December 31, 2015					
	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Securities available for sale:						
Mortgage-backed securities:						
U.S. Government sponsored enterprises and federal agencies	\$ 552,127	\$ 6,246	\$ —	\$ —	\$ 552,127	\$ 6,246
Total securities available for sale	\$ 552,127	\$ 6,246	\$ —	\$ —	\$ 552,127	\$ 6,246

Securities held to maturity:						
Mortgage-backed securities:						
U.S. Government sponsored enterprises and federal agencies	\$ 12,333	\$ 100	\$ 1,732	\$ 114	\$ 14,065	\$ 214
Total securities held to maturity	\$ 12,333	\$ 100	\$ 1,732	\$ 114	\$ 14,065	\$ 214

The amortized cost and fair value of securities available for sale and securities held to maturity by final contractual maturity were as follows. The remaining contractual principal maturities do not consider possible prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay.

(In thousands)	At December 31,			
	2016		2015	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Securities available for sale:				
Due in one year or less	\$ 1	\$ 1	\$ 1	\$ 1
Due in 1-5 years	18	18	38	38
Due in 5-10 years	331,430	329,005	268,638	272,511
Due after 10 years	1,125,263	1,094,411	621,067	616,335
Total securities available for sale	\$ 1,456,712	\$ 1,423,435	\$ 889,744	\$ 888,885
Securities held to maturity:				
Due in one year or less	\$ —	\$ —	\$ 100	\$ 100
Due in 1-5 years	1,400	1,400	1,900	1,900
Due in 5-10 years	1,400	1,400	1,400	1,400
Due after 10 years	178,514	181,146	198,520	203,553
Total securities held to maturity	\$ 181,314	\$ 183,946	\$ 201,920	\$ 206,953

Interest income attributable to securities available for sale was as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Taxable interest income	\$ 16,238	\$ 13,930	\$ 11,994
Tax-exempt interest income	10,335	1,718	—
Total interest income	\$ 26,573	\$ 15,648	\$ 11,994

Note 5. Loans and Leases

Loans and leases were as follows:

(In thousands)	At December 31,	
	2016	2015
Consumer real estate:		
First mortgage lien	\$ 2,292,596	\$ 2,624,956
Junior lien	2,791,756	2,839,316
Total consumer real estate	5,084,352	5,464,272
Commercial:		
Commercial real estate:		
Permanent	2,356,287	2,267,218
Construction and development	277,904	326,211
Total commercial real estate	2,634,191	2,593,429
Commercial business	652,287	552,403
Total commercial	3,286,478	3,145,832
Leasing and equipment finance	4,336,310	4,012,248
Inventory finance	2,470,175	2,146,754
Auto finance	2,647,741	2,647,596
Other	18,771	19,297
Total loans and leases⁽¹⁾	\$ 17,843,827	\$ 17,435,999

(1) Loans and leases are reported at historical cost including net direct fees and costs associated with originating and acquiring loans and leases, lease residuals, unearned income and unamortized purchase premiums and discounts. The aggregate amount of these loan and lease adjustments was \$54.1 million and \$73.7 million at December 31, 2016 and 2015, respectively.

The following table summarizes the recorded investment in consumer real estate and auto finance loans sold, including accrued interest, the net sales proceeds, the securitization receivable recorded, the interest-only strips received and the net gains. TCF executes securitizations, which qualify for sale accounting, by transferring the recorded investment to trusts. These trusts are considered variable interest entities due to their limited capitalization and special purpose nature. TCF has concluded it is not the primary beneficiary of the trusts and therefore, they are not consolidated. TCF retains servicing on these sold loans. No servicing assets or liabilities related to consumer real estate or auto finance loans were recorded within TCF's Consolidated Statements of Financial Condition, as the contractual servicing fees are adequate to compensate TCF for its servicing responsibilities based on the amount demanded by the marketplace.

(In thousands)	Year Ended December 31, 2016			
	Consumer Real Estate Loans	Auto Finance Loans	Auto Finance Securitizations	Total Auto Finance Loans
Sales proceeds, net ⁽¹⁾	\$ 1,665,507	\$ 688,227	\$ 1,447,113	\$ 2,135,340
Securitization receivable	—	—	18,620	18,620
Interest-only strips, initial value	16,925	5,695	—	5,695
Recorded investment in loans sold, including accrued interest	(1,630,113)	(669,775)	(1,453,283)	(2,123,058)
Net gains ⁽²⁾	\$ 52,319	\$ 24,147	\$ 12,450	\$ 36,597

(In thousands)	Year Ended December 31, 2015			
	Consumer Real Estate Loans	Auto Finance Loans	Auto Finance Securitizations	Total Auto Finance Loans
Sales proceeds, net ⁽¹⁾	\$ 1,301,438	\$ 225,018	\$ 1,165,213	\$ 1,390,231
Interest-only strips, initial value	7,495	—	—	—
Recorded investment in loans sold, including accrued interest	(1,269,108)	(218,339)	(1,139,701)	(1,358,040)
Net gains ⁽²⁾	\$ 39,825	\$ 6,679	\$ 25,512	\$ 32,191

(In thousands)	Year Ended December 31, 2014			
	Consumer Real Estate Loans	Auto Finance Loans	Auto Finance Securitizations	Total Auto Finance Loans
Sales proceeds, net ⁽¹⁾	\$ 1,450,244	\$ 1,098,635	\$ 265,976	\$ 1,364,611
Interest-only strips, initial value	10,816	17,927	—	17,927
Recorded investment in loans sold, including accrued interest	(1,426,969)	(1,079,230)	(258,561)	(1,337,791)
Net gains ⁽²⁾	\$ 34,091	\$ 37,332	\$ 7,415	\$ 44,747

(1) Includes transaction fees and other sales related assets and liabilities.

(2) Excludes subsequent adjustments and valuation adjustments while held for sale.

Total interest-only strips and the contractual liabilities related to loan sales were as follows:

(In thousands)	At December 31,	
	2016	2015
Interest-only strips attributable to:		
Consumer real estate loan sales	\$ 27,260	\$ 19,182
Auto finance loan sales	12,892	25,150
Contractual liabilities attributable to:		
Consumer real estate loan sales	\$ 701	\$ 702
Auto finance loan sales	168	185

TCF recorded \$0.8 million of impairment charges on the consumer real estate loan interest-only strips in 2016, compared with none in 2015 and 2014. TCF recorded impairment charges on the auto finance loan interest-only strips of \$2.4 million, \$0.9 million and \$3.5 million in 2016, 2015 and 2014, respectively, primarily as a result of higher prepayments than originally assumed.

TCF's agreements to sell auto and consumer real estate loans typically contain certain representations, warranties and covenants regarding the loans sold or securitized. These representations, warranties and covenants generally relate to, among other things, the ownership of the loan, the validity, priority and perfection of the lien securing the loan, accuracy of information supplied to the buyer or investor, the loan's compliance with the criteria set forth in the agreement, the manner in which the loans will be serviced, payment delinquency and compliance with applicable laws and regulations. These agreements generally require the repurchase of loans or indemnification in the event TCF breaches these representations, warranties or covenants and such breaches are not cured. In addition, some agreements contain a requirement to repurchase loans as a result of early payoffs by the borrower, early payment default of the borrower, or the failure to obtain valid title. During 2016, 2015 and 2014, losses related to repurchases pursuant to such representations, warranties and covenants were immaterial. The majority of such repurchases were of auto finance loans where TCF typically has contractual agreements with the automobile dealerships that originated the loans requiring the dealers to repurchase such contracts from TCF.

The leasing and equipment finance portfolio consisted of \$2.3 billion of leases and \$2.0 billion of loans at December 31, 2016, compared with \$2.1 billion of leases and \$1.9 billion of loans at December 31, 2015.

Future minimum lease payments receivable for direct financing, sales-type leases and operating leases as of December 31, 2016 were as follows:

(In thousands)	
2017	\$ 828,687
2018	631,715
2019	464,743
2020	285,663
2021	143,654
Thereafter	56,584
Total	\$ 2,411,046

Note 6. Allowance for Loan and Lease Losses and Credit Quality Information

The rollforwards of the allowance for loan and lease losses were as follows:

At or For the Year Ended December 31, 2016							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Balance, beginning of period	\$ 67,992	\$ 30,185	\$ 19,018	\$ 11,128	\$ 26,486	\$ 1,245	\$ 156,054
Charge-offs	(18,624)	(753)	(7,738)	(2,623)	(26,994)	(7,353)	(64,085)
Recoveries	7,065	373	2,386	816	3,853	4,357	18,850
Net (charge-offs) recoveries	(11,559)	(380)	(5,352)	(1,807)	(23,141)	(2,996)	(45,235)
Provision for credit losses	9,304	2,890	7,706	4,540	39,149	2,285	65,874
Other	(6,289)	—	(22)	71	(10,184)	—	(16,424)
Balance, end of period	\$ 59,448	\$ 32,695	\$ 21,350	\$ 13,932	\$ 32,310	\$ 534	\$ 160,269

At or For the Year Ended December 31, 2015							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Balance, beginning of period	\$ 85,361	\$ 31,367	\$ 18,446	\$ 10,020	\$ 18,230	\$ 745	\$ 164,169
Charge-offs	(33,687)	(5,249)	(7,631)	(2,501)	(18,386)	(7,093)	(74,547)
Recoveries	7,428	3,769	2,792	1,019	2,971	5,034	23,013
Net (charge-offs) recoveries	(26,259)	(1,480)	(4,839)	(1,482)	(15,415)	(2,059)	(51,534)
Provision for credit losses	12,697	298	5,411	3,036	28,943	2,559	52,944
Other	(3,807)	—	—	(446)	(5,272)	—	(9,525)
Balance, end of period	\$ 67,992	\$ 30,185	\$ 19,018	\$ 11,128	\$ 26,486	\$ 1,245	\$ 156,054

At or For the Year Ended December 31, 2014							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Balance, beginning of period	\$ 176,030	\$ 37,467	\$ 18,733	\$ 8,592	\$ 10,623	\$ 785	\$ 252,230
Charge-offs	(63,126)	(8,657)	(7,316)	(1,653)	(11,856)	(8,359)	(100,967)
Recoveries	6,867	2,887	3,705	826	1,491	5,860	21,636
Net (charge-offs) recoveries	(56,259)	(5,770)	(3,611)	(827)	(10,365)	(2,499)	(79,331)
Provision for credit losses	63,973	(259)	3,324	2,498	23,742	2,459	95,737
Other ⁽¹⁾	(98,383)	(71)	—	(243)	(5,770)	—	(104,467)
Balance, end of period	\$ 85,361	\$ 31,367	\$ 18,446	\$ 10,020	\$ 18,230	\$ 745	\$ 164,169

(1) Included in Other for consumer real estate is the transfer of \$95.3 million, comprised of \$77.0 million of previously established allowance for loan and lease losses and an additional \$18.3 million of write-downs arising from the transfer to loans held for sale in conjunction with the TDR loan sale.

The allowance for loan and lease losses and loans and leases outstanding by type of allowance methodology was as follows:

At December 31, 2016							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Allowance for loan and lease losses:							
Collectively evaluated for impairment	\$ 36,103	\$ 31,430	\$ 19,093	\$ 13,304	\$ 31,106	\$ 533	\$ 131,569
Individually evaluated for impairment	23,345	1,265	2,257	628	1,204	1	28,700
Total	\$ 59,448	\$ 32,695	\$ 21,350	\$ 13,932	\$ 32,310	\$ 534	\$ 160,269
Loans and leases outstanding:							
Collectively evaluated for impairment	\$ 4,884,653	\$ 3,242,389	\$ 4,320,129	\$ 2,465,041	\$ 2,638,380	\$ 18,765	\$ 17,569,357
Individually evaluated for impairment	199,699	44,089	16,165	5,134	9,360	6	274,453
Loans acquired with deteriorated credit quality	—	—	16	—	1	—	17
Total	\$ 5,084,352	\$ 3,286,478	\$ 4,336,310	\$ 2,470,175	\$ 2,647,741	\$ 18,771	\$ 17,843,827

At December 31, 2015							
(In thousands)	Consumer Real Estate	Commercial	Leasing and Equipment Finance	Inventory Finance	Auto Finance	Other	Total
Allowance for loan and lease losses:							
Collectively evaluated for impairment	\$ 38,819	\$ 30,170	\$ 16,994	\$ 10,929	\$ 23,471	\$ 1,243	\$ 121,626
Individually evaluated for impairment	29,173	15	2,024	199	3,015	2	34,428
Total	\$ 67,992	\$ 30,185	\$ 19,018	\$ 11,128	\$ 26,486	\$ 1,245	\$ 156,054
Loans and leases outstanding:							
Collectively evaluated for impairment	\$ 5,248,829	\$ 3,092,398	\$ 3,997,544	\$ 2,145,605	\$ 2,637,269	\$ 19,286	\$ 17,140,931
Individually evaluated for impairment	215,443	53,434	14,669	1,149	10,308	11	295,014
Loans acquired with deteriorated credit quality	—	—	35	—	19	—	54
Total	\$ 5,464,272	\$ 3,145,832	\$ 4,012,248	\$ 2,146,754	\$ 2,647,596	\$ 19,297	\$ 17,435,999

Accruing and Non-accrual Loans and Leases TCF's key credit quality indicator is the receivable's payment performance status, defined as accruing or non-accruing. Non-accrual loans and leases are those which management believes have a higher risk of loss. Delinquent balances are determined based on the contractual terms of the loan or lease. TCF's accruing and non-accrual loans and leases were as follows:

(In thousands)	At December 31, 2016					
	Current-59 Days Delinquent and Accruing	60-89 Days Delinquent and Accruing	90 Days or More Delinquent and Accruing	Total Accruing	Non-accrual	Total
Consumer real estate:						
First mortgage lien	\$ 2,177,746	\$ 6,581	\$ 2,144	\$ 2,186,471	\$ 106,125	\$ 2,292,596
Junior lien	2,744,006	1,404	—	2,745,410	46,346	2,791,756
Total consumer real estate	4,921,752	7,985	2,144	4,931,881	152,471	5,084,352
Commercial:						
Commercial real estate	2,628,627	—	—	2,628,627	5,564	2,634,191
Commercial business	651,932	—	—	651,932	355	652,287
Total commercial	3,280,559	—	—	3,280,559	5,919	3,286,478
Leasing and equipment finance	4,320,795	3,478	1,045	4,325,318	10,880	4,336,198
Inventory finance	2,464,986	16	39	2,465,041	5,134	2,470,175
Auto finance	2,634,600	3,785	2,317	2,640,702	7,038	2,647,740
Other	18,748	14	6	18,768	3	18,771
Subtotal	17,641,440	15,278	5,551	17,662,269	181,445	17,843,714
Portfolios acquired with deteriorated credit quality	113	—	—	113	—	113
Total	\$ 17,641,553	\$ 15,278	\$ 5,551	\$ 17,662,382	\$ 181,445	\$ 17,843,827

(In thousands)	At December 31, 2015					
	Current-59 Days Delinquent and Accruing	60-89 Days Delinquent and Accruing	90 Days or More Delinquent and Accruing	Total Accruing	Non-accrual	Total
Consumer real estate:						
First mortgage lien	\$ 2,489,235	\$ 8,649	\$ 2,916	\$ 2,500,800	\$ 124,156	\$ 2,624,956
Junior lien	2,793,684	1,481	38	2,795,203	44,113	2,839,316
Total consumer real estate	5,282,919	10,130	2,954	5,296,003	168,269	5,464,272
Commercial:						
Commercial real estate	2,586,692	—	—	2,586,692	6,737	2,593,429
Commercial business	548,814	1	—	548,815	3,588	552,403
Total commercial	3,135,506	1	—	3,135,507	10,325	3,145,832
Leasing and equipment finance	3,998,469	1,728	564	4,000,761	11,262	4,012,023
Inventory finance	2,145,538	87	31	2,145,656	1,098	2,146,754
Auto finance	2,634,496	2,343	1,230	2,638,069	9,509	2,647,578
Other	19,274	13	7	19,294	3	19,297
Subtotal	17,216,202	14,302	4,786	17,235,290	200,466	17,435,756
Portfolios acquired with deteriorated credit quality	242	1	—	243	—	243
Total	\$ 17,216,444	\$ 14,303	\$ 4,786	\$ 17,235,533	\$ 200,466	\$ 17,435,999

Interest income recognized on loans and leases in non-accrual status and contractual interest that would have been recorded had the loans and leases performed in accordance with their original contractual terms were as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Contractual interest due on non-accrual loans and leases	\$ 20,604	\$ 21,459	\$ 26,584
Interest income recognized on non-accrual loans and leases	4,152	4,305	9,359
Unrecognized interest income	\$ 16,452	\$ 17,154	\$ 17,225

Consumer real estate loans to customers currently involved in ongoing Chapter 7 or Chapter 13 bankruptcy proceedings which have not yet been discharged, dismissed or completed were as follows:

(In thousands)	At December 31,	
	2016	2015
Consumer real estate loans to customers in bankruptcy:		
0-59 days delinquent and accruing	\$ 13,675	\$ 26,020
Non-accrual	21,372	20,264
Total consumer real estate loans to customers in bankruptcy	\$ 35,047	\$ 46,284

For the years ended December 31, 2016 and 2015, interest income would have been reduced by approximately \$0.1 million and \$0.2 million, respectively, had the accrual of interest income on the above consumer loans been discontinued upon notification of bankruptcy.

Loan Modifications for Borrowers with Financial Difficulties Included within loans and leases in the previous tables are certain loans that have been modified in order to maximize collection of loan balances. If, for economic or legal reasons related to the customer's financial difficulties, TCF grants a concession, the modified loan is classified as a TDR loan. All loans classified as TDR loans are considered to be impaired. TDR loans consist primarily of consumer real estate and commercial loans.

Total TDR loans at December 31, 2016 and 2015 were \$207.4 million and \$230.6 million, respectively, of which \$126.0 million and \$135.3 million, respectively, were accruing. TCF held consumer real estate TDR loans of \$170.6 million and \$185.8 million at December 31, 2016 and 2015, respectively, of which \$98.6 million and \$106.8 million, respectively, were accruing. TCF also held \$22.5 million and \$31.7 million of commercial TDR loans at December 31, 2016 and 2015, respectively, of which \$20.3 million and \$24.7 million, respectively, were accruing. TDR loans for the remaining classes of finance receivables were not material at December 31, 2016 or 2015.

Unfunded commitments to consumer real estate and commercial loans classified as TDRs were \$0.4 million at both December 31, 2016 and 2015. At December 31, 2016 and 2015, no additional funds were committed to leasing and equipment finance, inventory finance or auto finance loans classified as TDRs.

When a loan is modified as a TDR, principal balances are generally not forgiven. Loan modifications to troubled borrowers are not reported as TDR loans in the calendar years after modification if the loans were modified to an interest rate equal to or greater than the yields of new loan originations with comparable risk at the time of restructuring and if the loan is performing based on the restructured terms; however, these loans are still considered impaired and follow TCF's impaired loan reserve policies. In 2016 and 2015, \$0.1 million and \$14.0 million, respectively, of commercial loans were removed from TDR status as they were restructured at market terms and were performing.

Unrecognized interest represents the difference between interest income recognized on accruing TDR loans and the contractual interest that would have been recorded under the original contractual terms. In 2016, unrecognized interest income for consumer real estate first mortgage lien accruing TDR loans and consumer real estate junior lien accruing TDR loans was \$2.0 million and \$0.7 million, respectively. The average yield for the same period on consumer real estate accruing TDR loans was 4.2%, which compares to the original contractual average rate of 6.7%. In 2015, unrecognized interest income for consumer real estate first mortgage lien accruing TDR loans and consumer real estate junior lien accruing TDR loans was \$2.2 million and \$0.8 million, respectively. The average yield for the same period on consumer real estate accruing TDR loans was 4.1%, which compares to the original contractual average rate of 6.7%. In 2014, unrecognized interest income for consumer real estate first mortgage lien accruing TDR loans and consumer real estate junior lien accruing TDR loans was \$16.7 million and \$1.2 million, respectively. The average yield for the same period on consumer real estate accruing TDR loans was 3.3%, which compares to the original contractual average rate of 6.8%. The unrecognized interest income for the remaining classes of finance receivables was not material for 2016, 2015 and 2014.

TCF considers a loan to have defaulted when under the modified terms it becomes 90 or more days delinquent, has been transferred to non-accrual status, has been charged down or has been transferred to other real estate owned or repossessed and returned assets. TDR loans that defaulted during 2016, 2015 and 2014, which were modified during the respective reporting period or within one year of the beginning of the respective reporting period were as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Loan balance: ⁽¹⁾			
Consumer real estate:			
First mortgage lien	\$ 8,193	\$ 1,674	\$ 1,969
Junior lien	1,630	821	1,364
Total consumer real estate	9,823	2,495	3,333
Commercial:			
Commercial real estate	—	—	3,895
Commercial business	—	—	127
Total commercial	—	—	4,022
Leasing and equipment finance	—	45	—
Auto finance	1,693	1,039	392
Defaulted TDR loans modified during the applicable period	\$ 11,516	\$ 3,579	\$ 7,747

(1) The loan balances presented are not materially different than the pre-modification loan balances as TCF's loan modifications generally do not forgive principal amounts.

Consumer real estate TDR loans are evaluated separately in TCF's allowance methodology. Impairment is generally based upon the present value of the expected future cash flows discounted at the loan's initial effective interest rate, unless the loans are collateral dependent, in which case loan impairment is based upon the fair value of the collateral less selling expenses. The allowance on accruing consumer real estate TDR loans was \$19.3 million, or 19.6% of the outstanding balance, at December 31, 2016, and \$22.4 million, or 21.0% of the outstanding balance, at December 31, 2015. In determining impairment for consumer real estate accruing TDR loans, TCF utilized assumed remaining re-default rates ranging from 10% to 33% in both 2016 and 2015, depending on modification type and actual experience. At December 31, 2016, 1.5% of accruing consumer real estate TDR loans were more than 60 days delinquent, compared with 2.0% at December 31, 2015.

Consumer real estate TDR loans generally remain on accruing status following modification if they are less than 90 days past due and payment in full under the modified terms of the loan is expected based on a current credit evaluation and historical payment performance. Of the non-accrual TDR balance at December 31, 2016, \$47.4 million, or 65.9%, were loans discharged in Chapter 7 bankruptcy that were not reaffirmed by the borrower, of which 82.2% were current. Of the non-accrual TDR balance at December 31, 2015, \$51.5 million, or 65.1%, were loans discharged in Chapter 7 bankruptcy that were not reaffirmed, of which 77.2% were current. All eligible loans are re-aged to current delinquency status upon modification.

Commercial TDR loans are individually evaluated for impairment based upon the present value of the expected future cash flows discounted at the loan's initial effective interest rate, unless the loans are collateral dependent, in which case impairment is based upon the fair value of collateral less estimated selling costs; however if payment or satisfaction of the loan is dependent on the operation, rather than the sale of the collateral, the impairment does not include selling costs. The allowance on accruing commercial TDR loans was \$1.1 million, or 5.6% of the outstanding balance, at December 31, 2016 and less than \$0.1 million, or 0.1% of the outstanding balance, at December 31, 2015. No accruing commercial TDR loans were 60 days or more delinquent at December 31, 2016 and 2015.

Impaired Loans TCF considers impaired loans to include non-accrual commercial loans, non-accrual equipment finance loans and non-accrual inventory finance loans, as well as all TDR loans. Non-accrual impaired loans, including non-accrual TDR loans, are included in non-accrual loans and leases within the previous tables. Accruing TDR loans have been disclosed by delinquency status within the previous tables of accruing and non-accrual loans and leases. In the following tables, the loan balance of impaired loans represents the amount recorded within loans and leases on the Consolidated Statements of Financial Condition, whereas the unpaid contractual balance represents the balances legally owed by the borrowers.

Information on impaired loans was as follows:

(In thousands)	At December 31,					
	2016			2015		
	Unpaid Contractual Balance	Loan Balance	Related Allowance Recorded	Unpaid Contractual Balance	Loan Balance	Related Allowance Recorded
Impaired loans with an allowance recorded:						
Consumer real estate:						
First mortgage lien	\$ 122,704	\$ 104,601	\$ 16,835	\$ 145,749	\$ 123,728	\$ 20,880
Junior lien	62,481	51,410	5,829	70,122	58,366	6,837
Total consumer real estate	185,185	156,011	22,664	215,871	182,094	27,717
Commercial:						
Commercial real estate	10,083	10,075	1,262	298	298	12
Commercial business	14	14	3	16	16	3
Total commercial	10,097	10,089	1,265	314	314	15
Leasing and equipment finance	9,900	9,900	1,044	7,259	7,259	822
Inventory finance	4,357	4,365	628	867	873	199
Auto finance	5,801	5,419	1,126	8,275	8,062	2,942
Other	6	6	1	21	11	2
Total impaired loans with an allowance recorded	215,346	185,790	26,728	232,607	198,613	31,697
Impaired loans without an allowance recorded:						
Consumer real estate:						
First mortgage lien	18,539	12,674	—	7,100	3,228	—
Junior lien	26,915	1,882	—	26,031	520	—
Total consumer real estate	45,454	14,556	—	33,131	3,748	—
Commercial:						
Commercial real estate	21,601	15,780	—	37,598	31,157	—
Commercial business	354	354	—	3,738	3,585	—
Total commercial	21,955	16,134	—	41,336	34,742	—
Inventory finance	767	769	—	274	276	—
Auto finance	3,919	2,408	—	2,003	1,177	—
Other	85	—	—	2	—	—
Total impaired loans without an allowance recorded	72,180	33,867	—	76,746	39,943	—
Total impaired loans	\$ 287,526	\$ 219,657	\$ 26,728	\$ 309,353	\$ 238,556	\$ 31,697

The average loan balance of impaired loans and interest income recognized on impaired loans were as follows:

(In thousands)	Year Ended December 31,					
	2016		2015		2014	
	Average Loan Balance	Interest Income Recognized	Average Loan Balance	Interest Income Recognized	Average Loan Balance	Interest Income Recognized
Impaired loans with an allowance recorded:						
Consumer real estate:						
First mortgage lien	\$ 114,164	\$ 3,597	\$ 112,698	\$ 5,438	\$ 311,458	\$ 14,715
Junior lien	54,888	2,606	56,885	3,353	63,977	3,492
Total consumer real estate	169,052	6,203	169,583	8,791	375,435	18,207
Commercial:						
Commercial real estate	5,186	353	27,355	852	63,099	2,349
Commercial business	15	—	17	—	2,199	—
Total commercial	5,201	353	27,372	852	65,298	2,349
Leasing and equipment finance	8,579	40	7,758	18	8,247	58
Inventory finance	2,619	56	1,315	76	4,249	97
Auto finance	6,741	112	5,495	22	1,617	—
Other	9	—	50	2	92	7
Total impaired loans with an allowance recorded	192,201	6,764	211,573	9,761	454,938	20,718
Impaired loans without an allowance recorded:						
Consumer real estate:						
First mortgage lien	7,951	449	19,188	1,045	39,086	2,321
Junior lien	1,201	672	3,959	1,817	5,852	1,285
Total consumer real estate	9,152	1,121	23,147	2,862	44,938	3,606
Commercial:						
Commercial real estate	23,468	743	40,828	1,957	65,167	2,973
Commercial business	1,970	—	2,033	5	2,946	94
Total commercial	25,438	743	42,861	1,962	68,113	3,067
Inventory finance	523	95	564	114	426	126
Auto finance	1,792	—	962	—	455	—
Total impaired loans without an allowance recorded	36,905	1,959	67,534	4,938	113,932	6,799
Total impaired loans	\$ 229,106	\$ 8,723	\$ 279,107	\$ 14,699	\$ 568,870	\$ 27,517

Note 7. Premises and Equipment

Premises and equipment were as follows:

(In thousands)	At December 31,	
	2016	2015
Land	\$ 144,221	\$ 152,034
Office buildings	271,597	281,462
Leasehold improvements	50,796	56,243
Furniture and equipment	341,621	315,869
Subtotal	808,235	805,608
Less: Accumulated depreciation and amortization	389,863	359,674
Total	\$ 418,372	\$ 445,934

Depreciation and amortization expense related to premises and equipment was \$44.9 million, \$40.8 million and \$40.9 million in 2016, 2015 and 2014, respectively. TCF leases certain premises and equipment under operating leases. Net lease expense was \$35.5 million, \$35.1 million and \$34.0 million in 2016, 2015 and 2014, respectively.

At December 31, 2016, the total future minimum rental payments for operating leases of premises and equipment were as follows:

(In thousands)	
2017	\$ 28,264
2018	28,595
2019	26,481
2020	22,211
2021	15,642
Thereafter	70,738
Total	\$ 191,931

Note 8. Goodwill and Other Intangible Assets

Goodwill and other intangible assets were as follows:

(In thousands)	At December 31,					
	2016			2015		
	Gross Amount	Accumulated Amortization	Net Amount	Gross Amount	Accumulated Amortization	Net Amount
Amortizable intangible assets:						
Deposit base intangibles	\$ 3,049	\$ 2,069	\$ 980	\$ 3,049	\$ 1,817	\$ 1,232
Customer base intangibles	2,730	2,002	728	2,730	1,709	1,021
Non-compete agreement	4,590	4,590	—	4,590	3,757	833
Tradename	300	300	—	300	300	—
Total	\$ 10,669	\$ 8,961	\$ 1,708	\$ 10,669	\$ 7,583	\$ 3,086
Unamortizable intangible assets:						
Goodwill related to consumer banking segment	\$ 214,286		\$ 214,286	\$ 214,286		\$ 214,286
Goodwill related to wholesale banking segment	11,354		11,354	11,354		11,354
Total	\$ 225,640		\$ 225,640	\$ 225,640		\$ 225,640

Amortization expense for intangible assets of \$1.4 million, \$1.6 million and \$1.7 million was recognized in 2016, 2015 and 2014, respectively. Amortization expense for intangible assets is estimated to be \$0.5 million for 2017, \$0.4 million for 2018, \$0.3 million for 2019, \$0.3 million for 2020 and \$0.2 million for 2021. There was no impairment of goodwill or the intangible assets in 2016, 2015 and 2014.

Note 9. Deposits

Deposits were as follows:

(Dollars in thousands)	At December 31,					
	2016			2015		
	Weighted-average Rate	Amount	% of Total	Weighted-average Rate	Amount	% of Total
Checking:						
Non-interest bearing	—%	\$ 3,454,962	20.0%	—%	\$ 3,187,581	19.1%
Interest bearing	0.01	2,554,189	14.9	0.02	2,502,978	14.9
Total checking	0.01	6,009,151	34.9	0.01	5,690,559	34.0
Savings	0.03	4,719,481	27.4	0.06	4,717,457	28.2
Money market	0.61	2,421,467	14.0	0.63	2,408,180	14.5
Certificates of deposit	1.06	4,092,423	23.7	0.91	3,903,793	23.3
Total deposits	0.36	\$ 17,242,522	100.0%	0.30	\$ 16,719,989	100.0%

Annual maturities for certificates of deposit at December 31, 2016 were as follows:

(In thousands)	
2017	\$ 3,392,044
2018	643,552
2019	18,859
2020	13,867
2021	10,196
Thereafter	13,905
Total	\$ 4,092,423

The aggregate amount of certificates of deposit with balances equal to or greater than the Federal Deposit Insurance Corporation insurance limit of \$250,000 was \$561.0 million and \$484.2 million at December 31, 2016 and 2015, respectively.

Note 10. Short-term Borrowings

Selected information for short-term borrowings (borrowings with an original maturity of less than one year) was as follows:

(Dollars in thousands)	At December 31,					
	2016		2015		2014	
	Amount	Rate	Amount	Rate	Amount	Rate
Period end balance:						
Securities sold under repurchase agreements	\$ 2,159	0.10%	\$ 5,381	0.03%	\$ 4,425	0.10%
Line of Credit - TCF Commercial Finance Canada, Inc.	2,232	1.75	—	—	—	—
Total	\$ 4,391	0.94	\$ 5,381	0.03	\$ 4,425	0.10
Average daily balances for the period ended:						
Federal Home Loan Bank advances	\$ —	—%	\$ —	—%	\$ 74,385	0.26%
Federal funds purchased	156	0.71	225	0.45	375	0.40
Securities sold under repurchase agreements	5,235	0.41	16,431	0.06	5,956	0.18
Line of Credit - TCF Commercial Finance Canada, Inc.	1,660	1.75	2,166	1.96	2,957	1.88
Total	\$ 7,051	0.73	\$ 18,822	0.28	\$ 83,673	0.31
Maximum month-end balances for the period ended:						
Federal Home Loan Bank advances	\$ —	N.A.	\$ —	N.A.	\$ 250,000	N.A.
Securities sold under repurchase agreements	3,391	N.A.	62,995	N.A.	4,425	N.A.
Line of Credit - TCF Commercial Finance Canada, Inc.	5,907	N.A.	5,519	N.A.	11,751	N.A.

N.A. Not Applicable.

At December 31, 2016, the securities sold under short-term repurchase agreements were related to TCF Bank's Repurchase Investment Sweep Agreement product and were collateralized by mortgage-backed securities having a period end fair value of \$6.4 million.

Note 11. Long-term Borrowings

Long-term borrowings were as follows:

(Dollars in thousands)	Stated Maturity	At December 31,			
		2016		2015	
		Amount	Stated Rate	Amount	Stated Rate
Federal Home Loan Bank advances	2016	\$ —	—%	\$ 447,000	0.54% - 1.17%
	2017	—	—	125,000	0.49 - 0.51
	2018	375,000	0.72% - 0.81	—	—
	2019	300,000	0.78 - 0.81	—	—
Subtotal		675,000		572,000	
Subordinated bank notes	2016	—	—	74,992	5.50
	2022	108,654	6.25	108,454	6.25
	2025	148,052	4.60	147,861	4.60
Hedge-related basis adjustment ⁽¹⁾		(1,349)		(209)	
Subtotal		255,357		331,098	
Discounted lease rentals	2016	—	—	48,120	2.39 - 7.95
	2017	57,081	2.45 - 7.88	41,969	2.45 - 7.88
	2018	42,132	2.55 - 7.95	24,496	2.55 - 7.95
	2019	24,671	2.53 - 6.00	9,329	2.53 - 6.00
	2020	11,753	2.64 - 6.90	2,035	2.95 - 5.15
	2021	4,423	2.88 - 4.57	83	4.57
Subtotal		140,060		126,032	
Other long-term borrowings	2016	—	—	2,685	1.36
	2017	2,764	1.36	2,742	1.36
Subtotal		2,764		5,427	
Total long-term borrowings		\$ 1,073,181		\$ 1,034,557	

(1) Related to subordinated bank notes with a stated maturity of 2025 at December 31, 2016.

At December 31, 2016, TCF Bank had pledged loans secured by consumer and commercial real estate and FHLB stock with an aggregate carrying value of \$4.5 billion as collateral for FHLB advances. At December 31, 2016, \$675.0 million of FHLB advances outstanding were prepayable monthly at TCF's option.

Note 12. Income Taxes

Applicable income taxes in the Consolidated Statements of Income were as follows:

(In thousands)	Current	Deferred	Total
Year ended December 31, 2016:			
Federal	\$ 66,810	\$ 28,629	\$ 95,439
State	11,402	4,425	15,827
Foreign	5,350	(88)	5,262
Total	\$ 83,562	\$ 32,966	\$ 116,528
Year ended December 31, 2015:			
Federal	\$ 73,579	\$ 16,141	\$ 89,720
State	9,255	4,637	13,892
Foreign	5,252	8	5,260
Total	\$ 88,086	\$ 20,786	\$ 108,872
Year ended December 31, 2014:			
Federal	\$ 55,062	\$ 26,308	\$ 81,370
State	2,087	11,147	13,234
Foreign	5,185	(23)	5,162
Total	\$ 62,334	\$ 37,432	\$ 99,766

Reconciliations to TCF's effective income tax rate from the statutory federal income tax rate of 35.00% were as follows:

	Year Ended December 31,		
	2016	2015	2014
Federal income tax rate	35.00%	35.00%	35.00%
Increase (decrease) resulting from:			
State income tax, net of federal income tax	3.04	2.87	3.06
Tax-exempt income	(2.07)	(0.93)	(0.76)
Non-controlling interest tax effect	(0.99)	(0.97)	(0.92)
Foreign tax effects	(0.50)	(0.53)	(0.58)
Other, net	(0.03)	(0.84)	(0.34)
Effective income tax rate	34.45%	34.60%	35.46%

TCF considers its undistributed foreign earnings to be reinvested indefinitely. This position is based on management's determination that cash held in TCF's foreign jurisdictions is not needed to fund its U.S. operations and that it either has reinvested or has intentions to reinvest these earnings. While management currently intends to indefinitely reinvest all of TCF's foreign earnings, should circumstances or tax laws change, TCF may need to record additional income tax expense in the period in which such determination or tax law change occurs. As of December 31, 2016 and 2015, TCF has not provided U.S. deferred taxes on \$56.3 million and \$42.9 million, respectively, of its undistributed foreign earnings. If these undistributed earnings were repatriated to the U.S. or otherwise became subject to U.S. taxation, the potential deferred tax liability would be approximately \$3.0 million and \$2.6 million as of December 31, 2016 and 2015, respectively, assuming full utilization of related foreign tax credits.

Reconciliations of the changes in unrecognized tax benefits were as follows:

(In thousands)	At or For the Year Ended December 31,		
	2016	2015	2014
Balance, beginning of period	\$ 4,249	\$ 4,649	\$ 4,704
Increases for tax positions related to the current year	546	323	468
Increases for tax positions related to prior years	627	—	8
Decreases for tax positions related to prior years	(84)	(157)	(350)
Settlements with taxing authorities	(525)	(425)	—
Decreases related to lapses of applicable statutes of limitation	(123)	(141)	(181)
Balance, end of period	\$ 4,690	\$ 4,249	\$ 4,649

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was \$1.6 million and \$1.3 million at December 31, 2016 and 2015, respectively. TCF recognizes increases and decreases for interest and penalties related to unrecognized tax benefits, where applicable, in income tax expense. TCF recognized approximately \$0.9 million of tax expense, \$0.2 million of tax benefit and \$0.1 million of tax expense in 2016, 2015 and 2014, respectively, related to interest and penalties. Interest and penalties of approximately \$1.2 million and \$0.3 million were accrued at December 31, 2016 and 2015, respectively.

TCF's federal income tax returns are open and subject to examination for 2013 and later tax return years. TCF's various state income tax returns are generally open for the 2012 and later tax return years based on individual state statutes of limitation. TCF's various foreign income tax returns are open and subject to examination for 2012 and later tax return years. Changes in the amount of unrecognized tax benefits within the next 12 months from normal expirations of statutes of limitation are not expected to be material.

TCF's deferred tax assets and deferred tax liabilities were as follows:

(In thousands)	At December 31,	
	2016	2015
Deferred tax assets:		
Allowance for loan and lease losses	\$ 75,976	\$ 74,858
Stock compensation and deferred compensation plans	41,105	37,913
Securities available for sale	17,606	5,945
Net operating losses	11,924	10,735
Accrued expense	3,730	5,228
Non-accrual interest	2,140	4,250
Other	3,408	3,437
Deferred tax assets	155,889	142,366
Valuation allowance	(10,377)	(7,515)
Total deferred tax assets, net of valuation allowance	145,512	134,851
Deferred tax liabilities:		
Lease financing	348,933	320,374
Premises and equipment	32,430	28,657
Loan fees and discounts	17,017	19,220
Prepaid expenses	11,245	10,936
Goodwill and other intangibles	3,870	4,105
Other	7,375	6,026
Total deferred tax liabilities	420,870	389,318
Net deferred tax liabilities	\$ 275,358	\$ 254,467

The net operating losses at December 31, 2016 consisted of state net operating losses that expire in 2017 through 2036. The valuation allowance at December 31, 2016 and 2015 principally applies to net operating losses that, in the opinion of management, are more likely than not to expire unutilized. However, to the extent that tax benefits related to these carryforwards are realized in the future, the reduction in the valuation allowance will reduce income tax expense.

Note 13. Equity

Restricted Retained Earnings Retained earnings at TCF Bank at December 31, 2016 included approximately \$134.4 million for which no provision for federal income taxes has been made. This amount represents earnings legally appropriated to thrift bad debt reserves and deducted for federal income tax purposes in prior years and is generally not available for payment of cash dividends or other distributions to stockholders. Future payments or distributions of these appropriated earnings could create a tax liability for TCF based on the amount of the distributions and the tax rates in effect at that time.

Treasury Stock and Other Treasury stock and other were as follows:

(In thousands)	At December 31,	
	2016	2015
Treasury stock, at cost	\$ (1,102)	\$ (1,102)
Shares held in trust for deferred compensation plans, at cost	(48,317)	(49,758)
Total	\$ (49,419)	\$ (50,860)

Repurchases No repurchases of common stock were made in 2016, 2015 or 2014. At December 31, 2016, TCF had 5.4 million shares remaining in its stock repurchase program authorized by TCF's Board of Directors. Prior consultation with the Federal Reserve is required by regulation before TCF could repurchase any shares of its common stock.

Depository Shares Representing 7.50% Series A Non-Cumulative Perpetual Preferred Stock TCF had 6,900,000 depository shares outstanding at December 31, 2016 and 2015, each representing a 1/1000th interest in a share of the Series A Non-Cumulative Perpetual Preferred Stock, par value \$0.01 per share (the "Series A Preferred Stock"). Dividends are payable on the Series A Preferred Stock if, as and when declared by TCF's Board of Directors on a non-cumulative basis on March 1, June 1, September 1 and December 1 of each year at a per annum rate of 7.5%. The Series A Preferred Stock may be redeemed at TCF's option in whole or in part on or after June 25, 2017. TCF paid cash dividends to holders of the Series A Preferred Stock of \$12.9 million in 2016, 2015 and 2014.

6.45% Series B Non-Cumulative Perpetual Preferred Stock TCF had 4,000,000 shares of 6.45% Series B Non-Cumulative Perpetual Preferred Stock, par value \$0.01 per share (the "Series B Preferred Stock") outstanding at December 31, 2016 and 2015. Dividends are payable on the Series B Preferred Stock if, as and when declared by TCF's Board of Directors on a non-cumulative basis on March 1, June 1, September 1 and December 1 of each year at a per annum rate of 6.45%. The Series B Preferred Stock may be redeemed at TCF's option in whole or in part on or after December 19, 2017. TCF paid cash dividends to holders of the Series B Preferred Stock of \$6.5 million in 2016, 2015 and 2014.

Shares Held in Trust for Deferred Compensation Plans

Executive, Senior Officer, Winthrop and Directors Deferred Compensation Plans TCF maintains the aforementioned deferred compensation plans, which previously allowed both eligible employees and non-employee directors to defer a portion of certain payments, and, in some cases, grants of restricted stock. In October 2008, TCF terminated the employee plans and only the Director plan remains active, which allows non-employee directors to defer up to 100% of their director fees and restricted stock awards. The amounts deferred under these plans are invested in TCF common stock or other publicly traded stocks, bonds or mutual funds. At December 31, 2016, the fair value of the assets in these plans totaled \$14.0 million and included \$10.5 million invested in TCF common stock, compared with a total fair value of \$11.7 million, including \$7.5 million invested in TCF common stock at December 31, 2015.

TCF Employees Deferred Stock Compensation Plan In 2011, TCF implemented the TCF Employees Deferred Stock Compensation Plan. This plan is comprised of restricted stock awards issued to certain executives. The assets of this plan are solely held in TCF common stock with a fair value of \$35.6 million and \$29.5 million at December 31, 2016 and 2015, respectively.

TCF 401K Supplemental Plan TCF also maintains the TCF 401K Supplemental Plan, a non-qualified plan, to which certain employees can contribute up to 50% of their salary and bonus. TCF matching contributions to this plan totaled \$1.7 million, \$1.0 million and \$1.5 million in 2016, 2015 and 2014, respectively. The Company made no other contributions to this plan, other than payment of administrative expenses. The amounts deferred under this plan are invested in TCF common stock or mutual funds. At December 31, 2016, the fair value of the assets in the plan totaled \$48.2 million and included \$27.9 million invested in TCF common stock, compared with a total fair value of \$32.8 million, including \$17.5 million invested in TCF common stock, at December 31, 2015.

The cost of TCF common stock held by TCF's deferred compensation plans and the TCF 401K Supplemental Plan is reported separately in a manner similar to treasury stock (that is, changes in fair value are not recognized) with a corresponding deferred compensation obligation reflected in additional paid-in capital.

Warrants At December 31, 2016, TCF had 3,199,988 warrants outstanding with an exercise price of \$16.93 per share, which expire on November 14, 2018. Upon the completion of the U.S. Department of the Treasury ("U.S. Treasury")'s secondary public offering of the warrants issued under the Capital Purchase Program ("CPP") in December 2009, the warrants became publicly traded on the New York Stock Exchange under the symbol "TCBWS". As a result, TCF has no further obligation to the Federal Government in connection with the CPP.

Joint Venture TCF has a joint venture with The Toro Company ("Toro") called Red Iron Acceptance, LLC ("Red Iron"). Red Iron provides U.S. distributors and dealers and select Canadian distributors of the Toro[®] and Exmark[®] branded products with sources of financing. TCF and Toro maintain a 55% and 45% ownership interest, respectively, in Red Iron. As TCF has a controlling financial interest in Red Iron, its financial results are consolidated in TCF's financial statements. Toro's interest is reported as a non-controlling interest within equity.

Note 14. Regulatory Capital Requirements

TCF and TCF Bank are subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory, and possible additional discretionary, actions by the federal banking agencies that could have a material adverse effect on TCF. In general, TCF Bank may not declare or pay a dividend to TCF Financial in excess of 100% of its net retained earnings for the current year combined with its net retained earnings for the preceding two calendar years, which was \$479.8 million at December 31, 2016, without prior approval of the Office of the Comptroller of the Currency ("OCC"). The OCC also has the authority to prohibit the payment of dividends by a national bank when it determines such payments would constitute an unsafe and unsound banking practice. TCF Bank's ability to make capital distributions in the future may require regulatory approval and may be restricted by its regulatory authorities. TCF Bank's ability to make any such distributions will also depend on its earnings and ability to meet minimum regulatory capital requirements in effect during future periods. In the future, these capital adequacy standards may be higher than existing minimum regulatory capital requirements.

The Basel III capital standard was introduced in 2015 and phases in through 2019. The standard revised the definition of capital, increased minimum capital ratios, introduced regulatory capital buffers above those minimums, introduced a common equity Tier 1 capital ratio and revised the rules for calculating risk-weighted assets. Banks that are not advanced approaches institutions may make a one-time election to opt out of the requirement to include components of accumulated other comprehensive income (loss) in common equity Tier 1 capital. TCF has elected to opt out of the accumulated other comprehensive income (loss) requirement. TCF and TCF Bank are subject to a capital conservation buffer. When fully phased-in on January 1, 2019, the Basel III capital standard will require TCF and TCF Bank to maintain a 2.5% capital conservation buffer, designed to absorb losses during periods of economic stress, composed entirely of Common equity Tier 1 capital, on top of the minimum risk-weighted asset ratios, effectively resulting in minimum ratios for TCF Bank of (i) a Common equity Tier 1 capital ratio of at least 7.0%, (ii) a Tier 1 risk-based capital ratio of at least 8.5% and (iii) a Total risk-based capital ratio of at least 10.5%.

Regulatory capital information for TCF and TCF Bank was as follows:

	TCF		TCF Bank		Well-capitalized Standard	Minimum Capital Requirement ⁽¹⁾
	At December 31,		At December 31,			
(Dollars in thousands)	2016	2015	2016	2015		
Regulatory Capital:						
Common equity Tier 1 capital	\$ 1,970,323	\$ 1,814,442	\$ 2,144,966	\$ 1,992,584		
Tier 1 capital	2,248,221	2,092,195	2,162,128	2,008,585		
Total capital	2,635,925	2,487,060	2,583,512	2,425,682		
Regulatory Capital Ratios:						
Common equity Tier 1 capital ratio	10.24%	10.00%	11.14%	10.99%	6.50%	4.50%
Tier 1 risk-based capital ratio	11.68	11.54	11.23	11.07	8.00	6.00
Total risk-based capital ratio	13.69	13.71	13.42	13.37	10.00	8.00
Tier 1 leverage ratio	10.73	10.46	10.32	10.04	5.00	4.00

(1) Excludes capital conservation buffer of 0.625% as of December 31, 2016.

Note 15. Stock Compensation

The TCF Financial 2015 Omnibus Incentive Plan ("Omnibus Incentive Plan") and the TCF Financial Incentive Stock Program ("Incentive Stock Program") were adopted to enable TCF to attract and retain key personnel. In April 2015, TCF stockholders approved the Omnibus Incentive Plan, which replaced the Incentive Stock Program. At December 31, 2016, there were 1,650,598 and 404,000 shares reserved for issuance under the Omnibus Incentive Plan and Incentive Stock Program, respectively.

At December 31, 2016, there were 50,000 and 1,050,000 shares of performance-based restricted stock awards outstanding under the Omnibus Incentive Plan and Incentive Stock Program, respectively, that will vest only if certain performance goals and service conditions are achieved. Failure to achieve the performance goals and service conditions will result in all or a portion of the shares being forfeited. Service-based restricted stock awards under either the Omnibus Incentive Plan or the Incentive Stock Program vest over periods from one to five years.

Information about restricted stock awards was as follows:

(Dollars in thousands)	At or For the Year Ended December 31,		
	2016	2015	2014
Unrecognized stock compensation expense	\$ 24,925	\$ 25,919	\$ 22,532
Weighted-average amortization (years)	1.6	2.1	2.6

At December 31, 2016, there were 228,867 performance-based restricted stock units granted under the Omnibus Incentive Plan that will vest only if certain performance goals are achieved. The performance-based restricted stock units are subject to TCF's relative total stockholder return for a three-year measurement period, based on award date, as measured against the peer group, which includes all publicly-traded banks and thrift institutions with assets between \$10 billion and \$50 billion, excluding peers which do not remain publicly traded for the full three-year performance period. The number of restricted stock units granted was at target and the actual restricted stock units granted will depend on actual performance with a maximum total payout of 150% of target. Failure to achieve the performance goals will result in all or a portion of the restricted stock units being forfeited. None of the performance-based restricted stock units have vested. The remaining performance period of the restricted stock units was 2.0 years at December 31, 2016.

Compensation expense for restricted stock awards and restricted stock units was as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Compensation expense	\$ 8,715	\$ 5,931	\$ 8,690
Tax benefit recognized for stock compensation expense	3,103	2,127	3,424

In 2008, TCF granted stock options under the Incentive Stock Program. These options generally become exercisable over a period of one to 10 years from the date of the grant and expire after 10 years. All outstanding options have a fixed exercise price equal to the market price of TCF common stock on the date of grant. No stock options have subsequently been granted under the Incentive Stock Program. TCF also has the ability to grant stock options under the Omnibus Incentive Plan. As of December 31, 2016, no stock options had been granted under the Omnibus Incentive Plan.

The valuation assumptions for stock options granted in 2008 under the Incentive Stock Program were as follows:

Expected volatility	28.5 %
Weighted-average volatility	28.5 %
Expected dividend yield	3.5 %
Expected term (years)	6.25 - 6.75
Risk-free interest rate	2.58 % - 2.91 %

TCF's restricted stock award and stock option transactions since December 31, 2013 under the Omnibus Incentive Plan and the Incentive Stock Program were as follows:

	Restricted Stock Awards				Stock Options				
	Shares	Price Range		Weighted-average Grant Date Fair Value	Shares	Price Range		Weighted-average Remaining Contractual Life in Years	Weighted-average Exercise Price
Outstanding at December 31, 2013	3,355,295	\$ 6.16	- \$ 15.17	\$ 11.09	1,626,000	\$ 12.85	- \$15.75	4.36	\$ 13.97
Granted	1,120,750	13.84	- 16.02	15.61	—	—	- —	—	—
Exercised	—	—	- —	—	(47,000)	15.75	- 15.75	—	15.75
Forfeited/canceled	(108,490)	6.80	- 15.79	13.06	—	—	- —	—	—
Vested	(1,509,061)	8.35	- 14.90	11.21	—	—	- —	—	—
Outstanding at December 31, 2014	2,858,494	6.16	- 16.02	12.73	1,579,000	12.85	- 15.75	2.98	13.91
Granted	786,933	12.86	- 16.28	14.45	—	—	- —	—	—
Exercised	—	—	- —	—	(200,000)	12.85	- 12.85	—	12.85
Forfeited/canceled	(156,332)	6.80	- 15.96	13.20	—	—	- —	—	—
Vested	(216,009)	9.65	- 15.96	13.16	—	—	- —	—	—
Outstanding at December 31, 2015	3,273,086	6.16	- 16.28	13.09	1,379,000	12.85	- 15.75	2.17	14.07
Granted	899,000	9.48	- 13.24	12.13	—	—	- —	—	—
Exercised	—	—	- —	—	(857,000)	12.85	- 15.75	—	13.04
Forfeited/canceled	(230,486)	6.16	- 15.96	13.59	(118,000)	15.75	- 15.75	—	15.75
Vested	(405,425)	9.65	- 15.96	13.10	—	—	- —	—	—
Outstanding at December 31, 2016	3,536,175	7.73	- 16.28	12.81	404,000	15.75	- 15.75	1.06	15.75
Exercisable at December 31, 2016	N.A.			N.A.	404,000	15.75	- 15.75		15.75

N.A. Not Applicable.

Note 16. Employee Benefit Plans

401K Plan The TCF 401K Plan (the "401K"), a qualified 401(k) and employee stock ownership plan, allows participants to make contributions of up to 50% of their covered compensation on a tax-deferred basis, subject to the annual covered compensation limitation imposed by the Internal Revenue Service ("IRS"). TCF matches the contributions of all participants with TCF common stock at the rate of \$1 per dollar for employees with one or more years of service up to a maximum company contribution of 5.0% of the employee's covered compensation subject to the annual covered compensation limitation imposed by the IRS. Employee contributions and matching contributions vest immediately.

Prior to January 1, 2016 TCF matched the contributions of all participants with TCF common stock at the rate of 50 cents per dollar for employees with one through four years of service up to a maximum company contribution of 3.0% of the employee's covered compensation, 75 cents per dollar for employees with five through nine years of service up to a maximum company contribution of 4.5% of the employee's covered compensation and \$1 per dollar for employees with 10 or more years of service up to a maximum company contribution of 6.0% of the employee's covered compensation, subject to the annual covered compensation limitation imposed by the IRS. Employee contributions vested immediately while the Company's matching contributions made prior to January 1, 2016 are subject to a graduated vesting schedule based on an employee's years of service with full vesting after five years.

Employees have the opportunity to diversify and invest their account balance, including matching contributions, in various mutual funds or TCF common stock. At December 31, 2016, the fair value of the assets in the 401K totaled \$315.5 million and included \$174.4 million invested in TCF common stock. Dividends on TCF common shares held in the 401K reduce retained earnings and the shares are considered outstanding for computing earnings per share. The Company's matching contributions are expensed when earned. TCF's contributions to the 401K were \$12.6 million, \$10.6 million and \$9.6 million in 2016, 2015 and 2014, respectively.

Pension Plan The TCF Cash Balance Pension Plan (the "Pension Plan") is a qualified defined benefit plan covering eligible employees who are at least 21 years old and have completed a year of eligible service with TCF. Employees hired after June 30, 2004 are not eligible to participate in the Pension Plan. Effective March 31, 2006, TCF amended the Pension Plan to discontinue compensation credits for all participants. Interest credits will continue to be paid until participants' accounts are distributed from the Pension Plan. Each month TCF credits participants' accounts with interest on their account balance based on the five-year Treasury rate plus 25 basis points rounded to the nearest quarter point determined at the beginning of each year. All participant accounts are vested.

The measurement of the projected benefit obligation, prepaid pension asset, pension liability and annual pension expense involves complex actuarial valuation methods and the use of actuarial and economic assumptions. Due to the long-term nature of the Pension Plan obligation, actual results may differ significantly from the actuarial-based estimates. Differences between estimates and actual experience are recorded in the year they arise. TCF closely monitors all assumptions and updates them annually. The Company does not consolidate the assets and liabilities associated with the Pension Plan.

Postretirement Plan TCF provides health care benefits for eligible retired employees (the "Postretirement Plan"). Effective January 1, 2000, TCF modified the Postretirement Plan for employees not yet eligible for benefits under the Postretirement Plan by eliminating the Company subsidy. The Postretirement Plan provisions for full-time and retired employees then eligible for these benefits were not changed. Employees retiring after December 31, 2009 are no longer eligible to participate in the Postretirement Plan. The Postretirement Plan is not funded.

The information set forth in the following tables is based on current actuarial reports using the measurement date of December 31 for TCF's Pension Plan and Postretirement Plan.

The funded statuses of the Pension Plan and the Postretirement Plan were as follows:

(In thousands)	Pension Plan		Postretirement Plan	
	Year Ended December 31,			
	2016	2015	2016	2015
Change in projected benefit obligation:				
Benefit obligation, beginning of period	\$ 35,953	\$ 39,490	\$ 4,570	\$ 4,984
Interest cost on projected benefit obligation	1,281	1,216	151	154
Actuarial (gain) loss	(625)	(1,436)	(211)	(173)
Benefits paid	(3,435)	(3,317)	(346)	(395)
Projected benefit obligation, end of period	33,174	35,953	4,164	4,570
Change in fair value of plan assets:				
Fair value of plan assets, beginning of period	40,914	44,678	—	—
Actual gain (loss) on plan assets	1,898	(447)	—	—
Benefits paid	(3,435)	(3,317)	(346)	(395)
TCF contributions	—	—	346	395
Fair value of plan assets, end of period	39,377	40,914	—	—
Funded status of plans, end of period	\$ 6,203	\$ 4,961	\$ (4,164)	\$ (4,570)
Amounts recognized in the Consolidated Statements of Financial Condition:				
Prepaid (accrued) benefit cost, end of period	\$ 6,203	\$ 4,961	\$ (4,164)	\$ (4,570)
Prior service cost included in accumulated other comprehensive income (loss)	—	—	(239)	(285)
Total recognized asset (liability)	\$ 6,203	\$ 4,961	\$ (4,403)	\$ (4,855)

The accumulated benefit obligation for the Pension Plan was \$33.2 million and \$36.0 million at December 31, 2016 and 2015, respectively.

TCF's Pension Plan investment policy permits investments in cash, money market mutual funds, direct fixed income securities to include U.S. Treasury securities, U.S. Government-sponsored enterprises and indirect fixed income investment securities made in fund form (mutual fund or institutional fund) where the fund invests in fixed income securities in investment grade corporate credits, non-investment grade floating-rate bank loans and non-investment grade bonds. The fair value of Level 1 assets are based upon prices obtained from independent pricing sources for the same assets traded in active markets. The fair value of the mortgage-backed securities categorized as Level 2 assets are based on prices obtained from independent pricing sources that are based on observable transactions of similar instruments, but not quoted markets. There were no assets that are valued on a recurring basis as Level 3 assets.

The balances of TCF's Pension Plan investments measured at fair value on a recurring basis were as follows:

(In thousands)	Pension Plan	
	Year Ended December 31,	
	2016	2015
Level 1:		
Fixed income mutual funds	\$ 26,121	\$ 25,323
Money market mutual funds	2,430	3,406
Cash	65	87
Level 2:		
Mortgage-backed securities	5,766	7,339
Pension plan investments not classified in fair value hierarchy:		
Collective investment fund	4,989	4,729
Total Pension Plan assets held in trust	\$ 39,371	\$ 40,884

The changes recognized in accumulated other comprehensive income (loss) attributable to the Postretirement Plan were as follows:

(In thousands)	Postretirement Plan		
	Year Ended December 31,		
	2016	2015	2014
Accumulated other comprehensive income (loss) before tax, beginning of period	\$ (285)	\$ (331)	\$ (378)
Amortization of prior service credit (recognized in net periodic benefit cost)	46	46	47
Accumulated other comprehensive income (loss) before tax, end of period	\$ (239)	\$ (285)	\$ (331)

The Pension Plan does not have any accumulated other comprehensive income (loss).

The net periodic benefit plan (income) cost included in compensation and employee benefits expense for the Pension Plan and the Postretirement Plan was as follows:

(In thousands)	Pension Plan					
	Year Ended December 31,					
	2016		2015		2014	
Interest cost	\$	1,281	\$	1,216	\$	1,587
(Gain) loss on plan assets		(1,898)		447		511
Recognized actuarial (gain) loss		(625)		(1,436)		1,862
Net periodic benefit plan (income) cost	\$	(1,242)	\$	227	\$	3,960

(In thousands)	Postretirement Plan					
	Year Ended December 31,					
	2016		2015		2014	
Interest cost	\$	151	\$	154	\$	198
Recognized actuarial (gain) loss		(211)		(173)		(63)
Amortization of prior service cost		(46)		(46)		(47)
Net periodic benefit plan (income) cost	\$	(106)	\$	(65)	\$	88

Pension Plan actual return on plan assets, net of administrative expenses was 4.9% in 2016 and a loss of 1.0% in 2015 and 2014. The expected actuarial return on plan assets was a gain of \$0.6 million, \$0.6 million and \$0.7 million in 2016, 2015 and 2014, respectively. In 2016, the actual gain on plan assets of \$1.9 million decreased net periodic benefit plan costs. In 2015 and 2014, the actual losses on plan assets of \$0.4 million and \$0.5 million, respectively, increased net periodic benefit plan costs.

The assumptions used to determine the estimated net benefit plan costs for the Pension Plan and Postretirement Plan were as follows:

	Pension Plan			Postretirement Plan		
	Year Ended December 31,			Year Ended December 31,		
	2016	2015	2014	2016	2015	2014
Discount rate	3.75%	3.25%	4.00%	3.50%	3.25%	4.00%
Expected long-term rate of return on plan assets	1.50	1.50	1.50	N.A.	N.A.	N.A.

N.A. Not Applicable.

Prior service credits of TCF's Postretirement Plan of \$46 thousand were included within accumulated other comprehensive income (loss) at December 31, 2016 and are expected to be recognized as components of net periodic benefit cost during 2017.

The actuarial assumptions used in the Pension Plan valuation are reviewed annually. The expected long-term rate of return on plan assets is determined by reference to historical market returns and future expectations. The 10-year expected average return of the index consistent with the Pension Plan's current investment strategy was 1.4%, net of administrative expenses. A 1.0% difference in the expected return on plan assets would result in a \$0.4 million change in net periodic pension expense.

The assumptions used to determine the estimated benefit plan obligation for the Pension Plan and Postretirement Plan were as follows:

	Pension Plan		Postretirement Plan	
	Year Ended December 31,		Year Ended December 31,	
	2016	2015	2016	2015
Discount rate	3.60%	3.75%	3.40%	3.50%
Health care cost trend rate assumed for next year	N.A.	N.A.	5.8	5.9
Final health care cost trend rate	N.A.	N.A.	4.5	4.5
Year that final health care trend rate is reached	N.A.	N.A.	2038	2038

N.A. Not Applicable.

The discount rates used to determine the estimated benefit plan obligation were determined by matching estimated benefit cash flows to a yield curve derived from corporate bonds rated AA by either Moody's or Standard and Poor's. Bonds containing call or put provisions were excluded. The average estimated duration of benefit cash flows for TCF's Pension Plan and Postretirement Plan varied between 6.7 and 7.0 years.

Assumed health care cost trend rates have an effect on the amounts reported for the Postretirement Plan. A 1.0% change in assumed health care cost trend rates would have the following effect:

(In thousands)	1-Percentage-Point	
	Increase	Decrease
Effect on total service and interest cost components	\$ 5	\$ (5)
Effect on postretirement benefit obligations	145	(133)

For 2016, TCF was eligible to contribute up to \$11.9 million to the Pension Plan until the 2016 federal income tax return extended due date under various IRS funding methods. During 2016, TCF made no cash contributions to the Pension Plan. TCF does not expect to be required to contribute to the Pension Plan in 2017. TCF expects to contribute \$0.5 million to the Postretirement Plan in 2017. TCF contributed \$0.3 million to the Postretirement Plan in 2016. TCF currently has no plans to pre-fund the Postretirement Plan in 2017.

The expected future benefit payments used to determine projected benefit obligations were as follows:

(In thousands)	Pension Plan	Postretirement Plan
2017	\$ 3,111	\$ 496
2018	3,110	471
2019	3,128	444
2020	2,980	418
2021	2,317	391
2022 - 2026	10,518	1,564

Note 17. Financial Instruments with Off-Balance Sheet Risk

TCF is a party to financial instruments with off-balance sheet risk, primarily to meet the financing needs of its customers. These financial instruments, which are issued or held for purposes other than trading, involve elements of credit and interest-rate risk in excess of the amounts recognized in the Consolidated Statements of Financial Condition.

TCF's exposure to credit loss, in the event of non-performance by the counterparty to the financial instrument, for commitments to extend credit and standby letters of credit is represented by the contractual amount of the commitments. TCF uses the same credit policies in making these commitments as it does for making direct loans. TCF evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained is based on a credit evaluation of the customer.

Financial instruments with off-balance sheet risk were as follows:

(In thousands)	At December 31,	
	2016	2015
Commitments to extend credit:		
Consumer real estate and other	\$ 1,425,585	\$ 1,402,088
Commercial	898,809	639,465
Leasing and equipment finance	125,648	128,259
Total commitments to extend credit	2,450,042	2,169,812
Standby letters of credit and guarantees on industrial revenue bonds	8,782	9,178
Total	\$ 2,458,824	\$ 2,178,990

Commitments to Extend Credit Commitments to extend credit are agreements to lend provided there is no violation of any condition in the contract. These commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since a certain amount of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. Collateral to secure any funding of these commitments predominantly consists of residential and commercial real estate.

Standby Letters of Credit and Guarantees on Industrial Revenue Bonds Standby letters of credit and guarantees on industrial revenue bonds are conditional commitments issued by TCF guaranteeing the performance of a customer to a third party. These conditional commitments expire in various years through 2020. Collateral held consists primarily of commercial real estate mortgages. Since the conditions under which TCF is required to fund these commitments may not materialize, the cash requirements are expected to be less than the total outstanding commitments.

Note 18. Derivative Instruments

Derivative instruments were as follows:

(In thousands)	At December 31, 2016			
	Notional Amount	Gross Amounts Recognized	Gross Amounts Offset	Net Amount Presented
Derivative Assets:				
Derivatives designated as hedges:				
Forward foreign exchange contracts	\$ 61,760	\$ 1,082	\$ —	\$ 1,082
Derivatives not designated as hedges:				
Forward foreign exchange contracts	250,018	2,995	(1,439)	1,556
Interest rate contracts	149,499	1,925	(633)	1,292
Interest rate lock commitments	27,954	318	—	318
Total derivative assets		\$ 6,320	\$ (2,072)	\$ 4,248
Derivative Liabilities:				
Derivatives designated as hedges:				
Interest rate contracts	\$ 150,000	\$ 1,320	\$ (1,320)	\$ —
Derivatives not designated as hedges:				
Forward foreign exchange contracts	115,336	469	(445)	24
Interest rate contracts	149,499	1,936	(1,332)	604
Other contracts	13,804	619	(619)	—
Interest rate lock commitments	2,947	21	—	21
Total derivative liabilities		\$ 4,365	\$ (3,716)	\$ 649

(In thousands)	At December 31, 2015			
	Notional Amount	Gross Amounts Recognized	Gross Amounts Offset	Net Amount Presented
Derivative Assets:				
Derivatives designated as hedges:				
Forward foreign exchange contracts	\$ 47,409	\$ 858	\$ —	\$ 858
Derivatives not designated as hedges:				
Forward foreign exchange contracts	260,678	5,057	(2,081)	2,976
Interest rate contracts	111,347	2,093	—	2,093
Interest rate lock commitments	50,667	729	—	729
Total derivative assets		\$ 8,737	\$ (2,081)	\$ 6,656
Derivative Liabilities:				
Derivatives designated as hedges:				
Interest rate contracts	\$ 150,000	\$ 142	\$ (142)	\$ —
Derivatives not designated as hedges:				
Forward foreign exchange contracts	187,902	1,192	(1,081)	111
Interest rate contracts	111,347	2,175	(2,175)	—
Other contracts	13,804	305	(305)	—
Interest rate lock commitments	3,218	13	—	13
Total derivative liabilities		\$ 3,827	\$ (3,703)	\$ 124

The pre-tax impact of derivative activity within the Consolidated Statements of Income and the Consolidated Statements of Comprehensive Income was as follows:

(In thousands)	Income Statement Location	Year Ended December 31,		
		2016	2015	2014
Consolidated Statements of Income				
Fair value hedges:				
Interest rate contracts	Other non-interest income	\$ (1,178)	\$ (142)	\$ —
Non-derivative hedged items	Other non-interest income	1,140	209	—
Not designated as hedges:				
Forward foreign exchange contracts	Other non-interest expense	(13,689)	74,292	38,752
Interest rate lock commitments	Gains on sales of consumer real estate loans, net	(419)	431	285
Interest rate contracts	Other non-interest income	71	4	(79)
Other contracts	Other non-interest expense	(629)	—	—
Net gain (loss) recognized		\$ (14,704)	\$ 74,794	\$ 38,958
Consolidated Statements of Comprehensive Income				
Net investment hedges:				
Forward foreign exchange contracts	Other comprehensive income (loss)	\$ (1,213)	\$ 7,613	\$ 3,126
Net unrealized gain (loss)		\$ (1,213)	\$ 7,613	\$ 3,126

TCF executes all of its forward foreign exchange contracts in the over-the-counter market with large financial institutions pursuant to International Swaps and Derivatives Association, Inc. agreements. These agreements include credit risk-related features that enhance the creditworthiness of these instruments as compared with other obligations of the respective counterparty with whom TCF has transacted by requiring that additional collateral be posted under certain circumstances. The amount of collateral required depends on the contract and is determined daily based on market and currency exchange rate conditions.

At December 31, 2016, credit risk-related contingent features existed on forward foreign exchange contracts with a notional value of \$78.1 million. In the event TCF is rated less than BB- by Standard and Poor's, the contracts could be terminated or TCF may be required to provide approximately \$1.6 million in additional collateral. There were no forward foreign exchange contracts containing credit risk-related features in a net liability position at December 31, 2016.

At December 31, 2016, TCF had posted \$10.1 million and \$1.4 million of cash collateral related to its interest rate contracts and other contracts, respectively, and had received \$3.8 million of cash collateral related to its forward foreign exchange contracts.

Note 19. Fair Value Disclosures

TCF uses fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. The Company's fair values are based on the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Securities available for sale, certain loans and leases held for sale, interest-only strips, forward foreign exchange contracts, interest rate contracts, interest rate lock commitments, forward loan sales commitments, assets and liabilities held in trust for deferred compensation plans and other contracts are recorded at fair value on a recurring basis. From time to time we may be required to record at fair value other assets on a non-recurring basis, such as certain securities held to maturity, loans, other real estate owned, repossessed and returned assets and the securitization receivable. These non-recurring fair value adjustments typically involve application of lower of cost or fair value accounting or write-downs of individual assets.

TCF groups its assets and liabilities measured at fair value in three levels, based on the markets in which the assets and liabilities are traded and the degree and reliability of estimates and assumptions used to determine fair value as follows: Level 1, which includes valuations that are based on prices obtained from independent pricing sources for the same instruments traded in active markets; Level 2, which includes valuations that are based on prices obtained from independent pricing sources that are based on observable transactions of similar instruments, but not quoted markets; and Level 3, for which valuations are generated from Company model-based techniques that use significant unobservable inputs. Such unobservable inputs reflect estimates of assumptions that market participants would use in pricing the asset or liability.

The following is a discussion of the valuation methodologies used to record assets and liabilities at fair value on a recurring or non-recurring basis and for estimating fair value of financial instruments not recorded at fair value.

Investments The carrying value of investments in FHLB stock and Federal Reserve Bank stock, categorized as Level 2, approximates fair value based on redemption at par value.

Securities Held to Maturity Securities held to maturity consist primarily of securities of U.S. Government sponsored enterprises and federal agencies. The fair value of securities of U.S. Government sponsored enterprises and federal agencies, categorized as Level 2, is estimated using prices obtained from independent asset pricing services that are based on observable transactions, but not quoted markets. Management reviews the prices obtained from independent asset pricing services for unusual fluctuations and comparisons to current market trading activity. The fair value of other mortgage-backed securities and other securities, categorized as Level 3, is estimated based on discounted cash flows using consideration of credit exposure and other internal pricing methods. There is no observable secondary market for these securities.

Securities Available for Sale Securities available for sale consist primarily of securities of U.S. Government sponsored enterprises and federal agencies, and obligations of states and political subdivisions. The fair value of these securities, categorized as Level 2, is recorded using prices obtained from independent asset pricing services that are based on observable transactions, but not quoted markets. Management reviews the prices obtained from independent asset pricing services for unusual fluctuations and comparisons to current market trading activity.

Loans and Leases Held for Sale Loans and leases held for sale are generally carried at the lower of cost or fair value. Estimated fair values are based upon recent loan sale transactions and any available price quotes on loans with similar coupons, maturities and credit quality. Certain other loans and leases held for sale are recorded at fair value under the elected fair value option. TCF relies on internal valuation models which utilize quoted investor prices to estimate the fair value of these loans. Loans and leases held for sale are categorized as Level 3.

Loans The fair value of loans, categorized as Level 3, is estimated based on discounted expected cash flows and recent sales of similar loans. The discounted cash flows include assumptions for prepayment estimates over each loan's remaining life, consideration of the current interest rate environment compared with the weighted-average rate of each portfolio, a credit risk component based on the historical and expected performance of each portfolio and a liquidity adjustment related to the current market environment. TCF also uses pricing data from recent sales of loans with similar risk characteristics as data points to validate the assumptions used in estimating the fair value of certain loans.

Loans for which repayment is expected to be provided solely by the value of the underlying collateral, categorized as Level 3 and recorded at fair value on a non-recurring basis, are valued based on the fair value of that collateral less estimated selling costs. Such loans include non-accrual impaired loans as well as certain delinquent non-accrual consumer real estate and auto finance loans. The fair value of the collateral is determined based on internal estimates and assessments provided by third-party appraisers.

Interest-only Strips The fair value of interest-only strips, categorized as Level 3, represents the present value of future cash flows expected to be received by TCF on certain assets. TCF uses available market data, along with its own empirical data and discounted cash flow models, to arrive at the estimated fair value of its interest-only strips. The present value of the estimated expected future cash flows to be received is determined by using discount, loss and prepayment rates that TCF believes are commensurate with the risks associated with the cash flows and what a market participant would use. These assumptions are inherently subject to volatility and uncertainty and, as a result, the estimated fair value of the interest-only strips may fluctuate significantly from period to period.

Forward Foreign Exchange Contracts TCF's forward foreign exchange contracts are currency contracts executed in over-the-counter markets and are recorded at fair value using a cash flow model that includes key inputs such as foreign exchange rates and an assessment of the risk of counterparty non-performance. The risk of counterparty non-performance is based on external assessments of credit risk. The fair value of these contracts, categorized as Level 2, is based on observable transactions, but not quoted markets.

Interest Rate Contracts TCF executes interest rate swap agreements with commercial banking customers to facilitate the customer's risk management strategy. These interest rate swaps are simultaneously hedged by offsetting interest rate swaps TCF executes with a third party, minimizing TCF's net interest rate risk exposure resulting from such transactions. TCF also has an interest rate swap agreement to convert its \$150.0 million of fixed-rate subordinated notes to floating rate debt. These derivative instruments are recorded at fair value. The fair value of these swap agreements, categorized as Level 2, is determined using a cash flow model which considers the forward curve, the discount curve and credit valuation adjustments related to counterparty and/or borrower non-performance risk.

Interest Rate Lock Commitments and Forward Loan Sales Commitments TCF's interest rate lock commitments are derivative instruments that are carried at fair value. The related forward loan sales commitments to sell the resulting loans held for sale are also recorded at fair value under the elected fair value option. TCF relies on internal valuation models to estimate the fair value of these instruments. The valuation models utilize estimated rates of successful loan closings and quoted investor prices. While these models use both Level 2 and 3 inputs, TCF has determined that the majority of the inputs significant in the valuation of these commitments fall within Level 3 and therefore they are categorized as Level 3.

Other Real Estate Owned and Repossessed and Returned Assets The fair value of other real estate owned, categorized as Level 3, is based on independent appraisals, real estate brokers' price opinions or automated valuation methods, less estimated selling costs. Certain properties require assumptions that are not observable in an active market in the determination of fair value. The fair value of repossessed and returned assets is based on available pricing guides, auction results or price opinions, less estimated selling costs. Assets acquired through foreclosure, repossession or returned to TCF are initially recorded at the lower of the loan or lease carrying amount or fair value less estimated selling costs at the time of transfer to other real estate owned or repossessed and returned assets.

Securitization Receivable TCF executed an auto finance loan securitization during the second quarter of 2016 with a related receivable representing a cash reserve account posted at the inception of the securitization. The fair value of the securitization receivable, categorized as Level 3, is estimated based on discounted cash flows using interest rates for borrowings of similar remaining maturities plus a spread based on management's judgment.

Assets and Liabilities Held in Trust for Deferred Compensation Plans Assets held in trust for deferred compensation plans include investments in publicly traded securities, excluding TCF common stock reported in treasury and other equity, and U.S. Treasury notes. The fair value of these assets, categorized as Level 1, is based upon prices obtained from independent asset pricing services based on active markets. The fair value of the liabilities equals the fair value of the assets.

Other Contracts TCF has a swap agreement related to the sale of TCF's Visa Class B stock, categorized as Level 3. The fair value of the Visa agreement is based upon TCF's estimated exposure related to the Visa covered litigation through a probability analysis of the funding and estimated settlement amounts.

Deposits The fair value of checking, savings and money market deposits, categorized as Level 1, is deemed equal to the amount payable on demand. The fair value of certificates of deposit, categorized as Level 2, is estimated based on discounted cash flows using currently offered market rates. The intangible value of long-term relationships with depositors is not taken into account in the fair values disclosed.

Long-term Borrowings The fair value of TCF's long-term borrowings, categorized as Level 2, is estimated based on observable market prices and discounted cash flows using interest rates for borrowings of similar remaining maturities and characteristics. The fair value of other long-term borrowings, categorized as Level 3, is based on unobservable inputs determined at the time of origination.

Financial Instruments with Off-Balance Sheet Risk The fair value of TCF's commitments to extend credit and standby letters of credit, categorized as Level 2, is estimated using fees currently charged to enter into similar agreements. Substantially all commitments to extend credit and standby letters of credit have floating interest rates and do not expose TCF to interest rate risk; therefore fair value is approximately equal to carrying value.

The balances of assets and liabilities measured at fair value on a recurring and non-recurring basis were as follows:

(In thousands)	Fair Value Measurements at December 31, 2016			
	Level 1	Level 2	Level 3	Total
Recurring Fair Value Measurements:				
Securities available for sale:				
Mortgage-backed securities:				
U.S. Government sponsored enterprises and federal agencies	\$ —	\$ 810,891	\$ —	\$ 810,891
Other	—	—	18	18
Obligations of states and political subdivisions	—	612,526	—	612,526
Loans and leases held for sale	—	—	6,498	6,498
Interest-only strips	—	—	40,152	40,152
Forward foreign exchange contracts ⁽¹⁾	—	4,077	—	4,077
Interest rate contracts ⁽¹⁾	—	1,925	—	1,925
Interest rate lock commitments ⁽¹⁾	—	—	318	318
Forward loan sales commitments	—	—	374	374
Assets held in trust for deferred compensation plans	23,363	—	—	23,363
Total assets	\$ 23,363	\$ 1,429,419	\$ 47,360	\$ 1,500,142
Forward foreign exchange contracts ⁽¹⁾	\$ —	\$ 469	\$ —	\$ 469
Interest rate contracts ⁽¹⁾	—	3,256	—	3,256
Interest rate lock commitments ⁽¹⁾	—	—	21	21
Forward loan sales commitments	—	—	13	13
Liabilities held in trust for deferred compensation plans	23,363	—	—	23,363
Other contracts ⁽¹⁾	—	—	619	619
Total liabilities	\$ 23,363	\$ 3,725	\$ 653	\$ 27,741
Non-recurring Fair Value Measurements:				
Securities held to maturity	\$ —	\$ —	\$ 2,400	\$ 2,400
Loans	—	—	113,954	113,954
Other real estate owned:				
Consumer	—	—	25,751	25,751
Commercial	—	—	3,874	3,874
Repossessed and returned assets	—	2,767	2,800	5,567
Total non-recurring fair value measurements	\$ —	\$ 2,767	\$ 148,779	\$ 151,546

(1) As permitted under GAAP, TCF has elected to net derivative assets and derivative liabilities when a legally enforceable master netting agreement exists as well as the related cash collateral received and paid. For purposes of this table, the derivative assets and derivative liabilities are presented gross of this netting adjustment.

Fair Value Measurements at December 31, 2015

(In thousands)	Level 1	Level 2	Level 3	Total
Recurring Fair Value Measurements:				
Securities available for sale:				
Mortgage-backed securities:				
U.S. Government sponsored enterprises and federal agencies	\$ —	\$ 621,930	\$ —	\$ 621,930
Other	—	—	34	34
Obligations of states and political subdivisions	—	266,921	—	266,921
Loans and leases held for sale	—	—	10,568	10,568
Interest-only strips	—	—	44,332	44,332
Forward foreign exchange contracts ⁽¹⁾	—	5,915	—	5,915
Interest rate contracts ⁽¹⁾	—	2,093	—	2,093
Interest rate lock commitments ⁽¹⁾	—	—	729	729
Forward loan sales commitments	—	—	284	284
Assets held in trust for deferred compensation plans	19,731	—	—	19,731
Total assets	\$ 19,731	\$ 896,859	\$ 55,947	\$ 972,537
Forward foreign exchange contracts ⁽¹⁾	\$ —	\$ 1,192	\$ —	\$ 1,192
Interest rate contracts ⁽¹⁾	—	2,317	—	2,317
Interest rate lock commitments ⁽¹⁾	—	—	13	13
Forward loan sales commitments	—	—	19	19
Liabilities held in trust for deferred compensation plans	19,731	—	—	19,731
Other contracts ⁽¹⁾	—	—	305	305
Total liabilities	\$ 19,731	\$ 3,509	\$ 337	\$ 23,577
Non-recurring Fair Value Measurements:				
Securities held to maturity	\$ —	\$ —	\$ 1,110	\$ 1,110
Loans	—	—	130,797	130,797
Other real estate owned:				
Consumer	—	—	37,619	37,619
Commercial	—	—	5,249	5,249
Repossessed and returned assets	—	2,673	2,197	4,870
Total non-recurring fair value measurements	\$ —	\$ 2,673	\$ 176,972	\$ 179,645

(1) As permitted under GAAP, TCF has elected to net derivative assets and derivative liabilities when a legally enforceable master netting agreement exists as well as the related cash collateral received and paid. For purposes of this table, the derivative assets and derivative liabilities are presented gross of this netting adjustment.

Management assesses the appropriate classification of financial assets and liabilities within the fair value hierarchy by monitoring the level of availability of observable market information. Changes in markets or economic conditions, as well as changes to Company valuation models may require the transfer of financial instruments from one fair value level to another. Such transfers, if any, are recorded at the fair values as of the beginning of the quarter in which the transfer occurred. TCF had no transfers in 2016, 2015 and 2014.

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis were as follows:

(In thousands)	Securities Available for Sale	Loans and Leases Held for Sale	Interest-only Strips	Interest Rate Lock Commitments	Forward Loan Sales Commitments	Other Contracts
Asset (liability) balance, December 31, 2013	\$ 93	\$ —	\$ 84,561	\$ —	\$ —	\$ (899)
Total net gains (losses) included in:						
Net income	—	72	6,836	285	(23)	(47)
Sales	—	(39,246)	—	—	—	—
Originations	—	42,482	28,743	—	—	—
Principal paydowns / settlements	(38)	—	(50,351)	—	—	325
Asset (liability) balance, December 31, 2014	55	3,308	69,789	285	(23)	(621)
Total net gains (losses) included in:						
Net income	—	(68)	6,960	431	288	—
Sales	—	(289,751)	—	—	—	—
Originations	—	297,079	7,495	—	—	—
Principal paydowns / settlements	(21)	—	(39,912)	—	—	316
Asset (liability) balance, December 31, 2015	34	10,568	44,332	716	265	(305)
Total net gains (losses) included in:						
Net income	—	(48)	2,980	(419)	96	(629)
Other comprehensive income (loss)	—	—	159	—	—	—
Sales	—	(343,949)	—	—	—	—
Originations	—	339,930	22,620	—	—	—
Principal paydowns / settlements	(16)	(3)	(29,939)	—	—	315
Asset (liability) balance, December 31, 2016	\$ 18	\$ 6,498	\$ 40,152	\$ 297	\$ 361	\$ (619)

Fair Value Option

TCF Bank originates first mortgage lien loans in its primary banking markets and sells the loans through a correspondent relationship. TCF elected the fair value option for these loans. This election facilitates the offsetting of changes in fair values of the loans held for sale and the derivative financial instruments used to economically hedge them. The difference between the aggregate fair value and aggregate unpaid principal balance of these loans held for sale was as follows:

(In thousands)	At December 31,	
	2016	2015
Fair value carrying amount	\$ 6,498	\$ 10,568
Aggregate unpaid principal amount	6,563	10,547
Fair value carrying amount less aggregate unpaid principal	\$ (65)	\$ 21

Differences between the fair value carrying amount and the aggregate unpaid principal balance include changes in fair value recorded at and subsequent to funding and gains and losses on the related loan commitment prior to funding. No loans recorded under the fair value option were delinquent or on non-accrual status at December 31, 2016 or 2015. The net gain from initial measurement of the correspondent lending loans held for sale, any subsequent changes in fair value while the loans are outstanding and any actual adjustment to the gains realized upon sales of the loans totaled \$7.6 million, \$6.3 million and \$0.9 million for 2016, 2015 and 2014, respectively, and is included in gains on sales of consumer real estate loans, net. This amount excludes the impact from the interest rate lock commitments and forward loan sales commitments which are also included in gains on sales of consumer real estate loans, net.

Disclosures About Fair Value of Financial Instruments

Management discloses the estimated fair value of financial instruments, both assets and liabilities on and off the balance sheet, for which it is practicable to estimate fair value. These fair value estimates were made at December 31, 2016 and 2015, based on relevant market information and information about the financial instruments. Fair value estimates are intended to represent the price at which an asset could be sold or a liability could be settled. However, given there is no active market or observable market transactions for many of the Company's financial instruments, the estimates of fair values are subjective in nature, involve uncertainties and include matters of significant judgment. Changes in assumptions could significantly affect the estimated values.

The carrying amounts and estimated fair values of the Company's financial instruments, excluding short-term financial assets and liabilities as their carrying amounts approximate fair value and excluding financial instruments recorded at fair value on a recurring basis were as follows. This information represents only a portion of TCF's balance sheet and not the estimated value of the Company as a whole. Non-financial instruments such as the intangible value of TCF's branches and core deposits, leasing operations, goodwill, premises and equipment and the future revenues from TCF's customers are not reflected in this disclosure. Therefore, this information is of limited use in assessing the value of TCF.

(In thousands)	Carrying Amount	Estimated Fair Value at December 31, 2016			
		Level 1	Level 2	Level 3	Total
Financial instrument assets:					
Investments	\$ 74,714	\$ —	\$ 74,714	\$ —	\$ 74,714
Securities held to maturity	181,314	—	181,146	2,800	183,946
Loans and leases held for sale	268,832	—	—	282,786	282,786
Loans:					
Consumer real estate	5,084,352	—	—	5,165,062	5,165,062
Commercial real estate	2,634,191	—	—	2,583,775	2,583,775
Commercial business	652,287	—	—	631,215	631,215
Equipment finance	2,016,732	—	—	1,983,237	1,983,237
Inventory finance	2,470,175	—	—	2,453,184	2,453,184
Auto finance	2,647,741	—	—	2,656,266	2,656,266
Other	18,771	—	—	17,780	17,780
Allowance for loan losses ⁽¹⁾	(160,269)	—	—	—	—
Securitization receivable ⁽²⁾	18,835	—	—	18,835	18,835
Total financial instrument assets	\$ 15,907,675	\$ —	\$ 255,860	\$ 15,794,940	\$ 16,050,800
Financial instrument liabilities:					
Deposits	\$ 17,242,522	\$ 13,150,099	\$ 4,112,685	\$ —	\$ 17,262,784
Long-term borrowings	1,073,181	—	1,073,875	2,764	1,076,639
Total financial instrument liabilities	\$ 18,315,703	\$ 13,150,099	\$ 5,186,560	\$ 2,764	\$ 18,339,423
Financial instruments with off-balance sheet risk:⁽³⁾					
Commitments to extend credit	\$ 21,681	\$ —	\$ 21,681	\$ —	\$ 21,681
Standby letters of credit	(29)	—	(29)	—	(29)
Total financial instruments with off-balance sheet risk	\$ 21,652	\$ —	\$ 21,652	\$ —	\$ 21,652

(1) Expected credit losses are included in the estimated fair values.

(2) Carrying amounts are included in other assets.

(3) Positive amounts represent assets, negative amounts represent liabilities.

(In thousands)	Carrying Amount	Estimated Fair Value at December 31, 2015			
		Level 1	Level 2	Level 3	Total
Financial instrument assets:					
Investments	\$ 70,537	\$ —	\$ 70,537	\$ —	\$ 70,537
Securities held to maturity	201,920	—	202,443	4,510	206,953
Loans and leases held for sale	157,625	—	—	165,387	165,387
Loans:					
Consumer real estate	5,464,272	—	—	5,543,273	5,543,273
Commercial real estate	2,593,429	—	—	2,556,018	2,556,018
Commercial business	552,403	—	—	531,274	531,274
Equipment finance	1,909,672	—	—	1,888,664	1,888,664
Inventory finance	2,146,754	—	—	2,132,435	2,132,435
Auto finance	2,647,596	—	—	2,650,429	2,650,429
Other	19,297	—	—	14,699	14,699
Allowance for loan losses ⁽¹⁾	(156,054)	—	—	—	—
Total financial instrument assets	\$ 15,607,451	\$ —	\$ 272,980	\$ 15,486,689	\$ 15,759,669
Financial instrument liabilities:					
Deposits	\$ 16,719,989	\$ 12,816,196	\$ 3,927,434	\$ —	\$ 16,743,630
Long-term borrowings	1,034,557	—	1,035,846	5,427	1,041,273
Total financial instrument liabilities	\$ 17,754,546	\$ 12,816,196	\$ 4,963,280	\$ 5,427	\$ 17,784,903
Financial instruments with off-balance sheet risk:⁽²⁾					
Commitments to extend credit	\$ 23,937	\$ —	\$ 23,937	\$ —	\$ 23,937
Standby letters of credit	(35)	—	(35)	—	(35)
Total financial instruments with off-balance sheet risk	\$ 23,902	\$ —	\$ 23,902	\$ —	\$ 23,902

(1) Expected credit losses are included in the estimated fair values.

(2) Positive amounts represent assets, negative amounts represent liabilities.

Note 20. Earnings Per Common Share

The computations of basic and diluted earnings per common share were as follows:

(Dollars in thousands, except per-share data)	Year Ended December 31,		
	2016	2015	2014
Basic Earnings Per Common Share:			
Net income available to common stockholders	\$ 192,736	\$ 177,735	\$ 154,799
Earnings allocated to participating securities	49	45	40
Earnings allocated to common stock	\$ 192,687	\$ 177,690	\$ 154,759
Weighted-average common shares outstanding for basic earnings per common share	167,219,964	165,696,678	163,581,435
Basic earnings per common share	\$ 1.15	\$ 1.07	\$ 0.95
Diluted Earnings Per Common Share:			
Earnings allocated to common stock	\$ 192,687	\$ 177,690	\$ 154,759
Weighted-average common shares outstanding used in basic earnings per common share calculation	167,219,964	165,696,678	163,581,435
Net dilutive effect of:			
Non-participating restricted stock	505,162	335,193	250,499
Stock options	82,325	210,049	252,892
Weighted-average common shares outstanding for diluted earnings per common share	167,807,451	166,241,920	164,084,826
Diluted earnings per common share	\$ 1.15	\$ 1.07	\$ 0.94

For 2016, 2015 and 2014, there were 4.7 million, 4.5 million and 4.2 million, respectively, of outstanding shares related to non-participating restricted stock and warrants that were not included in the computation of diluted earnings per share because they were anti-dilutive.

Note 21. Other Expense

Other expense was as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Loan and lease processing	\$ 26,193	\$ 24,641	\$ 20,294
Advertising and marketing	22,264	22,782	22,943
Professional fees	19,335	19,615	18,949
FDIC insurance	15,912	20,262	25,123
Card processing and issuance cost	15,856	16,591	16,588
Outside processing	15,313	14,332	13,288
Other	116,547	111,032	110,785
Total other expense	\$ 231,420	\$ 229,255	\$ 227,970

Note 22. Business Segments

Effective January 1, 2016, the Company changed its reportable segments to align with the way the Company is now managed. The revised presentation of previously reported segment data has been applied retroactively to all periods presented in these financial statements. The new reportable segments are Consumer Banking, Wholesale Banking and Enterprise Services. Consumer Banking is comprised of all of the Company's consumer-facing businesses and includes retail banking, consumer real estate and auto finance. Wholesale Banking is comprised of commercial real estate and business lending, leasing and equipment finance and inventory finance. Enterprise Services is comprised of (i) corporate treasury, which includes TCF's investment and borrowing portfolios and management of capital, debt and market risks; (ii) corporate functions, such as information technology, risk and credit management, bank operations, finance, investor relations, corporate development, legal and human resources, that provide services to the operating segments; (iii) the Holding Company; and (iv) eliminations.

TCF evaluates performance and allocates resources based on each reportable segment's net income or loss. The reportable business segments follow GAAP as described in Note 1, Basis of Presentation, except for the accounting for intercompany interest income and interest expense, which are eliminated in consolidation, and presenting net interest income on a fully tax-equivalent basis. TCF generally accounts for inter-segment sales and transfers at cost.

Certain information for each of TCF's reportable segments, including reconciliations of TCF's consolidated totals, was as follows:

(In thousands)	Consumer Banking	Wholesale Banking	Enterprise Services	Consolidated
At or For the Year Ended December 31, 2016:				
Net interest income	\$ 559,851	\$ 343,653	\$ (55,398)	\$ 848,106
Provision for credit losses	50,819	15,055	—	65,874
Non-interest income	336,991	128,881	28	465,900
Non-interest expense	652,460	247,115	10,312	909,887
Income tax expense (benefit)	69,523	70,805	(23,800)	116,528
Income (loss) after income tax expense (benefit)	124,040	139,559	(41,882)	221,717
Income attributable to non-controlling interest	—	9,593	—	9,593
Preferred stock dividends	—	—	19,388	19,388
Net income (loss) available to common stockholders	\$ 124,040	\$ 129,966	\$ (61,270)	\$ 192,736
Total assets	\$ 8,671,126	\$ 10,379,951	\$ 2,390,249	\$ 21,441,326
Revenues from external customers:				
Interest income	\$ 443,959	\$ 452,882	\$ 33,889	\$ 930,730
Non-interest income	336,991	128,881	28	465,900
Total	\$ 780,950	\$ 581,763	\$ 33,917	\$ 1,396,630
At or For the Year Ended December 31, 2015:				
Net interest income	\$ 536,714	\$ 339,934	\$ (56,260)	\$ 820,388
Provision for credit losses	44,328	8,616	—	52,944
Non-interest income	320,399	119,779	1,820	441,998
Non-interest expense	645,939	244,921	3,887	894,747
Income tax expense (benefit)	61,384	70,127	(22,639)	108,872
Income (loss) after income tax expense (benefit)	105,462	136,049	(35,688)	205,823
Income attributable to non-controlling interest	—	8,700	—	8,700
Preferred stock dividends	—	—	19,388	19,388
Net income (loss) available to common stockholders	\$ 105,462	\$ 127,349	\$ (55,076)	\$ 177,735
Total assets	\$ 8,954,807	\$ 9,558,406	\$ 2,176,396	\$ 20,689,609
Revenues from external customers:				
Interest income	\$ 434,674	\$ 431,764	\$ 25,492	\$ 891,930
Non-interest income	320,399	119,779	1,820	441,998
Total	\$ 755,073	\$ 551,543	\$ 27,312	\$ 1,333,928
At or For the Year Ended December 31, 2014:				
Net interest income	\$ 511,663	\$ 326,291	\$ (22,325)	\$ 815,629
Provision for credit losses	89,895	5,842	—	95,737
Non-interest income	326,048	105,624	1,595	433,267
Non-interest expense	619,526	237,221	15,030	871,777
Income tax expense (benefit)	47,906	66,475	(14,615)	99,766
Income (loss) after income tax expense (benefit)	80,384	122,377	(21,145)	181,616
Income attributable to non-controlling interest	—	7,429	—	7,429
Preferred stock dividends	—	—	19,388	19,388
Net income (loss) available to common stockholders	\$ 80,384	\$ 114,948	\$ (40,533)	\$ 154,799
Total assets	\$ 8,443,343	\$ 8,969,814	\$ 1,980,499	\$ 19,393,656
Revenues from external customers:				
Interest income	\$ 433,954	\$ 418,064	\$ 22,211	\$ 874,229
Non-interest income	326,048	105,624	1,595	433,267
Total	\$ 760,002	\$ 523,688	\$ 23,806	\$ 1,307,496

Note 23. Parent Company Financial Information

TCF Financial's (parent company only) condensed statements of financial condition, income and cash flows were as follows:

Condensed Statements of Financial Condition

(In thousands)	At December 31,	
	2016	2015
Assets:		
Cash and due from bank	\$ 69,711	\$ 69,503
Investment in bank subsidiary	2,338,885	2,205,818
Accounts receivable from bank subsidiary	19,967	16,217
Other assets	9,476	9,216
Total assets	\$ 2,438,039	\$ 2,300,754
Liabilities and Equity:		
Other liabilities	\$ 10,556	\$ 9,838
Total liabilities	10,556	9,838
Equity	2,427,483	2,290,916
Total liabilities and equity	\$ 2,438,039	\$ 2,300,754

Condensed Statements of Income

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Interest income	\$ 155	\$ 306	\$ 365
Non-interest income:			
Dividends from TCF Bank	63,000	25,000	19,000
Affiliate service fees	17,657	17,281	22,461
Other	5	1,733	1,178
Total non-interest income	80,662	44,014	42,639
Non-interest expense:			
Compensation and employee benefits	17,578	13,905	21,193
Occupancy and equipment	370	342	338
Other	3,545	5,344	3,436
Total non-interest expense	21,493	19,591	24,967
Income before income tax benefit and equity in undistributed earnings of subsidiary	59,324	24,729	18,037
Income tax benefit	1,010	435	52
Income before equity in undistributed earnings of subsidiary	60,334	25,164	18,089
Equity in undistributed earnings of bank subsidiary	151,790	171,959	156,098
Net income	212,124	197,123	174,187
Preferred stock dividends	19,388	19,388	19,388
Net income available to common stockholders	\$ 192,736	\$ 177,735	\$ 154,799

Condensed Statements of Cash Flows

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net income	\$ 212,124	\$ 197,123	\$ 174,187
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Equity in undistributed earnings of bank subsidiary	(151,790)	(171,959)	(156,098)
Gains on sales of assets, net	—	(50)	(1,177)
Other, net	4,731	1,308	16,430
Net cash provided by (used in) operating activities	65,065	26,422	33,342
Cash flows from investing activities:			
Proceeds from sales of securities available for sale	—	—	2,813
Purchases of premises and equipment	(69)	(65)	(260)
Proceeds from sales of premises and equipment	22	92	91
Net cash provided by (used in) investing activities	(47)	27	2,644
Cash flows from financing activities:			
Dividends paid on preferred stock	(19,388)	(19,388)	(19,388)
Dividends paid on common stock	(50,182)	(37,302)	(32,731)
Common shares sold to TCF employee benefit plans	5,838	24,835	23,083
Stock compensation tax (expense) benefit	(377)	558	1,316
Exercise of stock options	(701)	2,570	740
Net cash provided by (used in) financing activities	(64,810)	(28,727)	(26,980)
Net change in cash and due from bank	208	(2,278)	9,006
Cash and due from bank at beginning of period	69,503	71,781	62,775
Cash and due from bank at end of period	\$ 69,711	\$ 69,503	\$ 71,781

TCF Financial's operations are conducted through its banking subsidiary, TCF Bank. As a result, TCF's cash flow and ability to make dividend payments to its preferred and common stockholders depend on the earnings of TCF Bank. The ability of TCF Bank to pay dividends or make other payments to TCF Financial is limited by its obligation to maintain sufficient capital and by other regulatory restrictions on dividends. At December 31, 2016, TCF Bank could pay a total of approximately \$479.8 million in dividends to TCF without prior regulatory approval.

Note 24. Litigation Contingencies

From time to time TCF is a party to legal proceedings arising out of its lending, leasing and deposit operations, including foreclosure proceedings and other collection actions as part of its lending and leasing collections activities. TCF may also be subject to regulatory examinations and enforcement actions brought by federal regulators, including the Securities and Exchange Commission, the Federal Reserve, the OCC and the Consumer Financial Protection Bureau ("CFPB"), and TCF's regulatory authorities may impose sanctions on TCF for failures related to regulatory compliance. From time to time borrowers and other customers, and employees and former employees have also brought actions against TCF, in some cases claiming substantial damages. TCF and other financial services companies are subject to the risk of class action litigation. Litigation is often unpredictable and the actual results of litigation cannot be determined and therefore the ultimate resolution of a matter and the possible range of loss associated with certain potential outcomes cannot be established. Except as discussed below, based on our current understanding of TCF's pending legal proceedings, management does not believe that judgments or settlements arising from pending or threatened legal matters, individually or in the aggregate, would have a material adverse effect on the consolidated financial position, operating results or cash flows of TCF.

On January 19, 2017, the CFPB filed a civil lawsuit against TCF Bank in the United States District Court for the District of Minnesota, captioned Consumer Financial Protection Bureau v. TCF National Bank, alleging violations of the Consumer Financial Protection Act and Regulation E, §1005.17 in connection with TCF Bank's practices administering checking account overdraft program "opt-in" requirements from 2010 to early 2014. In its complaint, the CFPB seeks, among other relief, redress for consumers, injunctive relief and unspecified penalties. TCF Bank rejects the claims made by the CFPB in its complaint and intends to vigorously defend against the CFPB's allegations. TCF has not accrued any amounts with respect to this matter because (i) TCF does not believe a loss is probable, (ii) believes the Company has meritorious defenses to the claims made and (iii) the damages sought are unspecified and uncertain. Therefore, TCF is currently unable to reasonably estimate a range of potential loss, if any, relating to this matter. There is no assurance that the ultimate resolution of this lawsuit will not have a material adverse effect on the consolidated financial position, operating results or cash flows of TCF.

Note 25. Accumulated Other Comprehensive Income (Loss)

The components of other comprehensive income (loss) and the related tax effects were as follows:

(In thousands)	Before Tax	Tax Effect	Net of Tax
Year Ended December 31, 2016:			
Net unrealized gains (losses) on securities available for sale and interest-only strips:			
Unrealized gains (losses) arising during the period	\$ (32,408)	\$ 12,323	\$ (20,085)
Reclassification of net (gains) losses to net income	1,913	(722)	1,191
Net unrealized gains (losses)	(30,495)	11,601	(18,894)
Net unrealized gains (losses) on net investment hedges	(1,213)	457	(756)
Foreign currency translation adjustment ⁽¹⁾	1,300	—	1,300
Recognized postretirement prior service cost:			
Reclassification of net (gains) losses to net income	(46)	17	(29)
Total other comprehensive income (loss)	\$ (30,454)	\$ 12,075	\$ (18,379)
Year Ended December 31, 2015:			
Net unrealized gains (losses) on securities available for sale and interest-only strips:			
Unrealized gains (losses) arising during the period	\$ (2,523)	\$ 955	\$ (1,568)
Reclassification of net (gains) losses to net income	1,159	(407)	752
Net unrealized gains (losses)	(1,364)	548	(816)
Net unrealized gains (losses) on net investment hedges	7,613	(2,900)	4,713
Foreign currency translation adjustment ⁽¹⁾	(8,304)	—	(8,304)
Recognized postretirement prior service cost:			
Reclassification of net (gains) losses to net income	(46)	17	(29)
Total other comprehensive income (loss)	\$ (2,101)	\$ (2,335)	\$ (4,436)
Year Ended December 31, 2014:			
Net unrealized gains (losses) on securities available for sale and interest-only strips:			
Unrealized gains (losses) arising during the period	\$ 29,071	\$ (10,932)	\$ 18,139
Reclassification of net (gains) losses to net income	(76)	29	(47)
Net unrealized gains (losses)	28,995	(10,903)	18,092
Net unrealized gains (losses) on net investment hedges	3,126	(1,181)	1,945
Foreign currency translation adjustment ⁽¹⁾	(3,704)	—	(3,704)
Recognized postretirement prior service cost:			
Reclassification of net (gains) losses to net income	(47)	17	(30)
Total other comprehensive income (loss)	\$ 28,370	\$ (12,067)	\$ 16,303

(1) Foreign investments are deemed to be permanent in nature and therefore TCF does not provide for taxes on foreign currency translation adjustments.

Reclassifications of net (gains) losses to net income for securities available for sale and interest-only strips were recorded in the Consolidated Statements of Income in gains (losses) on securities, net for sales of securities, in interest income for those securities that were previously transferred to held to maturity and in other non-interest expense for interest-only strips. During 2014, TCF transferred \$191.7 million of available for sale mortgage-backed securities to held to maturity. At December 31, 2016 and 2015, the unrealized holding loss on the transferred securities retained in accumulated other comprehensive income (loss) totaled \$13.0 million and \$14.8 million, respectively. These amounts are amortized over the remaining lives of the transferred securities. The tax effect of these reclassifications was recorded in income tax expense in the Consolidated Statements of Income. See Note 16, Employee Benefit Plans, for additional information regarding TCF's recognized postretirement prior service cost.

The components of accumulated other comprehensive income (loss) were as follows:

(In thousands)	Securities Available for Sale and Interest-only Strips	Net Investment Hedges	Foreign Currency Translation	Recognized Postretirement Prior Service Cost	Total
At or For the Year Ended December 31, 2016:					
Balance, beginning of period	\$ (9,707)	\$ 7,249	\$ (13,064)	\$ 176	\$ (15,346)
Other comprehensive income (loss)	(20,085)	(756)	1,300	—	(19,541)
Amounts reclassified from accumulated other comprehensive income (loss)	1,191	—	—	(29)	1,162
Net other comprehensive income (loss)	(18,894)	(756)	1,300	(29)	(18,379)
Balance, end of period	\$ (28,601)	\$ 6,493	\$ (11,764)	\$ 147	\$ (33,725)
At or For the Year Ended December 31, 2015:					
Balance, beginning of period	\$ (8,891)	\$ 2,536	\$ (4,760)	\$ 205	\$ (10,910)
Other comprehensive income (loss)	(1,568)	4,713	(8,304)	—	(5,159)
Amounts reclassified from accumulated other comprehensive income (loss)	752	—	—	(29)	723
Net other comprehensive income (loss)	(816)	4,713	(8,304)	(29)	(4,436)
Balance, end of period	\$ (9,707)	\$ 7,249	\$ (13,064)	\$ 176	\$ (15,346)
At or For the Year Ended December 31, 2014:					
Balance, beginning of period	\$ (26,983)	\$ 591	\$ (1,056)	\$ 235	\$ (27,213)
Other comprehensive income (loss)	18,139	1,945	(3,704)	—	16,380
Amounts reclassified from accumulated other comprehensive income (loss)	(47)	—	—	(30)	(77)
Net other comprehensive income (loss)	18,092	1,945	(3,704)	(30)	16,303
Balance, end of period	\$ (8,891)	\$ 2,536	\$ (4,760)	\$ 205	\$ (10,910)

Other Financial Data

The selected quarterly financial data presented below should be read in conjunction with the Consolidated Financial Statements and related notes.

SELECTED QUARTERLY FINANCIAL DATA (Unaudited)

(In thousands, except per-share data)	Three Months Ended							
	Dec. 31, 2016	Sep. 30, 2016	Jun. 30, 2016	Mar. 31, 2016	Dec. 31, 2015	Sep. 30, 2015	Jun. 30, 2015	Mar. 31, 2015
Net interest income	\$ 211,446	\$ 212,018	\$ 212,984	\$ 211,658	\$ 205,669	\$ 205,270	\$ 206,029	\$ 203,420
Provision for credit losses	19,888	13,894	13,250	18,842	17,607	10,018	12,528	12,791
Net interest income after provision for credit losses	191,558	198,124	199,734	192,816	188,062	195,252	193,501	190,629
Non-interest income	115,668	119,674	117,956	112,602	115,659	112,252	113,449	100,638
Non-interest expense	225,359	228,878	227,316	228,334	222,587	222,284	223,109	226,767
Income before income tax expense	81,867	88,920	90,374	77,084	81,134	85,220	83,841	64,500
Income tax expense	29,762	30,257	29,706	26,803	26,614	30,528	28,902	22,828
Income after income tax expense	52,105	58,663	60,668	50,281	54,520	54,692	54,939	41,672
Income attributable to non-controlling interest	2,013	2,371	2,974	2,235	2,028	2,117	2,684	1,871
Net income attributable to TCF Financial Corporation	50,092	56,292	57,694	48,046	52,492	52,575	52,255	39,801
Preferred stock dividends	4,847	4,847	4,847	4,847	4,847	4,847	4,847	4,847
Net income available to common stockholders	\$ 45,245	\$ 51,445	\$ 52,847	\$ 43,199	\$ 47,645	\$ 47,728	\$ 47,408	\$ 34,954
Earnings per common share:								
Basic	\$ 0.27	\$ 0.31	\$ 0.32	\$ 0.26	\$ 0.29	\$ 0.29	\$ 0.29	\$ 0.21
Diluted	\$ 0.27	\$ 0.31	\$ 0.31	\$ 0.26	\$ 0.29	\$ 0.29	\$ 0.29	\$ 0.21

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer (Principal Executive Officer), Chief Financial Officer (Principal Financial Officer) and Chief Accounting Officer (Principal Accounting Officer), of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Rules 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based upon that evaluation, management concluded that the Company's disclosure controls and procedures were effective as of December 31, 2016.

Disclosure controls and procedures are designed to ensure that information required to be disclosed by TCF in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls are also designed with the objective of ensuring that such information is accumulated and communicated to the Company's management, including the Chief Executive Officer (Principal Executive Officer), Chief Financial Officer (Principal Financial Officer) and Chief Accounting Officer (Principal Accounting Officer), as appropriate, to allow for timely decisions regarding required disclosure. TCF's disclosure controls also include internal controls that are designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use and that transactions are properly recorded and reported.

Changes in Internal Control Over Financial Reporting There were no changes to TCF's internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the quarter ended December 31, 2016, that materially affected, or are reasonably likely to materially affect, TCF's internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for TCF Financial Corporation (the Company). Internal control over financial reporting is a process designed 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.

Internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the Company are only being made in accordance with authorizations of management and directors of the Company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Management, with the participation of the Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer), completed an assessment of TCF's internal control over financial reporting as of December 31, 2016. This assessment was based on criteria for evaluating internal control over financial reporting established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in May 2013. Based on this assessment, management concluded that TCF's internal control over financial reporting was effective as of December 31, 2016.

KPMG LLP, the Company's independent registered public accounting firm that audited the consolidated financial statements included in this annual report, has issued an unqualified attestation report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2016.

Any control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. The design of a control system inherently has limitations and the benefits of controls must be weighed against their costs. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. Therefore, no assessment of a cost-effective system of internal controls can provide absolute assurance that all control issues and instances of fraud, if any, will be detected.

Report of Independent Registered Public Accounting Firm



The Board of Directors and Stockholders
TCF Financial Corporation:

We have audited TCF Financial Corporation's (the Company) internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). TCF Financial Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, TCF Financial Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statements of financial condition of TCF Financial Corporation and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended December 31, 2016, and our report dated February 21, 2017 expressed an unqualified opinion on those consolidated financial statements.

KPMG LLP

Minneapolis, Minnesota
February 21, 2017

Item 9B. Other Information

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding directors and executive officers of TCF is set forth in the following sections of TCF's definitive Proxy Statement for the 2017 Annual Meeting of Stockholders to be held on April 26, 2017 (the "2017 Proxy") and is incorporated herein by reference: Election of Directors; Background of Executive Officers Who Are Not Directors; and Section 16(a) Beneficial Ownership Reporting Compliance.

Information regarding procedures for nominations of Directors is set forth in the following sections of TCF's 2017 Proxy and is incorporated herein by reference: Corporate Governance - Director Nominations; and Additional Information.

Audit Committee and Financial Expert

Information regarding TCF's Audit Committee, its members and financial experts is set forth in the following sections of TCF's 2017 Proxy and is incorporated herein by reference: Election of Directors - Background of the Nominees; Corporate Governance - Board Committees, Committee Memberships, and Meetings in 2016; and Corporate Governance - Audit Committee.

TCF's Board of Directors is required to determine whether it has at least one Audit Committee Financial Expert and that the expert is independent. An Audit Committee Financial Expert is a committee member who has an understanding of generally accepted accounting principles and financial statements and has the ability to assess the general application of these principles in connection with the accounting for estimates, accruals and reserves. Additionally, this individual should have experience preparing, auditing, analyzing or evaluating financial statements that present the breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by TCF's financial statements, or experience actively supervising one or more persons engaged in such activities. The member should also have an understanding of internal control over financial reporting as well as an understanding of audit committee functions.

The Board has determined that all members of the Audit Committee, including Karen L. Grandstrand, George G. Johnson, Richard H. King, Vance K. Opperman, Roger J. Sit, Julie H. Sullivan and Richard A. Zona, are independent and that Directors Johnson, Opperman, Sit, Sullivan and Zona each meet the requirements of audit committee financial experts. Additional information regarding Ms. Grandstrand, Mr. Johnson, Mr. King, Mr. Opperman, Mr. Sit, Ms. Sullivan and Mr. Zona and the other directors is set forth in the section Election of Directors - Background of the Nominees in TCF's 2017 Proxy and is incorporated herein by reference.

Code of Ethics for Senior Financial Management

TCF has adopted a code of ethics applicable to the Principal Executive Officer ("PEO"), Principal Financial Officer ("PFO") and Principal Accounting Officer ("PAO") (the "Senior Financial Management Code of Ethics") as well as a code of ethics generally applicable to all employees (including the PEO, PFO and PAO) and directors of TCF (the "Code of Ethics"). The Code of Ethics and Senior Financial Management Code of Ethics are both available for review at TCF's website at www.tcfbank.com by clicking on "About TCF" and then "Learn More" under the heading "Corporate Governance" and then either "Code of Ethics Policy" or "Code of Ethics for Senior Financial Management". Any changes to either code will be posted on the website and any waivers granted to or violations by the PEO, PFO, PAO or any director of TCF will also be posted on TCF's website. To date, there have been no waivers granted to or violations by the PEO, PFO, PAO or any director of TCF.

Item 11. Executive Compensation

Information regarding compensation of directors and executive officers of TCF is set forth in the following sections of TCF's 2017 Proxy and is incorporated herein by reference: Corporate Governance - Compensation, Nominating, and Corporate Governance Committee - Compensation Committee Interlocks and Insider Participation; Director Compensation; Compensation Discussion and Analysis; Compensation Committee Report; and Executive Compensation.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information regarding ownership of TCF's common stock by TCF's directors, executive officers and certain other stockholders and shares authorized under equity compensation plans is set forth in the following sections of TCF's 2017 Proxy and is incorporated herein by reference: Equity Compensation Plans Approved by Stockholders; and Ownership of TCF Stock.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information regarding director independence and certain relationships and transactions between TCF and certain related persons is set forth in the section entitled Corporate Governance - Director Independence and Related Person Transactions of TCF's 2017 Proxy and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information regarding principal accountant fees and services and the Audit Committee's pre-approval policies and procedures relating to audit and non-audit services provided by the Company's independent registered public accounting firm is set forth in the section entitled Independent Registered Public Accountants in TCF's 2017 Proxy and is incorporated herein by reference.

Part IV

Item 15. Exhibits and Financial Statement Schedules

(a) *Financial Statements, Financial Statement Schedules and Exhibits*

1. Financial Statements

The following consolidated financial statements of TCF and its subsidiaries are filed as part of this report:

Description	Page
Selected Financial Data	20
Report of Independent Registered Public Accounting Firm	57
Consolidated Statements of Financial Condition at December 31, 2016 and 2015	58
Consolidated Statements of Income for each of the years in the three-year period ended December 31, 2016	59
Consolidated Statements of Comprehensive Income for each of the years in the three-year period ended December 31, 2016	60
Consolidated Statements of Equity for each of the years in the three-year period ended December 31, 2016	61
Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2016	62
Notes to Consolidated Financial Statements	63
Other Financial Data	111
Management's Report on Internal Control Over Financial Reporting	113
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2. Financial Statement Schedules

All schedules to the Consolidated Financial Statements normally required by the applicable accounting regulations are included in the Consolidated Financial Statements or the Notes thereto.

3. Exhibits

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SIGNATURES

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

TCF FINANCIAL CORPORATION

/s/ Craig R. Dahl

Craig R. Dahl,

Vice Chairman, President and Chief Executive Officer
(Principal Executive Officer)

Dated: February 21, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ Craig R. Dahl</u> Craig R. Dahl	Director, Vice Chairman, President and Chief Executive Officer (Principal Executive Officer)	February 21, 2017
<u>/s/ Brian W. Maass</u> Brian W. Maass	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 21, 2017
<u>/s/ Susan D. Bode</u> Susan D. Bode	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 21, 2017
<u>/s/ Peter Bell</u> Peter Bell	Director	February 21, 2017
<u>/s/ William F. Bieber</u> William F. Bieber	Director	February 21, 2017
<u>/s/ Theodore J. Bigos</u> Theodore J. Bigos	Director	February 21, 2017
<u>/s/ Karen L. Grandstrand</u> Karen L. Grandstrand	Director	February 21, 2017
<u>/s/ Thomas F. Jasper</u> Thomas F. Jasper	Director, Vice Chairman and Chief Operating Officer	February 21, 2017
<u>/s/ George G. Johnson</u> George G. Johnson	Director	February 21, 2017
<u>/s/ Richard H. King</u> Richard H. King	Director	February 21, 2017
<u>/s/ Vance K. Opperman</u> Vance K. Opperman	Lead Director	February 21, 2017
<u>/s/ James M. Ramstad</u> James M. Ramstad	Director	February 21, 2017
<u>/s/ Roger J. Sit</u> Roger J. Sit	Director	February 21, 2017
<u>/s/ Julie H. Sullivan</u> Julie H. Sullivan	Director	February 21, 2017
<u>/s/ Barry N. Winslow</u> Barry N. Winslow	Director	February 21, 2017
<u>/s/ Richard A. Zona</u> Richard A. Zona	Director	February 21, 2017

INDEX TO EXHIBITS

Exhibit Number	Description
3(a)	Amended and Restated Certificate of Incorporation of TCF Financial Corporation [incorporated by reference to Exhibit 3.1 to TCF Financial Corporation's Current Report on Form 8-K filed April 28, 2015 (No. 15798862)]
3(b)	Amended and Restated Bylaws of TCF Financial Corporation [incorporated by reference to Exhibit 3.1 to TCF Financial Corporation's Current Report on Form 8-K filed July 26, 2016 (No. 161784576)]
4(a)	Warrant Agreement dated December 15, 2009 by and among TCF Financial Corporation, Computershare, Inc. and Computershare Trust Company, N.A. [incorporated by reference to Exhibit 4.1 to TCF Financial Corporation's Form 8-A filed December 16, 2009 (No. 091243195)]
4(b)	Specimen Warrant to Purchase Shares of Common Stock of TCF Financial Corporation [incorporated by reference to Exhibit 4.2 to TCF Financial Corporation's Form 8-A filed December 16, 2009 (No. 0912431945)]
4(c)	Specimen Common Stock Certificate of TCF Financial Corporation [incorporated by reference to Exhibit 4.3 to TCF Financial Corporation's Registration Statement on Form S-3ASR filed May 29, 2012 (No. 12874917)]
4(d)	Form of Certificate for Series A Non-Cumulative Perpetual Preferred Stock [incorporated by reference to Exhibit 4.1 to TCF Financial Corporation's Current Report on Form 8-K filed June 22, 2012 (No. 12922780)]
4(e)	Deposit Agreement dated June 25, 2012 by and among TCF Financial Corporation, Computershare Trust Company, N.A. and Computershare Inc. and the holders from time to time of the Depositary Receipts described therein [incorporated by reference to Exhibit 4.1 to TCF Financial Corporation's Current Report on Form 8-K filed June 25, 2012 (No. 12923856)]
4(f)	Form of Depositary Receipt (included as part of Exhibit 4(e)) [incorporated by reference to Exhibit 4.1 to TCF Financial Corporation's Current Report on Form 8-K filed June 25, 2012 (No. 12923856)]
4(g)	Form of Certificate for 6.45% Series B Non-Cumulative Perpetual Preferred Stock [incorporated by reference to Exhibit 4.1 to TCF Financial Corporation's Current Report on Form 8-K filed December 18, 2012 (No. 121271334)]
4(h)	Copies of instruments with respect to long-term debt will be furnished to the Securities and Exchange Commission upon request.
10(a)*#	TCF Financial 2015 Omnibus Incentive Plan, as amended effective December 29, 2016
10(a)-1#	Form of Restricted Stock Award Agreement under the TCF Financial 2015 Omnibus Incentive Plan
10(a)-2*	Form of Performance-Based Restricted Stock Award Agreement under the TCF Financial 2015 Omnibus Incentive Plan [incorporated by reference to Exhibit 10.3 to TCF Financial Corporation's Current Report on Form 8-K filed April 28, 2015 (No. 15798862)]
10(a)-3*	Form of Restricted Stock Unit Agreement under the TCF Financial 2015 Omnibus Incentive Plan [incorporated by reference to Exhibit 10.4 to TCF Financial Corporation's Current Report on Form 8-K filed April 28, 2015 (No. 15798862)]
10(a)-4*	Form of Performance-Based Restricted Stock Unit Agreement under the TCF Financial 2015 Omnibus Incentive Plan [incorporated by reference to Exhibit 10.5 to TCF Financial Corporation's Current Report on Form 8-K filed April 28, 2015 (No. 15798862)]
10(a)-5*	2015 Performance-Based Restricted Stock Unit Agreement under the TCF Financial 2015 Omnibus Incentive Plan entered into by certain executives [incorporated by reference to Exhibit 10.6 to TCF Financial Corporation's Current Report on Form 8-K filed April 28, 2015 (No. 15798862)]
10(a)-6*	Form of 2016 Management Incentive Plan - Executive, as executed by certain executives [incorporated by reference to Exhibit 10(a)-6 to TCF Financial Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (No. 161465956)]
10(b)*	TCF Financial Incentive Stock Program, as amended and restated April 24, 2013 [incorporated by reference to Exhibit 10.1 to TCF Financial Corporation's Current Report on Form 8-K filed April 30, 2013 (No. 13797581)]
10(b)-1*	Form of Nonqualified Stock Option Award Agreement as executed by certain executives [incorporated by reference to Exhibit 10(b)-10 to TCF Financial Corporation's Current Report on Form 8-K filed January 25, 2008 (No. 08551203)]
10(b)-2*	Form of Deferred Restricted Stock Award Agreement as executed by certain executives [incorporated by reference to Exhibit 10(b)-16 to TCF Financial Corporation's Current Report on Form 8-K filed February 18, 2011 (No. 11625311)]
10(b)-3*	Form of Performance-Based Restricted Stock Award Agreement as executed by certain executives [incorporated by reference to Exhibit 10.3 to TCF Financial Corporation's Current Report on Form 8-K filed January 20, 2012 (No. 12537269)]
10(c)	TCF Performance-Based Compensation Policy for Covered Executive Officers, as approved effective January 1, 2013 [incorporated by reference to Exhibit 10.2 to TCF Financial Corporation's Current Report on Form 8-K filed April 30, 2013 (No. 13797581)]
10(d)*	Employment Agreement with Craig R. Dahl effective as of January 1, 2016 [incorporated by reference to Exhibit 10.1 to TCF Financial Corporation's Current Report on Form 8-K filed October 30, 2015 (No. 151184773)]
10(e)*	TCF Financial Corporation Supplemental Employee Retirement Plan - ESPP Plan as amended and restated through January 24, 2005 [incorporated by reference to Exhibit 10(j) to TCF Financial Corporation's Current Report on Form 8-K filed January 27, 2005 (No. 05552640)]
10(e)-1*#	TCF 401K Supplemental Plan, as amended effective October 18, 2016
10(f)*	Trust Agreement for TCF Employees Stock Purchase Plan Supplemental Executive Retirement Plan ("SERP") effective January 1, 2009 and dated November 20, 2008 [incorporated by reference to Exhibit 10(k) to TCF Financial Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2008 (No. 09618185)]
10(g)*	TCF Financial Corporation Executive Deferred Compensation Plan as amended and restated through January 24, 2005 [incorporated by reference to Exhibit 10(c) to TCF Financial Corporation's Current Report on Form 8-K filed January 27, 2005 (No. 05552640)]
10(h)*	Restated Trust Agreement as executed with First National Bank in Sioux Falls as trustee effective as of October 1, 2000 [incorporated by reference to Exhibit 10(d) to TCF Financial Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2000 (No. 1584625)]; as amended by amendment adopted April 30, 2001 [incorporated by reference to Exhibit 10(d) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 (No. 1706058)]; and as amended by amendments adopted May 3, 2002 incorporated by reference to Exhibit 10(d) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 (No. 02730799); and as amended by Third Amendment of Trust Agreement for TCF Executive Deferred Compensation Plan effective as of June 30, 2003 [incorporated by reference to Exhibit 10(d) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003 (No. 03830138)]

10(i)*	TCF Financial Corporation Senior Officer Deferred Compensation Plan as amended and restated through January 24, 2005 [incorporated by reference to Exhibit 10(l) to TCF Financial Corporation's Current Report on Form 8-K filed January 27, 2005 (No. 05552640)]
10(j)*	Trust Agreement for TCF Financial Senior Officer Deferred Compensation Plan as executed with First National Bank in Sioux Falls as trustee effective as of October 1, 2000 [incorporated by reference to Exhibit 10(m) to TCF Financial Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2000 (No. 1584625)]; as amended by amendment adopted April 30, 2001 [incorporated by reference to Exhibit 10(m) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 (No. 1706058)]; and as amended by Second Amendment of Trust Agreement for TCF Financial Senior Officers Deferred Compensation Plan effective as of June 30, 2003 [incorporated by reference to Exhibit 10(m) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003 (No. 03830138)]
10(k)*	Directors Stock Grant Program, as amended and restated April 25, 2012 [incorporated by reference to Exhibit 10(j) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (No. 12986667)]
10(k)-1*	Form of Director's Restricted Stock Agreement dated January 24, 2012 [incorporated by reference to Exhibit 10(j)-1 to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (No. 12986667)]
10(k)-2*	Form of Deferred Director's Restricted Stock Agreement dated January 24, 2012 [incorporated by reference to Exhibit 10(j)-2 to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (No. 12986667)]
10(l)*	TCF Financial Corporation TCF Directors Deferred Compensation Plan as amended and restated through January 24, 2005 [incorporated by reference to Exhibit 10(r) to TCF Financial Corporation's Current Report on Form 8-K filed January 27, 2005 (No. 05552640)]
10(l)-1*	TCF Financial Corporation TCF Directors 2005 Deferred Compensation Plan, adopted effective as of January 6, 2005, as amended and restated through January 24, 2005 [incorporated by reference to Exhibit 10(r)-1 to TCF Financial Corporation's Current Report on Form 8-K filed January 27, 2005 (No. 05552640)]; and as amended by Amendment of Directors 2005 Deferred Compensation Plan effective July 19, 2010 [incorporated by reference to Exhibit 10(r)-1 to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010 (No. 101147679)]
10(m)*	Trust Agreement for TCF Directors Deferred Compensation Plan [incorporated by reference to Exhibit 10(d) to TCF Financial Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2000 (No. 1584625)]; as amended by amendment adopted April 30, 2001 [incorporated by reference to Exhibit 10(s) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 (No. 1706058)]; as amended by amendment adopted October 10, 2001 [incorporated by reference to Exhibit 10(s) to TCF Financial Corporation's Annual Report on Form 10-K for the year ended December 31, 2001 (No. 02568362)]; and as amended by amendments adopted May 3, 2002 [incorporated by reference to Exhibit 10(s) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 (No. 02730799)]; and as amended by Third Amendment of TCF Directors Deferred Compensation Trust effective as of June 30, 2003 [incorporated by reference to Exhibit 10(s) to TCF Financial Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003 (No. 03830138)]
10(n)*	Summary of Non-Employee Director Compensation [incorporated by reference to Exhibit 10(n) to TCF Financial Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (No. 161465956)]
10(o)*	TCF Employees Deferred Stock Compensation Plan, effective January 1, 2011 [incorporated by reference to Exhibit 10(u) to TCF Financial Corporation's Current Report on Form 8-K filed February 18, 2011 (No. 11625311)]
10(p)*	Form of Rabbi Trust Agreement for the TCF Employees Deferred Stock Compensation Plan [incorporated by reference to Exhibit 10(v) to TCF Financial Corporation's Current Report on Form 8-K filed February 18, 2011 (No. 11625311)]
12(a)#	Consolidated Ratios of Earnings to Fixed Charges for years ended December 31, 2016, 2015, 2014, 2013 and 2012
12(b)#	Consolidated Ratios of Earnings to Fixed Charges and Preferred Stock Dividends for years ended December 31, 2016, 2015, 2014, 2013 and 2012
21#	Subsidiaries of TCF Financial Corporation (as of December 31, 2016)
23#	Consent of KPMG LLP dated February 21, 2017
31.1#	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2#	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1#	Certification of the Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2#	Certification of the Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101#	Financial statements from the Annual Report on Form 10-K of the Company for the year ended December 31, 2016, formatted in XBRL: (i) the Consolidated Statements of Financial Condition, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements

*Executive Contract
Filed herein