# Section 1: 10-K (10-K)

Table of Contents

---

# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**WASHINGTON, D.C. 20549**

# FORM 10-K

[X] **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2016
or

**[ ] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from to
**Commission File No. 001-10253**

## TCF Financial Corporation
(Exact name of registrant as specified in its charter)

| **Delaware** | **41-1591444** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |

**200 Lake Street East**
**Wayzata, Minnesota 55391-1693**
(Address and Zip Code of principal executive offices)
**(952) 745-2760**
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

| (Title of each class) | (Name of each exchange on which registered) |
|---|---|
| Common Stock (par value $.01 per share) | New York Stock Exchange |
| Depositary Shares, each representing a 1/1000th interest in a share of 7.50% Series A Non-Cumulative Perpetual Preferred Stock | New York Stock Exchange |
| 6.45% Series B Non-Cumulative Perpetual Preferred Stock | New York Stock Exchange |
| Warrants (expiring November 14, 2018) | New York Stock Exchange |

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [X] No [ ]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes [ ] No [X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

| | |
|---|---|
| Large accelerated filer [X] | Accelerated filer [ ] |
| Non-accelerated filer [ ] (Do not check if smaller reporting company) | Smaller reporting company [ ] |

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [X]

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter as reported by the New York Stock Exchange, was $1,937,412,097.

As of February 16, 2017, there were 170,627,418 shares outstanding of the registrant's common stock, par value $.01 per share, its only outstanding class of common stock.

**DOCUMENTS INCORPORATED BY REFERENCE**

Specific portions of the Registrant's definitive Proxy Statement for the 2017 Annual Meeting of Stockholders to be held on April 26, 2017 are incorporated by reference into Part III hereof.

## TABLE OF CONTENTS


| Description | | Page |
|---|---|---|
| **Part I** | | |
| Item 1. | Business | 1 |
| Item 1A. | Risk Factors | 7 |
| Item 1B. | Unresolved Staff Comments | 15 |
| Item 2. | Properties | 16 |
| Item 3. | Legal Proceedings | 16 |
| Item 4. | Mine Safety Disclosures | 16 |
| **Part II** | | |
| Item 5. | Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities | 17 |
| Item 6. | Selected Financial Data | 20 |
| Item 7. | Management's Discussion and Analysis of Financial Condition and Results of Operations | 21 |
| Item 7A. | Quantitative and Qualitative Disclosures About Market Risk | 53 |
| Item 8. | Financial Statements and Supplementary Data | 54 |
| | Report of Independent Registered Public Accounting Firm | 54 |
| | Consolidated Financial Statements | 55 |
| | Notes to Consolidated Financial Statements | 60 |
| | Other Financial Data | 108 |
| Item 9. | Changes in and Disagreements With Accountants on Accounting and Financial Disclosure | 109 |
| Item 9A. | Controls and Procedures | 109 |
| | Management's Report on Internal Control Over Financial Reporting | 110 |
| | Report of Independent Registered Public Accounting Firm | 111 |
| Item 9B. | Other Information | 112 |
| **Part III** | | |
| Item 10. | Directors, Executive Officers and Corporate Governance | 112 |
| Item 11. | Executive Compensation | 113 |
| Item 12. | Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters | 113 |
| Item 13. | Certain Relationships and Related Transactions, and Director Independence | 113 |
| Item 14. | Principal Accountant Fees and Services | 113 |
| **Part IV** | | |
| Item 15. | Exhibits and Financial Statement Schedules | 114 |
| Signatures | | 115 |
| Index to Exhibits | | 117 |

## Part I

## Item 1. Business

### General

TCF Financial Corporation (together with its direct and indirect subsidiaries, "we," "us," "our," "TCF" or the "Company"), a Delaware corporation incorporated on April 28, 1987, 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. Its principal subsidiary, TCF National Bank ("TCF Bank"), is headquartered in Sioux Falls, South Dakota. TCF Bank operates bank branches in Illinois, Minnesota, Michigan, Colorado, Wisconsin, Arizona and South Dakota (TCF's primary banking markets). TCF delivers retail banking products in 45 states and commercial banking products in 37 states. TCF also conducts commercial leasing and equipment finance business in all 50 states and, to a limited extent, in foreign countries; commercial inventory finance business in all 50 states and Canada and, to a limited extent, in other foreign countries and indirect auto finance business in all 50 states. TCF generated total revenue, defined as net interest income plus total non-interest income, of $1.3 billion, $1.2 billion and $1.2 billion in the United States in 2016, 2015 and 2014, respectively. International revenue, primarily from Canada, was $25.6 million, $27.3 million and $27.9 million in 2016, 2015 and 2014, respectively.

TCF had total assets of $21.4 billion as of December 31, 2016 and was the 47th largest publicly traded bank holding company in the United States based on total assets at September 30, 2016.

TCF provides convenient financial services through multiple channels in its primary banking markets. TCF has developed products and services designed to meet the specific needs of the largest consumer segments in the market. The Company focuses on attracting and retaining customers through service and convenience, including select locations open seven days a week with extended hours and on most holidays, full-service supermarket branches, access to automated teller machine ("ATM") networks and digital banking channels. TCF's philosophy is to generate interest income, fees and other revenue growth through business lines that emphasize higher yielding assets and low interest cost deposits. TCF's growth strategies include organic growth in existing businesses, development of new products and services, new customer acquisition and acquisitions of portfolios or businesses. New products and services are designed to build on existing businesses and expand into complementary products and services through strategic initiatives. Funded generally through retail deposit generation, TCF continues to focus on profitable asset growth.

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 "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations ("Management's Discussion and Analysis") - Results of Operations - Reportable Segment Results" and 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.

***Retail Banking*** TCF offers an array of solutions for consumers and small businesses through its physical and digital distribution channels. TCF offers a broad selection of deposit and lending products including (i) checking and savings accounts, (ii) credit, debit and prepaid cards, (iii) check cashing and remittance services and (iv) residential, consumer and small business lending.

Deposits are a primary source of TCF's funds for use in lending and for other general business purposes. Deposit inflows and outflows are significantly influenced by general interest rates, market and competitive conditions and other economic factors. Deposits are acquired from within TCF's primary banking markets through (i) checking, savings and money market accounts, (ii) certificates of deposit and (iii) individual retirement accounts. Such deposit accounts provide fee income, including banking fees and service charges. Checking, savings and certain money market accounts are a source of low interest cost funds.

At December 31, 2016, TCF had 339 branches, consisting of 191 traditional branches, 145 supermarket branches and three campus branches. TCF operates 123 branches in Illinois, 98 in Minnesota, 52 in Michigan, 33 in Colorado, 24 in Wisconsin, seven in Arizona and two in South Dakota. TCF currently has plans to close 17 supermarket branches in early 2017. TCF also offers 848 ATMS across TCF's primary banking markets. See "Item 1A. Risk Factors" for additional information regarding the risks related to TCF's supermarket branch relationships.

Non-interest income is a significant source of revenue for TCF and an important component of TCF's results of operations. Providing a wide range of retail banking services is an integral component of TCF's business philosophy. Primary drivers of bank fees and service charges include the number of customers we attract, the customers' level of engagement and the frequency with which the customer uses our solutions. TCF's business philosophy is to offer our customers an "easy-to-bank-with" experience, with multiple solutions that benefit the customer and are consistent with TCF's business philosophy. Customers have convenient access to their funds through their credit, debit and prepaid cards. TCF's card programs are supported by interchange fees paid by retailers.

***Consumer Real Estate*** TCF makes consumer loans for personal, family or household purposes, such as home purchases, debt consolidation and financing of home improvements. TCF's retail lending origination activity primarily consists of consumer real estate secured lending. It also includes originating loans secured by personal property and, to a very limited extent, unsecured personal loans. Consumer loans are made on a fixed-term basis or as a revolving line of credit. Loans are originated for investment and for sale. TCF has two consumer real estate loan sale programs: one that sells nationally originated consumer real estate junior lien loans and the other that originates first mortgage lien loans in its primary banking markets and sells the loans through a correspondent relationship. TCF does not have any consumer real estate subprime lending programs. TCF continues to expand its junior lien lending business through a national lending platform focused on junior lien loans to high credit quality customers.

***Auto Finance*** Gateway One Lending & Finance, LLC ("Gateway One"), headquartered in Anaheim, California, originates and services loans on new and used autos to customers through relationships established with more than 11,400 franchised and independent dealers in all 50 states. Loans are originated for investment and for sale. Gateway One's business strategy is to maintain strong relationships with key personnel at the dealerships. These relationships are a significant driver in generating volume and executing a high-touch underwriting approach to minimize credit losses.

**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.

***Commercial Real Estate and Business Lending*** 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.

Commercial real estate loans originated by TCF are secured by commercial real estate, including multi-family housing, warehouse and industrial buildings, health care facilities, office buildings, retail services buildings and commercial real estate under construction or development. The commercial real estate portfolio represented 80.2% and 82.4% of TCF's total commercial portfolio at December 31, 2016 and 2015, respectively.

Commercial business loans originated by TCF are secured by various types of business assets including inventory, receivables, equipment or financial instruments. Commercial business loans are used for a variety of purposes, including working capital and financing the purchase of equipment.

***Leasing and Equipment Finance*** TCF provides a broad range of comprehensive lease and equipment finance products addressing the diverse financing needs of small to large companies in a growing number of select market segments including specialty vehicles, construction equipment, golf cart and turf equipment, furniture and fixtures, medical equipment, technology and data processing equipment, and manufacturing equipment. TCF's leasing and equipment finance businesses, TCF Equipment Finance, a division of TCF Bank, and Winthrop Resources Corporation ("Winthrop"), finance equipment in all 50 states and, to a limited extent, in foreign countries. TCF Equipment Finance delivers equipment finance solutions primarily to small and mid-size companies in various industries with significant diversity in the types of underlying equipment. Winthrop focuses on providing customized lease financing to meet the special needs of mid-size and large companies and health care facilities that procure high-tech essential business equipment such as computers, servers, telecommunication equipment, medical equipment and other technology equipment.

***Inventory Finance*** TCF Inventory Finance, Inc. ("TCF Inventory Finance") originates commercial variable-rate loans which are secured by the underlying floorplan equipment and supported by repurchase agreements from original equipment manufacturers. The operation focuses on establishing relationships with distributors, dealer buying groups and manufacturers, giving TCF access to thousands of independent retailers primarily in the areas of powersports and lawn and garden. TCF Inventory Finance operates in all 50 states and Canada and, to a limited extent, in other foreign countries. TCF Inventory Finance's portfolio balances are impacted by seasonal shipments and sales activities as dealers receive inventory shipments in anticipation of the upcoming selling season while carrying current season product. In 2009, TCF Inventory Finance formed 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® brands with reliable, cost-effective sources of financing. TCF maintains a 55% ownership interest in Red Iron, with Toro owning the other 45%.

**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.

***Corporate Treasury*** Corporate Treasury's primary responsibility is management of liquidity, capital, interest rate risk, and investment and borrowing portfolios. Corporate Treasury has authority to invest in various types of liquid assets including, but not limited to, U.S. Department of the Treasury obligations and securities of various federal agencies and U.S. Government sponsored enterprises, obligations of states and political subdivisions, deposits of insured banks, bankers' acceptances and federal funds. Corporate Treasury also has the authority to enter into wholesale borrowing transactions which may be used to compensate for reductions in deposit inflows or net deposit outflows, or to support lending, leasing and other expansion activities. These borrowings may include Federal Home Loan Bank ("FHLB") advances, brokered deposits, repurchase agreements, federal funds and other permitted borrowings from creditworthy counterparties.

Information concerning TCF's FHLB advances, repurchase agreements, federal funds and other borrowings is set forth in "Item 7. Management's Discussion and Analysis - Consolidated Financial Condition Analysis - Borrowings" and in Note 10, Short-term Borrowings and Note 11, Long-term Borrowings of Notes to Consolidated Financial Statements.

## Other Information

***Activities of Subsidiaries of TCF*** TCF's business operations include those conducted by direct and indirect subsidiaries of TCF Financial, all of which are consolidated for purposes of preparing TCF's consolidated financial statements. TCF Bank's subsidiaries principally engage in leasing, inventory finance and auto finance activities. See "Consumer Banking" and "Wholesale Banking" above for more information.

***Competition*** TCF competes with a number of depository institutions and financial service providers primarily based on price and service and faces significant competition in attracting and retaining deposits and in lending activities. Direct competition for deposits comes primarily from banks, savings institutions, credit unions and investment banks. Additional significant competition for deposits comes from institutions selling money market mutual funds and corporate and government securities. TCF competes for the origination of loans with banks, mortgage bankers, mortgage brokers, consumer and commercial finance companies, credit unions, insurance companies and savings institutions. TCF also competes nationwide with other companies and banks in the financing of equipment, inventory and automobiles, leasing of equipment and consumer real estate junior lien loans. The expanded use of the internet and the growth of financial-technology companies partnering with financial services providers has increased competition for loan, lease and deposit products.

***Employees*** As of December 31, 2016, TCF had 6,427 employees, including 908 part-time employees. TCF provides its employees with comprehensive benefits, some of which are provided on a contributory basis, including medical and dental plans, a 401(k) savings plan with a company matching contribution, life insurance and short- and long-term disability coverage.

## Regulation

TCF Financial, as a publicly held bank holding company, and TCF Bank, which has deposits insured by the Federal Deposit Insurance Corporation ("FDIC"), are subject to extensive regulation. Among other things, TCF Financial and TCF Bank are subject to minimum capital requirements, lending and deposit restrictions and numerous other requirements. TCF Financial's primary regulator is the Federal Reserve and TCF Bank's primary regulator is the Office of the Comptroller of the Currency ("OCC"). TCF's consumer products are also regulated by the Consumer Financial Protection Bureau ("CFPB").

***Regulatory Capital Requirements*** TCF Financial and TCF Bank are subject to various regulatory capital requirements administered by the federal banking agencies as described below. These regulatory agencies are required by law to take prompt action when institutions are viewed as engaging in unsafe or unsound practices or do not meet certain minimum capital standards.

In July 2013, the Board of Governors of the Federal Reserve System, the OCC and FDIC approved final rules (the "Final Capital Rules") implementing revised capital requirements to reflect the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") and the Basel III international capital standards. The Final Capital Rules became applicable to TCF on January 1, 2015 with conservation buffers phasing in over the subsequent five years. Among other things, the Final Capital Rules established a new capital ratio of common equity Tier 1 capital of 4.5% and a common equity Tier 1 capital conservation buffer of 2.5% of risk-weighted assets; increased the minimum Tier 1 capital ratio from 4.0% to 6.0% and included a minimum leverage ratio of 4.0%; placed an emphasis on common equity Tier 1 capital and changed the risk weights assigned to certain instruments. Failure to meet these standards would result in limitations on capital distributions as well as executive bonuses. TCF and TCF Bank exceeded the Basel III capital standards as of December 31, 2016. See Note 14, Regulatory Capital Requirements of Notes to Consolidated Financial Statements for additional information.

***Restrictions on Distributions*** TCF Financial's ability to pay dividends is subject to limitations imposed by the Federal Reserve. In general, Federal Reserve regulatory guidelines require the board of directors of a bank holding company to consider a number of factors in determining the payment of dividends, including the quality and level of current and future earnings.

Dividends or other capital distributions from TCF Bank to TCF Financial are an important source of funds to enable TCF Financial to pay dividends on its preferred and common stock, to pay TCF Financial's obligations or to meet other cash needs. The ability of TCF Financial and TCF Bank to pay dividends depends on regulatory policies and regulatory capital requirements and may be subject to regulatory approval.

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 without prior approval of the 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. These capital adequacy standards may be higher in the future than existing minimum regulatory capital requirements.

In addition, income tax considerations may limit the ability of TCF Bank to make dividend payments in excess of its current and accumulated tax earnings. Annual dividend distributions in excess of earnings could result in a tax liability based on the amount of excess earnings distributed and current tax rates.

***Regulation of TCF and Affiliates and Insider Transactions*** TCF Financial is subject to Federal Reserve regulations, examinations and reporting requirements applicable to bank holding companies. Subsidiaries of bank holding companies, like TCF Bank, are subject to certain restrictions in their dealings with holding company affiliates.

A holding company must serve as a source of strength for its subsidiary banks, and the Federal Reserve may require a holding company to contribute additional capital to an undercapitalized subsidiary bank. In addition, the OCC may assess TCF Financial if it believes the capital of TCF Bank has become impaired. If TCF Financial were to fail to pay such an assessment within three months, the Board of Directors would be required to cause the sale of TCF Bank's stock to cover a deficiency in the capital. In the event of a bank holding company's bankruptcy, any commitment by the bank holding company to a federal bank regulatory agency to maintain the capital of a subsidiary bank would be assumed by the bankruptcy trustee and may be entitled to priority over other creditors.

Under the Bank Holding Company Act of 1956 ("BHCA"), Federal Reserve approval is required before acquiring more than 5% control, or substantially all of the assets, of another bank, or bank holding company, or merging or consolidating with such a bank or bank holding company. The BHCA also generally prohibits a bank holding company, with certain exceptions, from acquiring direct or indirect ownership or control of more than 5% of the voting shares of any company which is not a bank or bank holding company, or from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, providing services for its subsidiaries, or conducting activities permitted by the Federal Reserve as being closely related to the business of banking. Further restrictions or limitations on acquisitions or establishing financial subsidiaries may also be imposed by TCF's regulators or examiners.

***Restrictions on Acquisitions and Changes in Control*** Under federal and state law, merger and branch acquisition transactions may be subject to certain restrictions, including certain nationwide and statewide insured deposit maximum concentration levels or other limitations. In addition, federal and state laws and regulations contain a number of provisions which impose restrictions on changes in control of financial institutions such as TCF Bank, and which require regulatory approval prior to any such changes in control.

***Insurance of Accounts*** TCF Bank is a member of the FDIC, which maintains the Deposit Insurance Fund ("DIF"). The FDIC insures deposits up to prescribed limits for each depositor through the DIF, which is funded through assessments on member institutions. To maintain the DIF, member institutions are assessed an insurance premium based on an assessment base and an assessment rate.

The Dodd-Frank Act gave the FDIC much greater discretion to manage the DIF and also changed the assessment base from domestic deposits to average total assets less tangible equity. Additionally, the Dodd-Frank Act raised the minimum designated reserve ratio ("DRR") to 1.35% of estimated insured deposits from 1.15% and required this new minimum be reached by September 30, 2020. On July 1, 2016 an additional surcharge of 4.5 cents for each $100 of an institution's assessment base in excess of $10.0 billion went into effect to ensure the DRR reaches this new minimum by the required date. The DIF ratio calculated by the FDIC using estimated insured deposits as of September 30, 2016 was 1.18%.

In 2016, insurance premiums on bank deposits insured by the FDIC for banks with at least $10.0 billion in total assets ranged from 1.5 cents to 40 cents per $100 of the institution's assessment base. TCF's FDIC insurance expense was $15.9 million, $20.3 million and $25.1 million in 2016, 2015 and 2014, respectively.

In addition to deposit insurance premium assessments from the FDIC, additional assessments may be imposed by the Financing Corporation, a separate U.S. government agency affiliated with the FDIC to pay for the interest cost of Financing Corporation bonds. The Financing Corporation assessment rate for 2016 was 56 cents for each $10,000 of the institution's assessment base.

***Examinations and Regulatory Sanctions*** TCF is subject to periodic examination by the Federal Reserve, the OCC, the CFPB and the FDIC. Bank regulatory authorities may impose a number of restrictions or new requirements on institutions, including, but not limited to, growth limitations, dividend restrictions, increased regulatory capital requirements, increased loan and lease loss reserve requirements, increased supervisory assessments, activity limitations or other restrictions that could have an adverse effect on such institutions, their holding companies or holders of their debt and equity securities. Various enforcement remedies, including civil money penalties, may be assessed against an institution or an institution's directors, officers, employees, agents or independent contractors. Certain enforcement actions may not be publicly disclosed by TCF or its regulatory authorities. Subsidiaries of TCF Bank are also subject to state and/or self-regulatory organization licensing, regulation and examination requirements in connection with certain activities. See "Item 1A. Risk Factors."

***National Bank Investment Limitations*** Permissible investments by national banks are limited by the National Bank Act of 1864, as amended, and by rules of the OCC. Non-traditional bank activities permitted by the Gramm-Leach-Bliley Act of 1999 will subject a bank to additional regulatory limitations or requirements, including a required regulatory capital deduction and application of transactions with affiliates limitations in connection with such activities.

**Taxation**

***Federal Taxation*** TCF's federal income tax returns are open and subject to examination for 2013 and later tax return years.

***State Taxation*** TCF and/or its subsidiaries currently file tax returns in all state and local taxing jurisdictions which impose corporate income, franchise or other taxes. 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. The methods of filing and the methods for calculating taxable and apportionable income vary depending upon the laws of each taxing jurisdiction.

***Foreign Taxation*** TCF and/or its subsidiaries currently file tax returns in Canada and certain Canadian provinces which impose corporate income taxes. TCF's various foreign income tax returns are open and subject to examination for 2012 and later tax return years. The methods of filing and the methods for calculating taxable and apportionable income vary depending upon the laws of each taxing jurisdiction.

See "Item 7. Management's Discussion and Analysis - Consolidated Income Statement Analysis - Income Taxes", Note 1, Basis of Presentation and Note 12, Income Taxes of Notes to Consolidated Financial Statements for additional information regarding TCF's income taxes.

**Available Information**

TCF's website, www.tcfbank.com, includes free access to Company news releases, investor presentations, conference calls to discuss published financial results, TCF's Annual Report and periodic filings required by the U.S. Securities and Exchange Commission ("SEC"), including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements, and amendments to those reports, as soon as reasonably practicable after electronic filing of such material with, or furnishing it to, the SEC. TCF's Compensation, Nominating, and Corporate Governance Committee and Audit Committee charters, Corporate Governance Guidelines, Codes of Ethics and information on all of TCF's securities are also available on this website. Stockholders may request these documents in print free of charge by contacting the Corporate Secretary at TCF Financial Corporation, 200 Lake Street East, Mail Code EX0-01-G, Wayzata, MN 55391-1693.

**Item 1A. Risk Factors**

An investment in securities issued by TCF, including an investment in TCF's common and preferred stock, involves certain risks that should be considered carefully. The most significant risks that management believes affect TCF are described below. Any of the risks described below may have a material impact on TCF's financial condition, results of operations or reputation. To the extent that any of the information contained in this Annual Report on Form 10-K is forward-looking, the risk factors set forth below also are cautionary statements identifying important factors that could cause TCF's actual results to differ materially from those expressed in any forward-looking statements.

*TCF's financial results are significantly affected by general economic and political conditions.*

TCF's operations and profitability are impacted by both business and economic conditions generally, as well as those in the local markets in which TCF operates. Economic conditions have a significant impact on the demand for TCF's products and services, as well as the ability of its customers to repay loans and leases, the value of the collateral securing loans and leases, the ability of TCF to sell or securitize loans, the stability of its deposit funding sources and sales revenue at the end of contractual lease terms. A significant decline in general economic conditions caused by inflation, recession, unemployment, changes in securities markets, changes in housing market prices or other factors could impact economic conditions and, in turn, could have a material adverse effect on TCF's financial condition and results of operations.

Additionally, adverse economic conditions may result in a decline in demand for automobiles or equipment that TCF leases or finances, which could result in a decline in the amount of new equipment being placed in service, as well as declines in the values of automobiles and equipment already in service. Adverse economic conditions may also hinder TCF from expanding the inventory or auto finance businesses by limiting its ability to attract and retain manufacturers and dealers as expected. Any such difficulties in TCF's leasing and equipment, inventory and auto finance businesses could have a material adverse effect on its financial condition and results of operations.

*TCF's financial results are subject to interest rate risk.*

TCF's earnings and cash flows largely depend upon its net interest income. Interest rates are highly sensitive to many factors that are beyond TCF's control, including general economic conditions and policies of various governmental and regulatory agencies, including the Federal Reserve. Changes in monetary policy, including changes in interest rates, could influence not only the interest TCF receives on loans, leases and other investments and the amount of interest TCF pays on deposits and other borrowings, but such changes could also affect: (i) TCF's ability to originate loans and leases and attract or retain deposits; (ii) the fair value of TCF's financial assets and liabilities; and (iii) the average duration of TCF's interest-earning assets. If the interest rates paid on deposits and other borrowings increase at a faster rate than the interest rates received on loans, leases and other investments, then TCF's net interest income and earnings could be adversely affected. Earnings could also be adversely affected if the interest rates received on loans, leases and other investments fall more quickly than the interest rates paid on deposits and other borrowings. Although management believes it has implemented effective asset and liability management strategies, any substantial, unexpected or prolonged change in market interest rates could have a material adverse effect on its financial condition and results of operations.

*An inability to obtain needed liquidity could have a material adverse effect on TCF's financial condition and results of operations.*

TCF's liquidity could be limited by an inability to access the capital markets or unforeseen outflows of cash, which could arise due to circumstances outside of its control, such as a general market disruption or an operational problem that affects TCF or third parties. TCF's credit rating is important to its liquidity. A reduction or anticipated reduction in TCF's credit ratings could adversely affect the ability of TCF Bank and its subsidiaries to lend and adversely affect its liquidity and competitive position, increase its borrowing costs, limit its access to the capital markets or trigger unfavorable contractual obligations. An inability to meet its funding needs on a timely basis could have a material adverse effect on TCF's financial condition and results of operations.

*TCF Financial relies on dividends from TCF Bank for most of its liquidity.*

TCF Financial is a separate and distinct legal entity from TCF Bank. TCF Financial's liquidity comes principally from dividends from TCF Bank. These dividends, which are limited by various federal and state regulations, are the principal source of funds TCF Financial uses to pay dividends on its preferred and common stock and to meet its other cash needs. In the event TCF Bank is unable to pay dividends to TCF Financial, it may not be able to pay dividends or other obligations, which could have a material adverse effect on TCF's financial condition and results of operations.

*Competition for growth in deposits and evolving payment system developments could increase TCF's funding costs.*

TCF relies on bank deposits to be a low cost and stable source of funding. TCF competes with banks and other financial institutions for deposits and it is expected that competition for deposits will continue to increase. If TCF's competitors raise the rates they pay on deposits, TCF may experience either a loss of deposits or an increase in rates paid by TCF to avoid losing deposits. Industry developments involving payment system changes could also impose additional costs. Losses of deposits may require TCF to address its liquidity needs in ways that increase its funding costs. Increased funding costs could reduce TCF's net interest margin and net interest income, which could have a material adverse effect on TCF's financial condition and results of operations.

*The soundness of other financial institutions could adversely affect TCF's financial results.*

TCF's ability to engage in routine funding transactions could be adversely affected by the actions and commercial soundness of other financial institutions. TCF routinely executes transactions with counterparties in the financial industry, including brokers and dealers, commercial banks and other institutional clients. As a result, defaults by, or even speculation regarding the soundness of, any financial institution, or the financial services industry generally, could lead to losses by, or other adverse consequences to, TCF or a counterparty. Many of these transactions expose TCF to credit risk in the event of default of the counterparty or client. In addition, TCF's credit risk may be exacerbated if the collateral held by TCF cannot be realized or is liquidated at prices not sufficient to recover the full amount of the financial exposure. Any such losses could have a material adverse effect on TCF's financial condition and results of operations.

*TCF relies on its systems and counterparties, including reliance on other companies for the provision of key components of its business infrastructure, and any failures could have a material adverse effect on its financial condition and results of operations.*

TCF settles funds on behalf of financial institutions, other businesses and consumers and receives funds from payment networks, consumers and other paying agents. TCF's businesses depend on their ability to process, record and monitor a large number of complex transactions and process large amounts of information, including employee and financial information. For example, we are currently in the process of a significant project to replace several of our key systems, including our operations, finance and human resources systems. While we expect these systems to be a significant improvement over our current systems, and these initiatives will be completed in phases to allow for appropriate testing and implementation so as to minimize the chance of service interruptions, time delays and cost overruns, we may encounter significant adverse developments in the completion and implementation of these initiatives. These may include significant time delays, cost overruns, and other adverse developments that could result in disruptions to our systems. Although we have plans, policies and procedures designed to prevent or limit the negative effect of these adverse developments, there can be no assurance that these will be successful. Our failure to effectively mitigate or promptly remediate any adverse developments could result in additional unforeseen costs, result in an inability to perform necessary business functions, damage our reputation, result in a loss of customer business or confidence, subject us to regulatory scrutiny, or expose us to litigation or other financial liability, any of which could materially affect us, including our results of operations.

Third party vendors provide key components of TCF's business infrastructure, such as internet connections, network access and transaction and other processing services. While TCF has selected these third party vendors carefully, it does not control their actions. Any problems experienced or caused by these third parties, including inadequate or interrupted service, could adversely affect TCF's ability to process, record or monitor transactions, or to deliver products and services to its customers and to conduct its business. Replacing these third party vendors could also entail significant delay and expense.

TCF also may be subject to disruptions of its operating systems arising from events that are wholly or partially beyond its control, which may include, for example, computer viruses, electrical or telecommunications outages, natural disasters, terrorist acts or other damage to property or physical assets. Such disruptions may give rise to loss of services to customers and loss or liability to TCF. Any system failure could have a material adverse effect on TCF's financial condition and results of operations. If any of TCF's financial, accounting or other data processing systems fail or if personal information of TCF's customers or clients were mishandled or misused (whether by employees or counterparties), TCF could suffer regulatory consequences, reputational damage and financial losses, any of which could have a material adverse effect on its financial condition and results of operations.

*TCF faces cyber-security and other external risks, including "denial of service," "hacking" and "identity theft," that could adversely affect TCF's reputation and could have a material adverse effect on TCF's financial condition and results of operations.*

TCF's computer systems and network infrastructure present security risks, and could be susceptible to cyber-attacks, such as denial of service attacks, hacking, terrorist activities or identity theft. Hacking and identity theft risks, in particular, could cause serious financial and reputational harm. Cyber threats are rapidly evolving and TCF may not be able to anticipate or prevent all such attacks. While TCF does not believe it has experienced a material cyber-security breach, TCF experiences periodic threats to its data and systems, including malware and computer virus attacks, attempted unauthorized access of accounts and attempts to disrupt its systems. TCF may incur increasing costs in an effort to minimize these risks, could be held liable for and could suffer reputational damage as a result of, any security breach or loss.

In addition, there have been increasingly sophisticated and large-scale efforts on the part of third parties to breach data security with respect to financial transactions, including by intercepting account information at locations where customers make purchases, as well as through the use of social engineering schemes such as "phishing." For example, many retailers have reported data breaches resulting in the loss of customer information. In the event that third parties are able to misappropriate financial information of TCF's customers, even if such breaches take place due to weaknesses in other parties' internal data security procedures, TCF could suffer reputational damage or financial losses which could have a material adverse effect on its financial condition and results of operations.

*The success of TCF's supermarket branches depends on the continued long-term success and viability of TCF's supermarket partners, TCF's ability to maintain licenses or lease agreements for its supermarket locations and customer preferences.*

A significant financial decline or change in ownership involving one of TCF's supermarket partners, including Jewel-Osco or SUPERVALU Inc., could result in the loss of supermarket branches or could increase costs to operate the supermarket branches. At December 31, 2016, TCF had 145 supermarket branches. Supermarket banking continues to play an important role in TCF's deposit account strategy. TCF is subject to the risk, among others, that its license or lease for a location or locations will terminate upon the sale or closure of that location or locations by the supermarket partner, or that we may not be able to renew branch leases with our supermarket partners on favorable terms, or at all.

Also, difficult economic conditions, financial or labor difficulties in the supermarket industry, or a decrease in customer utilization of traditional bank branches may reduce activity in TCF's supermarket branches. Although utilization of these branches may decrease, the nature of these leases with our supermarket partners generally do not allow us to terminate significant numbers of individual branches. Because these leases are generally all renewed together, in the event of a decrease in customer utilization there may be limited opportunities to terminate unprofitable branch leases. Any of the above risks could have a material adverse effect on TCF's financial condition and results of operations.

*New lines of business or new products and services may subject TCF to additional risk.*

From time to time, TCF may implement new lines of business or offer new products and services within existing lines of business. There are substantial risks and uncertainties associated with these efforts, particularly in instances where the markets are not fully developed. In developing and marketing new lines of business and new products or services, TCF may invest significant time and resources. Initial timetables for the introduction and development of new lines of business and new products or services may not be achieved and price and profitability targets may not prove feasible. External factors, such as compliance with regulations, competitive alternatives and shifting market preferences may also impact the successful implementation of a new line of business or a new product or service. Furthermore, any new line of business or new product or service could have a significant impact on the effectiveness of TCF's system of internal controls. Failure to successfully manage these risks in the development and implementation of new lines of business and new products or services could have a material adverse effect on TCF's financial condition and results of operations.

*Increased competition in the already highly competitive financial services industry could have a material adverse effect on TCF's financial condition and results of operations.*

The financial services industry is highly competitive and could become even more competitive as a result of legislative, regulatory and technological changes, as well as continued industry consolidation, which may increase in connection with current economic and market conditions. TCF competes with other commercial banks, savings and loan associations, mutual savings banks, finance companies, mortgage banking companies, credit unions and investment companies. In addition, technology has lowered barriers to entry and made it possible for non-banks to offer products and services traditionally only provided by banks. Some of TCF's competitors have fewer regulatory constraints or lower cost structures. Also, the potential need to adapt to industry changes in information technology systems, on which TCF and the financial services industry generally highly depend, could present operational issues and require considerable capital spending. Further, decreased underwriting standards of competitors may result in lower interest rates on loans originated by TCF or lower loan volumes originated by TCF. As a result, any increased competition in the already highly competitive financial services industry could have a material adverse effect on TCF's financial condition and results of operations.

*The allowance for loan and lease losses maintained by TCF may not be sufficient to cover actual losses experienced by TCF, and losses in excess of TCF's allowance could have a material adverse effect on TCF's financial condition and results of operations.*

TCF maintains an allowance for loan and lease losses, which is a reserve established through a provision for loan and lease losses charged to expense, which represents management's best estimate of probable credit losses incurred within the existing portfolio of loans and leases. The level of the allowance for loan and lease losses reflects management's continuing evaluation of industry concentrations, specific credit risks, loan and lease loss experience, current loan and lease portfolio quality, present economic, political and regulatory conditions and unidentified losses in the current loan and lease portfolio. The determination of the appropriate level of the allowance for loan and lease losses involves a high degree of subjectivity and requires management to make significant estimates of current credit risks using qualitative and quantitative factors, each of which is subject to significant change. Changes in economic conditions affecting customers, new information regarding existing loans and leases, identification of additional problem loans and leases, lower than expected recoveries in the case of default and other factors may require an increase in the allowance for loan and lease losses. In addition, bank regulatory agencies periodically review TCF's allowance for loan and lease losses and may require an increase in the provision for loan and lease losses or the recognition of additional loan and lease charge-offs, based on judgments different than those of management. An increase in the allowance for loan and lease losses would result in a decrease in net income, and possibly risk-based capital, and could have a material adverse effect on TCF's financial condition and results of operations.

*TCF is subject to extensive government regulation and supervision, and changes in applicable laws and regulations, or their enforcement, could have a material adverse effect on TCF's financial results.*

TCF Financial, its subsidiary TCF Bank and certain indirect subsidiaries are subject to extensive federal and state regulation and supervision. Banking regulations are primarily intended to protect bank customers, depositors' funds, federal deposit insurance funds and the banking system as a whole, not stockholders. These regulations affect TCF's revenues, lending practices, capital structure, investment practices, dividend policy and growth, among other things. Congress and federal regulatory agencies continually review banking laws, regulations and policies for possible changes. Many new banking rules are issued with limited interpretive guidance.

Future changes in regulations, regulatory policies, interpretation and enforcement of statutes, regulations or policies could result in reduced revenues, increased compliance burdens, additional costs, limits on the types of financial services and products we may offer or increased competition from non-banks offering competing financial services and products, among other things. Future legislative and regulatory initiatives cannot be fully or accurately predicted. Such proposals may impose more stringent standards than currently applicable or anticipated with respect to capital and liquidity requirements for depository institutions. For example, the CFPB has examination and enforcement authority over TCF Bank and its subsidiaries, and broad rulemaking authority to administer and carry out the purposes and objectives of the federal consumer financial laws with respect to all financial institutions that offer financial products and services to consumers. The CFPB is authorized to make rules identifying and prohibiting acts or practices that are unfair, deceptive or abusive in connection with any transaction with a consumer for a consumer financial product or service, or the offering of a consumer financial product or service. Uncertainties remain concerning how the term "abusive" will be enforced. In recent years there has been an increase in the frequency of enforcement actions brought by regulatory agencies, such as the CFPB, dealing with matters such as indirect auto lending, fair lending, account fees, loan servicing and other products and services provided to customers.

For example, 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. However, the ultimate resolution of this lawsuit and any other proceeding, action or matter arising from the same or similar facts or practices is uncertain, and this lawsuit and any other such proceedings, actions or matters may result in costs, losses, fines, penalties, restitution, injunctive relief, changes to our business practices and regulatory scrutiny, enforcement or restrictions which, individually or in the aggregate, could have a material adverse effect on our reputation, results of operations, cash flows, financial position, ability to offer certain products and business and prospects generally.

While TCF has policies and procedures designed to prevent violations of laws, regulations and regulatory policies, and to ensure compliance with new or changed laws, regulations and regulatory policies, there can be no assurance that violations will not occur, and failure to comply could result in reputational damage, remediation, disgorgement, penalties, other monetary relief, injunctive relief or changes to TCF's business practices or operations, any of which could have a material adverse effect on its financial condition and results of operations.

*TCF's earnings are significantly affected by the fiscal and monetary policies of the federal government and its agencies.*

The policies of the Federal Reserve impact TCF significantly. The Federal Reserve regulates the supply of money and credit in the U.S. Its policies directly and indirectly influence the rate of interest earned on loans and leases and paid on borrowings and interest-bearing deposits, and also affect the value of financial instruments that TCF holds. Those policies determine, to a significant extent, the cost of funds for lending and investing. Changes in those policies are beyond TCF's control and are difficult to predict. Federal Reserve policies can also affect TCF's borrowers, potentially increasing the risk that they may fail to repay their loans or leases. For example, a tightening of the money supply by the Federal Reserve could increase unemployment or reduce the demand for a borrower's products and services. This could adversely affect the borrower's earnings and ability to repay its loan or lease. As a result, changes to the fiscal and monetary policies by the Federal Reserve could have a material adverse effect on TCF's financial condition and results of operations.

*TCF's framework for managing risks may not be effective in mitigating risk and any resulting loss.*

TCF's risk management framework seeks to mitigate risk and any resulting loss. TCF has established processes intended to identify, measure, monitor, report and analyze the types of risk to which TCF is subject, including legal and compliance, operational, reputational, strategic and market risk such as interest rate, credit, liquidity and foreign currency risk. However, as with any risk management framework, there are inherent limitations to TCF's risk management strategies. There may exist, or develop in the future, risks that TCF has not appropriately anticipated or identified. Any future breakdowns in TCF's risk management framework could have a material adverse effect on its financial condition and results of operations.

*Damage to TCF's reputation could have a material adverse effect on TCF's financial results.*

Reputational risk, or the risk to earnings and capital from negative public opinion, is inherent in TCF's business. Negative public opinion could adversely affect TCF's ability to keep and attract employees and customers and expose it to adverse legal and regulatory consequences. Negative public opinion could result from TCF's actual or alleged conduct in any number of activities, including lending practices, corporate governance, regulatory compliance, mergers and acquisitions, disclosure, sharing or inadequate protection of customer information or from actions taken by government regulators and community organizations in response to such conduct, and could be exacerbated by negative publicity. Because TCF conducts most of its businesses under the "TCF" brand, negative public opinion about one business could affect all of TCF's businesses.

*Failure to keep pace with technological change could adversely affect TCF's business.*

The financial services industry is continually undergoing rapid technological change with frequent introductions of new technology-driven products and services. TCF's future success depends, in part, upon its ability to address the needs of its customers by using technology to provide products and services that will satisfy customer demands, as well as to create additional efficiencies in its operations. Many of TCF's competitors have substantially greater resources to invest in technological improvements. TCF may not be able to effectively implement new technology-driven products and services or be successful in marketing these products and services to its customers. Failure to successfully keep pace with technological change affecting the financial services industry could have a material adverse effect on TCF's financial condition and results of operations.

*The Company is subject to certain risks related to originating and selling loans that could have a material adverse effect on TCF's financial condition and results of operations.*

TCF relies on the sale and securitization of loans to generate earnings and manage its liquidity and capital levels, as well as geographical and product diversity in its loan portfolio. Disruptions in the financial markets, changes to regulations that reduce the attractiveness of such loans to purchasers of the loans, or a decrease in the willingness of purchasers to purchase loans from TCF, or in general, could require TCF to decrease its lending activities or retain a greater portion of the loans it originates. Selling fewer loans would result in a decrease in the gains recognized on the sale of loans, would decrease TCF's capital ratios as a result of the increase of risk weighted assets, could result in decreased liquidity, and could result in increased credit risk as TCF's loan portfolio increased in size, any of which could have a material adverse effect on TCF's financial condition and results of operations.

The structure of certain loan sales and securitizations may result in the retention of credit risk. TCF may receive interest-only strips in connection with certain of its loan sales. The interest-only strip is recorded at fair value, which represents the present value of future cash flows expected to be received by TCF. The value of these interest-only strips may be affected by factors such as changes in the behavior patterns of customers (including defaults and prepayments), changes in the strength of the economy and developments in the interest rate markets; therefore, actual performance may differ from TCF's expectations. The impact of such factors could have a material adverse effect on the value of these interest-only strips and on TCF's financial condition and results of operations. In addition, pursuant to rules recently adopted as part of Dodd-Frank, sponsors of a securitization are required to retain at least a five percent economic interest in securitized assets which they are prohibited from hedging. As a result, future securitization transactions executed by TCF will result in retention of credit risk associated with the assets securitized.

When loans are sold or securitized, it is customary to make representations, warranties and covenants to the purchaser or investors about the loans, including the manner in which they were originated and will be serviced. 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. TCF has not made significant repurchases of sold loans. A material increase in the amount of loans repurchased could have a material adverse effect on TCF's financial condition and results of operations.

*Financial institutions depend on the accuracy and completeness of information about customers and counterparties.*

In deciding whether to extend credit or enter into other transactions, TCF may rely on information furnished by or on behalf of customers and counterparties, including financial statements, credit reports and other financial information. TCF may also rely on representations of those customers, counterparties or other third parties, such as independent auditors, as to the accuracy and completeness of that information. Reliance on inaccurate or misleading financial statements, credit reports or other financial information could cause TCF to enter into unfavorable transactions, which could have a material adverse effect on TCF's financial condition and results of operations.

*The failure to attract and retain key personnel could have a material adverse effect on TCF's financial condition and results of operations.*

TCF's success depends to a large extent upon its key personnel, including its ability to attract and retain such personnel. The loss of key personnel could have a material adverse impact on TCF's business because of their skills, market knowledge, industry experience and the difficulty of promptly finding qualified replacements. Additionally, portions of TCF's business are relationship driven, and many of TCF's key personnel have extensive customer relationships. Loss of key personnel to a competitor could result in the loss of some of TCF's customers. As a result, a failure to attract and retain key personnel could have a material adverse effect on TCF's financial condition and results of operations.

*Acquisitions may disrupt TCF's business and dilute stockholder value.*

TCF regularly evaluates merger and acquisition opportunities and conducts due diligence activities related to possible transactions with banks or other financial institutions. As a result, negotiations may take place and future mergers or acquisitions involving cash, debt or equity securities may occur at any time. Acquiring other banks, businesses or branches involves various risks, such as: difficulty in estimating the value of the target company; payment of a premium over book and market values that may dilute TCF's tangible book value and earnings per share in the short- and long-term; potential exposure to unknown or contingent liabilities of the target company; exposure to potential asset quality issues of the target company; volatility in reported income as goodwill impairment losses could occur irregularly and in varying amounts; difficulty and expense of integrating the operations and personnel of the target company; inability to realize the expected revenue increases, cost savings, increases in geographic or product presence or other projected benefits; potential disruption to TCF's business; potential diversion of TCF management's time and attention; potential loss of key employees and customers of TCF or the target company; and potential changes in banking or tax laws or regulations that may affect the target company, any of which could have a material adverse effect on TCF's financial condition and results of operations.

*Consumers may decide not to use banks to complete their financial transactions.*

Technology and other changes are allowing consumers to complete financial transactions through alternative methods that historically have involved banks. For example, consumers can now maintain funds that would have previously been held as bank deposits in brokerage accounts, mutual funds or general-purpose reloadable prepaid cards. Consumers can also complete transactions such as paying bills and transferring funds directly without the assistance of banks. The process of eliminating banks as intermediaries could result in the loss of fee income, as well as the loss of customer deposits and the related income generated from those deposits. The loss of these revenue streams and the loss of lower-cost deposits as a source of funds could have a material adverse effect on TCF's financial condition and results of operations.

*Changes in accounting policies or in accounting standards could materially affect how TCF reports its financial condition and results of operations.*

TCF's accounting policies are fundamental to the understanding of its financial condition and results of operations. Some of these policies require the use of estimates and assumptions that may affect the value of TCF's assets or liabilities and results of operations. Some of TCF's accounting policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because materially different amounts would be reported if different estimates or assumptions were used. If such estimates or assumptions underlying the financial statements are incorrect, TCF could experience material losses. From time to time the Financial Accounting Standards Board and the SEC change the financial accounting and reporting standards or the interpretation of those standards that govern the preparation of TCF's financial statements. These changes are beyond TCF's control, can be difficult to predict and could materially impact how TCF reports its financial condition and results of operations. Additionally, TCF could be required to apply a new or revised standard retrospectively, resulting in it restating prior period financial statements in material amounts.

*TCF is subject to examinations and challenges by tax authorities that could adversely affect TCF's results of operations and financial condition.*

TCF is subject to federal, state, and foreign income tax regulations, which often require interpretation due to their complexity. Changes in income tax regulations or in how the regulations are interpreted could have a material adverse effect on TCF's results of operations. In the normal course of business, TCF is routinely subject to examinations and challenges from taxing authorities, regarding its tax positions. Taxing authorities have been aggressive in challenging tax positions taken by financial institutions. These tax positions may relate to tax compliance, sales and use, franchise, gross receipts, payroll, property and income tax issues, including tax base, apportionment and tax credit planning. These challenges may result in adjustments to the timing or amount of taxable income or deductions, or the allocation of income among tax jurisdictions. If any such challenges are made and are not resolved in TCF's favor, they could have a material adverse effect on TCF's financial condition and results of operations.

*Significant legal actions could subject TCF to substantial uninsured liabilities.*

TCF can be subject to claims and legal actions related to its operations. These claims and legal actions, including supervisory or enforcement actions by TCF's regulators and other government authorities or private litigation, could result in large monetary awards or penalties, as well as significant defense costs. While TCF maintains insurance coverage in amounts and with deductibles that it believes are appropriate for its operations, such insurance does not cover all types of liability, including regulatory fines or penalties, and may not continue to be available to TCF at a reasonable cost, or at all. As a result, TCF may be exposed to substantial uninsured liabilities, which could have a material adverse effect on TCF's financial condition and results of operations.

In addition, customers may make claims and take legal action pertaining to TCF's sale or servicing of its loan, lease and deposit products. Whether or not such claims and legal action have merit, they may result in significant financial liability and could adversely affect the market perception of TCF and its products and services, as well as impact customer demand for those products and services. Any financial liability or reputational damage could have a material adverse effect on TCF's financial condition and results of operations.

In particular, the financial services industry has increasingly been targeted by lawsuits alleging infringement of patent rights, often from patent holding companies seeking to monetize patents they have purchased or otherwise obtained. Regardless of the scope or validity of such patents or other intellectual property rights, or the merits of any claims by potential or actual litigants, the Company may have to engage in protracted and costly litigation which may be time consuming and disruptive to TCF's operations and management. If the Company is found to infringe on one or more patents or other intellectual property rights, it may be required to pay substantial damages or royalties to a third-party, or it may be subject to a temporary or permanent injunction prohibiting the Company from utilizing certain technologies.

*TCF's internal controls may be ineffective.*

Management regularly reviews and updates TCF's internal controls, disclosure controls and procedures and corporate governance policies and procedures. Any system of controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. Any failure or circumvention of TCF's controls and procedures or failure to comply with regulations related to controls and procedures could have a material adverse effect on its financial condition and results of operations.

*TCF is subject to environmental liability risk associated with lending activities.*

A significant portion of TCF's loan portfolio is secured by real property. In the ordinary course of business, TCF may foreclose on and take title to properties securing certain loans. In doing so, there is a risk that hazardous or toxic substances could be found on these properties. If hazardous or toxic substances are found, TCF may be liable for remediation costs, as well as for personal injury and property damage. Environmental laws may require TCF to incur substantial expenses and may materially reduce the affected property's value or limit TCF's ability to use or sell the affected property. In addition, future laws or more stringent interpretations or enforcement policies with respect to existing laws may increase TCF's exposure to environmental liability. The remediation costs and any other financial liabilities associated with an environmental hazard could have a material adverse effect on TCF's financial condition and results of operations.

**Item 1B. Unresolved Staff Comments**

None.

## Item 2. Properties

**Offices** TCF owns its headquarters office in Wayzata, Minnesota. Other operations facilities, located in Minnesota, Illinois, California and South Dakota, are either owned or leased. These facilities are predominantly utilized by the Consumer Banking and Wholesale Banking reportable segments. Several facilities in Minnesota are also utilized by the Enterprise Services reportable segment. At December 31, 2016, TCF owned the buildings and land for 143 of its bank branch offices, owned the buildings but leased the land for 26 of its bank branch offices and leased or licensed the remaining 170 bank branch offices, all of which are functional and appropriately maintained and are utilized by both the Consumer Banking and Wholesale Banking reportable segments. These branch offices are located in Illinois, Minnesota, Michigan, Colorado, Wisconsin, Arizona and South Dakota. For more information on premises and equipment, see Note 7, Premises and Equipment of Notes to Consolidated Financial Statements.

## Item 3. Legal Proceedings

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 SEC, the Federal Reserve, the OCC and the 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. However, the ultimate resolution of this lawsuit and any other proceeding, action or matter arising from the same or similar facts or practices is uncertain, and this lawsuit and any other such proceedings, actions or matters may result in costs, losses, fines, penalties, restitution, injunctive relief, changes to our business practices and regulatory scrutiny, enforcement or restrictions which, individually or in the aggregate, could have a material adverse effect on our reputation, results of operations, cash flows, financial position, ability to offer certain products and business and prospects generally.

## Item 4. Mine Safety Disclosures

Not applicable.

## Part II

### Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

TCF's common stock trades on the New York Stock Exchange under the symbol "TCB." As of February 16, 2017, there were 5,751 holders of record of TCF's common stock. The high and low prices and the dividends declared for TCF's common stock were as follows:

| | High | Low | Dividends Declared |
|---|---|---|---|
| **2016:** | | | |
| Fourth Quarter | $ 19.97 | $ 13.73 | $ 0.075 |
| Third Quarter | 14.78 | 11.72 | 0.075 |
| Second Quarter | 14.48 | 11.62 | 0.075 |
| First Quarter | 13.97 | 10.37 | 0.075 |
| **2015:** | | | |
| Fourth Quarter | $ 15.94 | $ 13.78 | $ 0.075 |
| Third Quarter | 17.07 | 14.35 | 0.05 |
| Second Quarter | 17.29 | 14.93 | 0.05 |
| First Quarter | 16.31 | 13.78 | 0.05 |

The Board of Directors of TCF Financial and TCF Bank have each adopted a Capital Planning Policy and Dividend Policy. The policies define how enterprise risk related to capital will be managed, how the adequacy of capital will be measured and the process by which capital strategy, capital management and preferred and common stock dividend recommendations will be presented to TCF's Board of Directors. TCF's management is charged with ensuring that capital strategy actions, including the declaration of preferred and common stock 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, risk profile and overall financial condition. The Board of Directors intends to continue its practice of paying quarterly cash dividends on TCF's common stock as justified by the financial condition of TCF. The declaration and amount of future dividends will depend on circumstances existing at the time, including TCF's earnings, level of internally generated common capital excluding earnings, financial condition and capital requirements, the cash available to pay such dividends (derived mainly from dividends and distributions from TCF Bank), as well as regulatory and contractual limitations and such other factors as the Board of Directors may deem relevant. Dividends for the current dividend period on all outstanding shares of preferred stock must be declared and paid or declared and a sum sufficient for the payment thereof must be set aside before any dividend may be declared or paid on TCF's common stock. In general, TCF Bank may not declare or pay a dividend to TCF Financial in excess of 100% of its net retained profits for that year combined with its net retained profits for the preceding two calendar years without prior approval of the OCC. Restrictions on the ability of TCF Bank to pay cash dividends or possible diminished earnings of TCF may limit the ability of TCF Financial to pay dividends in the future to holders of its preferred and common stock. In addition, the ability of TCF Financial and TCF Bank to pay dividends depends on regulatory policies and capital requirements and may be subject to regulatory approval. See "Item 1. Business - Regulation - Regulatory Capital Requirements", "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.

*Total Return Performance*

The following chart compares the cumulative total stockholder return on TCF common stock over the last five fiscal years with the cumulative total return of the Standard and Poor's ("S&P") 500 Index and the KBW Regional Banking Index (assuming the investment of $100 in each index on December 31, 2011 and reinvestment of all dividends).

TCF has chosen to replace the SNL U.S. Bank and Thrift Index (included in the chart in prior years) with the KBW Regional Banking Index. TCF believes the KBW Regional Banking Index represents a more relevant group of regional banking peers rather than the broader group of banks and thrifts included in the SNL U.S. Bank and Thrift Index. The KBW Regional Banking Index and the SNL U.S. Bank and Thrift Index are both shown below for comparison purposes.

In addition to the required broad equity market index and industry index, TCF previously displayed an extra peer group consisting of all publicly-traded banks and thrifts with total assets ranging from $10.0 billion to $50.0 billion, which TCF utilized for executive compensation purposes. TCF has since discontinued the use of this peer group for this purpose and will no longer include it in the chart below.

**TCF Total Stock Return Performance Chart**

◆ TCF Financial Corporation ■ SNL U.S. Bank and Thrift Index (old index) p S&P 500 Index ● KBW Regional Banking Index

| Index | Year Ended December 31, 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| TCF Financial Corporation | $ 100.00 | $ 119.92 | $ 162.59 | $ 161.02 | $ 145.14 | $ 206.01 |
| SNL U.S. Bank and Thrift Index (old index) | 100.00 | 134.28 | 183.86 | 205.25 | 209.39 | 264.35 |
| S&P 500 Index | 100.00 | 116.00 | 153.57 | 174.60 | 177.01 | 198.18 |
| KBW Regional Banking Index | 100.00 | 113.25 | 166.31 | 170.34 | 180.41 | 250.80 |

Source: SNL Financial.

*Repurchases of TCF Stock*

Share repurchase activity for the quarter ended December 31, 2016 was as follows:

| Period | Total Number of Shares Purchased | Average Price Paid Per Share | Total Number of Shares Purchased as Part of Publicly Announced Plan | Maximum Number of Shares that May Yet be Purchased Under the Plan |
|---|---|---|---|---|
| October 1 to October 31, 2016 | | | | |
| Share repurchase program[1] | — | $ — | — | 5,384,130 |
| Employee transactions[2] | 1,412 | $ 14.39 | N.A. | N.A. |
| November 1 to November 30, 2016 | | | | |
| Share repurchase program[1] | — | $ — | — | 5,384,130 |
| Employee transactions[2] | — | $ — | N.A. | N.A. |
| December 1 to December 31, 2016 | | | | |
| Share repurchase program[1] | — | $ — | — | 5,384,130 |
| Employee transactions[2] | — | $ — | N.A. | N.A. |
| Total | | | | |
| Share repurchase program[1] | — | $ — | — | 5,384,130 |
| Employee transactions[2] | 1,412 | $ 14.39 | N.A. | N.A. |

N.A. Not Applicable

(1) The current share repurchase authorization was approved by the Board of Directors on April 14, 2007 and was announced in a press release dated April 16, 2007. The authorization was for a repurchase of up to an additional 5% of TCF's common stock outstanding at the time of the authorization, or 6.5 million shares. TCF has not repurchased shares since October 2007. Future repurchases will be based upon capital levels, growth expectations and market opportunities and may be subject to regulatory approval. The ability to repurchase shares in the future may be adversely affected by new legislation or regulations or by changes in regulatory policies. This authorization does not have an expiration date.

(2) Represents restricted stock withheld pursuant to the terms of awards granted on or prior to April 22, 2015 under the TCF Financial Incentive Stock Program to offset tax withholding obligations that occur upon vesting and release of restricted stock. The TCF Financial Incentive Stock Program provides that the value of shares withheld shall be the average of the high and low prices of common stock of TCF Financial Corporation on the date the relevant transaction occurs.

## Item 6. Selected Financial Data

The selected five-year financial summary presented below should be read in conjunction with the Consolidated Financial Statements and related notes. Historical data is not necessarily indicative of TCF's future results of operations or financial condition. See "Item 1A. Risk Factors."

### Five-Year Financial Summary

| | At or For the Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| (Dollars in thousands, except per-share data) | 2016 | 2015 | 2014 | 2013 | 2012 |
| **Consolidated Income:** | | | | | |
| Net interest income | $ 848,106 | $ 820,388 | $ 815,629 | $ 802,624 | $ 780,019 |
| Fees and other revenue | 466,481 | 442,295 | 432,240 | 403,094 | 388,191 |
| Gains (losses) on securities, net | (581) | (297) | 1,027 | 964 | 102,232 |
| Total revenue | 1,314,006 | 1,262,386 | 1,248,896 | 1,206,682 | 1,270,442 |
| Provision for credit losses | 65,874 | 52,944 | 95,737 | 118,368 | 247,443 |
| Non-interest expense | 909,887 | 894,747 | 871,777 | 845,269 | 811,819 |
| Loss on termination of debt | — | — | — | — | 550,735 |
| Income (loss) before income tax expense (benefit) | 338,245 | 314,695 | 281,382 | 243,045 | (339,555) |
| Income tax expense (benefit) | 116,528 | 108,872 | 99,766 | 84,345 | (132,858) |
| Income attributable to non-controlling interest | 9,593 | 8,700 | 7,429 | 7,032 | 6,187 |
| Net income (loss) attributable to TCF Financial Corporation | 212,124 | 197,123 | 174,187 | 151,668 | (212,884) |
| Preferred stock dividends | 19,388 | 19,388 | 19,388 | 19,065 | 5,606 |
| Net income (loss) available to common stockholders | $ 192,736 | $ 177,735 | $ 154,799 | $ 132,603 | $ (218,490) |
| Earnings (loss) per common share: | | | | | |
| Basic | $ 1.15 | $ 1.07 | $ 0.95 | $ 0.82 | $ (1.37) |
| Diluted | $ 1.15 | $ 1.07 | $ 0.94 | $ 0.82 | $ (1.37) |
| Dividends declared | $ 0.30 | $ 0.225 | $ 0.20 | $ 0.20 | $ 0.20 |
| **Consolidated Financial Condition:** | | | | | |
| Loans and leases | $ 17,843,827 | $ 17,435,999 | $ 16,401,646 | $ 15,846,939 | $ 15,425,724 |
| Total assets | 21,441,326 | 20,689,609 | 19,393,656 | 18,378,769 | 18,224,736 |
| Deposits | 17,242,522 | 16,719,989 | 15,449,882 | 14,432,776 | 14,050,786 |
| Borrowings | 1,077,572 | 1,039,938 | 1,235,535 | 1,487,172 | 1,932,634 |
| Total equity | 2,444,645 | 2,306,917 | 2,135,364 | 1,964,759 | 1,876,643 |
| Book value per common share | 12.66 | 11.94 | 11.10 | 10.23 | 9.79 |
| **Financial Ratios:** | | | | | |
| Return on average assets | 1.05% | 1.03% | 0.96% | 0.87% | (1.14)% |
| Return on average common equity | 9.13 | 9.19 | 8.71 | 8.12 | (13.33) |
| Net interest margin[(1)] | 4.34 | 4.42 | 4.61 | 4.68 | 4.65 |
| Average total equity to average assets | 11.36 | 11.15 | 10.89 | 10.46 | 9.66 |
| Dividend payout ratio | 26.09 | 21.03 | 21.28 | 24.30 | (14.60) |
| **Credit Quality Ratios:** | | | | | |
| 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 total loans and leases | 0.90 | 0.90 | 1.00 | 1.59 | 1.73 |
| Net charge-offs as a percentage of average loans and leases | 0.26 | 0.30 | 0.49 | 0.81 | 1.54 |

(1) Net interest income on a fully tax-equivalent basis divided by average interest-earning assets.

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

**Table of Contents**


| Description | Page |
|---|---|
| Overview | 22 |
| Results of Operations | 23 |
| Performance Summary | 23 |
| Consolidated Income Statement Analysis | 23 |
| Net Interest Income | 23 |
| Provision for Credit Losses | 27 |
| Non-interest Income | 28 |
| Non-interest Expense | 29 |
| Income Taxes | 29 |
| Reportable Segment Results | 30 |
| Consolidated Financial Condition Analysis | 33 |
| Securities Available for Sale and Securities Held to Maturity | 33 |
| Loans and Leases | 34 |
| Credit Quality | 38 |
| Liquidity Management | 45 |
| Deposits | 45 |
| Borrowings | 46 |
| Contractual Obligations and Commitments | 46 |
| Capital Management | 47 |
| Critical Accounting Estimates | 48 |
| Recent Accounting Developments | 49 |
| Legislative and Regulatory Developments | 51 |
| Forward-looking Information | 51 |

Management's discussion and analysis of the consolidated financial condition and results of operations of TCF Financial Corporation should be read in conjunction with "Part I, Item 1A. Risk Factors," "Item 6. Selected Financial Data" and "Item 8. Consolidated Financial Statements."

***Overview***

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. Its principal subsidiary, TCF National Bank ("TCF Bank"), is headquartered in Sioux Falls, South Dakota. At December 31, 2016, TCF had 339 bank branches in Illinois, Minnesota, Michigan, Colorado, Wisconsin, Arizona and South Dakota (TCF's primary banking markets). At December 31, 2015, TCF's primary banking markets also included Indiana.

TCF provides convenient financial services through multiple channels in its primary banking markets. TCF has developed products and services designed to meet the specific needs of the largest consumer segments in the market. The Company focuses on attracting and retaining customers through service and convenience, including select locations open seven days a week with extended hours and on most holidays, full-service supermarket branches, access to automated teller machine ("ATM") networks and digital banking channels. TCF's philosophy is to generate interest income, fees and other revenue growth through business lines that emphasize higher yielding assets and low interest cost deposits. TCF's growth strategies include organic growth in existing businesses, development of new products and services, new customer acquisition and acquisitions of portfolios or businesses. New products and services are designed to build on existing businesses and expand into complementary products and services through strategic initiatives. Funded generally through retail deposit generation, TCF continues to focus on profitable asset growth.

Net interest income, the difference between interest income earned on loans and leases, securities, investments and other interest-earning assets (interest income) and interest paid on deposits and borrowings (interest expense), represented 64.5% of TCF's total revenue for 2016, compared with 65.0% and 65.3% for 2015 and 2014, respectively. Net interest income can change significantly from period to period based on interest rates, customer prepayment patterns, the volume and mix of interest-earning assets and the volume and mix of interest-bearing and non-interest bearing deposits and interest-bearing borrowings. TCF manages the risk of changes in interest rates on its net interest income through a management Asset & Liability Committee and through related interest rate risk monitoring and management policies. See "Part I, Item 1A. Risk Factors" and "Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk" for further discussion.

Non-interest income is a significant source of revenue for TCF and an important component of TCF's results of operations. Providing a wide range of retail banking services is an integral component of TCF's business philosophy. Primary drivers of bank fees and service charges include the number of customers we attract, the customers' level of engagement and the frequency with which the customer uses our solutions. As an effort to diversify TCF's non-interest income sources and manage credit concentration risk, TCF sells or securitizes loans, primarily in consumer real estate and auto finance, which result in gains on sales as well as increased servicing fee income through the growth of the portfolio of loans sold with servicing retained by TCF. Primary drivers of gains on sales include TCF's ability to originate loans held for sale, identify loan buyers and execute loan sales. In addition, growth in the leasing and equipment finance lending business results in increased non-interest income from operating and sales-type leases.

The following portions of this Management's Discussion and Analysis of Financial Condition and Results of Operations ("Management's Discussion and Analysis") focus in more detail on the results of operations for 2016, 2015 and 2014 and on information about TCF's balance sheet, loan and lease portfolio, liquidity, funding resources, capital and other matters.

***Results of Operations***

**Performance Summary** TCF reported diluted earnings per common share of $1.15 for 2016, compared with $1.07 and 94 cents for 2015 and 2014, respectively. TCF reported net income of $212.1 million for 2016, compared with $197.1 million and $174.2 million for 2015 and 2014, respectively.

Return on average assets was 1.05% for 2016, compared with 1.03% and 0.96% for 2015 and 2014, respectively. Return on average common equity was 9.13% for 2016, compared with 9.19% and 8.71% for 2015 and 2014, respectively.

***Consolidated Income Statement Analysis***

**Net Interest Income** Net interest income represented 64.5% of TCF's total revenue for 2016, compared with 65.0% and 65.3% for 2015 and 2014, respectively. Net interest income was $848.1 million for 2016, compared with $820.4 million and $815.6 million for 2015 and 2014, respectively. Net interest income increased $27.7 million, or 3.4% in 2016 and increased $4.8 million, or 0.6% in 2015. Average loans and leases increased $581.1 million, or 3.4% in 2016 and increased $720.7 million, or 4.4% in 2015. Average securities available for sale increased $570.4 million, or 88.4% in 2016 and increased $198.1 million, or 44.3% in 2015. The average yield on interest-earning assets on a fully tax-equivalent basis was 4.76%, 4.80% and 4.94% in 2016, 2015 and 2014, respectively. Average deposits increased $1.2 billion, or 7.2% in 2016 and increased $1.0 billion, or 6.7% in 2015. The average rate on the deposits was 0.36%, 0.30% and 0.26% in 2016, 2015 and 2014, respectively.The increase in net interest income in 2016 was primarily due to higher average balances of loans and leases and securities available for sale, partially offset by a lower average yield on the interest-earning assets and higher interest expense on certificates of deposit due to growth and higher rates paid as a result of special campaigns to fund interest-earning assets growth. The increase in 2015 was primarily driven by higher average loan and lease balances in the auto finance, leasing and equipment finance and inventory finance portfolios, partially offset by margin reduction resulting from the competitive, low interest rate environment.

Net interest income on a fully tax-equivalent basis divided by average interest-earning assets is referred to as the net interest margin, expressed as a percentage. Net interest income and net interest margin are affected by (i) changes in prevailing short- and long-term interest rates, (ii) loan and deposit pricing strategies and competitive conditions, (iii) the volume and mix of interest-earning assets, non-interest bearing deposits and interest-bearing liabilities, (iv) the level of non-accrual loans and leases and other real estate owned and (v) the impact of modified loans and leases.

Net interest margin was 4.34% for 2016, compared with 4.42% and 4.61% for 2015 and 2014, respectively. The decrease in 2016 was primarily due to margin compression resulting from the competitive, low interest rate environment and higher rates on certificates of deposit. The decrease in 2015 was primarily due to margin compression resulting from the competitive, low interest rate environment and higher rates on certificates of deposit and money market accounts, as well as a change in the asset portfolio mix due to growth in the auto finance business.

Table of Contents

TCF's average balances, interest, and yields and rates on major categories of TCF's interest-earning assets and interest-bearing liabilities on a fully tax-equivalent basis were as follows:

| | Year Ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | 2015 | | | Change | | |
| (Dollars in thousands) | Average Balance | Interest[1] | Yields and Rates[1] | Average Balance | Interest[1] | Yields and Rates[1] | Average Balance | Interest | Yields and Rates (bps) |
| **Assets:** | | | | | | | | | |
| Investments and other | $ 319,582 | $ 9,314 | 2.91% | $ 520,577 | $ 12,294 | 2.36% | $ (200,995) | $ (2,980) | 55 |
| Securities held to maturity | 190,863 | 4,649 | 2.44 | 207,140 | 5,486 | 2.65 | (16,277) | (837) | (21) |
| Securities available for sale:[2] | | | | | | | | | |
| Taxable | 719,743 | 16,238 | 2.26 | 564,205 | 13,930 | 2.47 | 155,538 | 2,308 | (21) |
| Tax-exempt[3] | 495,708 | 15,900 | 3.21 | 80,894 | 2,643 | 3.27 | 414,814 | 13,257 | (6) |
| Loans and leases held for sale | 479,401 | 39,648 | 8.27 | 286,295 | 25,766 | 9.00 | 193,106 | 13,882 | (73) |
| Loans and leases:[4] | | | | | | | | | |
| Consumer real estate: | | | | | | | | | |
| Fixed-rate | 2,285,647 | 130,753 | 5.72 | 2,710,512 | 157,428 | 5.81 | (424,865) | (26,675) | (9) |
| Variable- and adjustable-rate | 2,948,482 | 156,919 | 5.32 | 2,911,689 | 149,770 | 5.14 | 36,793 | 7,149 | 18 |
| Total consumer real estate | 5,234,129 | 287,672 | 5.50 | 5,622,201 | 307,198 | 5.46 | (388,072) | (19,526) | 4 |
| Commercial: | | | | | | | | | |
| Fixed-rate | 972,107 | 47,445 | 4.88 | 1,173,039 | 59,037 | 5.03 | (200,932) | (11,592) | (15) |
| Variable- and adjustable-rate | 2,154,774 | 85,996 | 3.99 | 1,961,389 | 76,677 | 3.91 | 193,385 | 9,319 | 8 |
| Total commercial | 3,126,881 | 133,441 | 4.27 | 3,134,428 | 135,714 | 4.33 | (7,547) | (2,273) | (6) |
| Leasing and equipment finance | 4,106,718 | 183,029 | 4.46 | 3,804,015 | 175,565 | 4.62 | 302,703 | 7,464 | (16) |
| Inventory finance | 2,414,684 | 140,453 | 5.82 | 2,154,357 | 122,799 | 5.70 | 260,327 | 17,654 | 12 |
| Auto finance | 2,693,041 | 110,651 | 4.11 | 2,278,617 | 94,463 | 4.15 | 414,424 | 16,188 | (4) |
| Other | 9,538 | 548 | 5.74 | 10,303 | 712 | 6.91 | (765) | (164) | (117) |
| Total loans and leases | 17,584,991 | 855,794 | 4.87 | 17,003,921 | 836,451 | 4.92 | 581,070 | 19,343 | (5) |
| Total interest-earning assets | 19,790,288 | 941,543 | 4.76 | 18,663,032 | 896,570 | 4.80 | 1,127,256 | 44,973 | (4) |
| Other assets[5] | 1,285,127 | | | 1,226,645 | | | 58,482 | | |
| Total assets | $ 21,075,415 | | | $ 19,889,677 | | | $ 1,185,738 | | |
| **Liabilities and Equity:** | | | | | | | | | |
| Non-interest bearing deposits: | | | | | | | | | |
| Retail | $ 1,778,707 | | | $ 1,658,951 | | | $ 119,756 | | |
| Small business | 884,192 | | | 838,758 | | | 45,434 | | |
| Commercial and custodial | 585,611 | | | 507,446 | | | 78,165 | | |
| Total non-interest bearing deposits | 3,248,510 | | | 3,005,155 | | | 243,355 | | |
| Interest-bearing deposits: | | | | | | | | | |
| Checking | 2,452,206 | 346 | 0.01 | 2,396,334 | 547 | 0.02 | 55,872 | (201) | (1) |
| Savings | 4,677,517 | 1,510 | 0.03 | 4,938,303 | 3,005 | 0.06 | (260,786) | (1,495) | (3) |
| Money market | 2,488,977 | 15,114 | 0.61 | 2,265,121 | 14,237 | 0.63 | 223,856 | 877 | (2) |
| Certificates of deposit | 4,229,247 | 44,818 | 1.06 | 3,340,341 | 30,437 | 0.91 | 888,906 | 14,381 | 15 |
| Total interest-bearing deposits | 13,847,947 | 61,788 | 0.45 | 12,940,099 | 48,226 | 0.37 | 907,848 | 13,562 | 8 |
| Total deposits | 17,096,457 | 61,788 | 0.36 | 15,945,254 | 48,226 | 0.30 | 1,151,203 | 13,562 | 6 |
| Borrowings: | | | | | | | | | |
| Short-term borrowings | 7,051 | 51 | 0.73 | 18,822 | 53 | 0.28 | (11,771) | (2) | 45 |
| Long-term borrowings | 890,846 | 20,785 | 2.33 | 1,119,175 | 23,263 | 2.08 | (228,329) | (2,478) | 25 |
| Total borrowings | 897,897 | 20,836 | 2.32 | 1,137,997 | 23,316 | 2.05 | (240,100) | (2,480) | 27 |
| Total interest-bearing liabilities | 14,745,844 | 82,624 | 0.56 | 14,078,096 | 71,542 | 0.51 | 667,748 | 11,082 | 5 |
| Total deposits and borrowings | 17,994,354 | 82,624 | 0.46 | 17,083,251 | 71,542 | 0.42 | 911,103 | 11,082 | 4 |
| Other liabilities | 686,360 | | | 589,222 | | | 97,138 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Total liabilities | 18,680,714 | | | 17,672,473 | | | 1,008,241 | | |
| Total TCF Financial Corp. stockholders' equity | 2,373,176 | | | 2,197,690 | | | 175,486 | | |
| Non-controlling interest in subsidiaries | 21,525 | | | 19,514 | | | 2,011 | | |
| Total equity | 2,394,701 | | | 2,217,204 | | | 177,497 | | |
| Total liabilities and equity | $ 21,075,415 | | | $ 19,889,677 | | | $ 1,185,738 | | |
| Net interest income and margin | | $ 858,919 | 4.34 | | $ 825,028 | 4.42 | | $ 33,891 | (8) |

(1) Interest and yields are presented on a fully tax-equivalent basis.
(2) Average balances and yields of securities available for sale are based upon historical amortized cost and exclude equity securities.
(3) The yield on tax-exempt securities available for sale is computed on a tax-equivalent basis using a statutory federal income tax rate of 35% for all periods presented.
(4) Average balances of loans and leases include non-accrual loans and leases and are presented net of unearned income.
(5) Includes leased equipment and related initial direct costs under operating leases of $140.3 million and $104.1 million in 2016 and 2015, respectively.

| (Dollars in thousands) | Year Ended December 31, 2015 Average Balance | 2015 Interest[1] | 2015 Yields and Rates[1] | 2014 Average Balance | 2014 Interest[1] | 2014 Yields and Rates[1] | Change Average Balance | Change Interest | Change Yields and Rates (bps) |
|---|---|---|---|---|---|---|---|---|---|
| **Assets:** | | | | | | | | | |
| Investments and other | $ 520,577 | $ 12,294 | 2.36% | $ 586,803 | $ 15,390 | 2.62% | $ (66,226) | $ (3,096) | (26) |
| Securities held to maturity | 207,140 | 5,486 | 2.65 | 197,943 | 5,281 | 2.67 | 9,197 | 205 | (2) |
| Securities available for sale:[2] | | | | | | | | | |
| Taxable | 564,205 | 13,930 | 2.47 | 447,016 | 11,994 | 2.68 | 117,189 | 1,936 | (21) |
| Tax-exempt[3] | 80,894 | 2,643 | 3.27 | — | — | — | 80,894 | 2,643 | 327 |
| Loans and leases held for sale | 286,295 | 25,766 | 9.00 | 259,186 | 21,128 | 8.15 | 27,109 | 4,638 | 85 |
| Loans and leases:[4] | | | | | | | | | |
| Consumer real estate: | | | | | | | | | |
| Fixed-rate | 2,710,512 | 157,428 | 5.81 | 3,359,670 | 190,973 | 5.68 | (649,158) | (33,545) | 13 |
| Variable-rate | 2,911,689 | 149,770 | 5.14 | 2,788,882 | 143,431 | 5.14 | 122,807 | 6,339 | — |
| Total consumer real estate | 5,622,201 | 307,198 | 5.46 | 6,148,552 | 334,404 | 5.44 | (526,351) | (27,206) | 2 |
| Commercial: | | | | | | | | | |
| Fixed-rate | 1,173,039 | 59,037 | 5.03 | 1,469,579 | 73,752 | 5.02 | (296,540) | (14,715) | 1 |
| Variable- and adjustable-rate | 1,961,389 | 76,677 | 3.91 | 1,665,788 | 66,450 | 3.99 | 295,601 | 10,227 | (8) |
| Total commercial | 3,134,428 | 135,714 | 4.33 | 3,135,367 | 140,202 | 4.47 | (939) | (4,488) | (14) |
| Leasing and equipment finance | 3,804,015 | 175,565 | 4.62 | 3,531,256 | 166,974 | 4.73 | 272,759 | 8,591 | (11) |
| Inventory finance | 2,154,357 | 122,799 | 5.70 | 1,888,080 | 112,603 | 5.96 | 266,277 | 10,196 | (26) |
| Auto finance | 2,278,617 | 94,463 | 4.15 | 1,567,904 | 68,595 | 4.37 | 710,713 | 25,868 | (22) |
| Other | 10,303 | 712 | 6.91 | 12,071 | 931 | 7.71 | (1,768) | (219) | (80) |
| Total loans and leases | 17,003,921 | 836,451 | 4.92 | 16,283,230 | 823,709 | 5.06 | 720,691 | 12,742 | (14) |
| Total interest-earning assets | 18,663,032 | 896,570 | 4.80 | 17,774,178 | 877,502 | 4.94 | 888,854 | 19,068 | (14) |
| Other assets[5] | 1,226,645 | | | 1,123,213 | | | 103,432 | | |
| Total assets | $ 19,889,677 | | | $ 18,897,391 | | | $ 992,286 | | |
| **Liabilities and Equity:** | | | | | | | | | |
| Non-interest bearing deposits: | | | | | | | | | |
| Retail | $ 1,658,951 | | | $ 1,546,453 | | | $ 112,498 | | |
| Small business | 838,758 | | | 806,649 | | | 32,109 | | |
| Commercial and custodial | 507,446 | | | 413,893 | | | 93,553 | | |
| Total non-interest bearing deposits | 3,005,155 | | | 2,766,995 | | | 238,160 | | |
| Interest-bearing deposits: | | | | | | | | | |
| Checking | 2,396,334 | 547 | 0.02 | 2,328,402 | 921 | 0.04 | 67,932 | (374) | (2) |
| Savings | 4,938,303 | 3,005 | 0.06 | 5,693,751 | 8,343 | 0.15 | (755,448) | (5,338) | (9) |
| Money market | 2,265,121 | 14,237 | 0.63 | 1,312,483 | 7,032 | 0.54 | 952,638 | 7,205 | 9 |
| Certificates of deposit | 3,340,341 | 30,437 | 0.91 | 2,840,922 | 22,089 | 0.78 | 499,419 | 8,348 | 13 |
| Total interest-bearing deposits | 12,940,099 | 48,226 | 0.37 | 12,175,558 | 38,385 | 0.32 | 764,541 | 9,841 | 5 |
| Total deposits | 15,945,254 | 48,226 | 0.30 | 14,942,553 | 38,385 | 0.26 | 1,002,701 | 9,841 | 4 |
| Borrowings: | | | | | | | | | |
| Short-term borrowings | 18,822 | 53 | 0.28 | 83,673 | 261 | 0.31 | (64,851) | (208) | (3) |
| Long-term borrowings | 1,119,175 | 23,263 | 2.08 | 1,310,163 | 19,954 | 1.52 | (190,988) | 3,309 | 56 |
| Total borrowings | 1,137,997 | 23,316 | 2.05 | 1,393,836 | 20,215 | 1.45 | (255,839) | 3,101 | 60 |
| Total interest-bearing liabilities | 14,078,096 | 71,542 | 0.51 | 13,569,394 | 58,600 | 0.43 | 508,702 | 12,942 | 8 |
| Total deposits and borrowings | 17,083,251 | 71,542 | 0.42 | 16,336,389 | 58,600 | 0.36 | 746,862 | 12,942 | 6 |
| Other liabilities | 589,222 | | | 502,560 | | | 86,662 | | |
| Total liabilities | 17,672,473 | | | 16,838,949 | | | 833,524 | | |
| Total TCF Financial Corp. stockholders' | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| equity | 2,197,690 | | | 2,041,428 | | | 156,262 | | |
| Non-controlling interest in subsidiaries | 19,514 | | | 17,014 | | | 2,500 | | |
| Total equity | 2,217,204 | | | 2,058,442 | | | 158,762 | | |
| Total liabilities and equity | $ 19,889,677 | | | $ 18,897,391 | | | $ 992,286 | | |
| Net interest income and margin | | $ 825,028 | 4.42 | | $ 818,902 | 4.61 | | $ 6,126 | (19) |

(1) Interest and yields are presented on a fully tax-equivalent basis.
(2) Average balances and yields of securities available for sale are based upon historical amortized cost and exclude equity securities.
(3) The yield on tax-exempt securities available for sale is computed on a tax-equivalent basis using a statutory federal income tax rate of 35% for all periods presented.
(4) Average balances of loans and leases include non-accrual loans and leases and are presented net of unearned income.
(5) Includes leased equipment and related initial direct costs under operating leases of $104.1 million and $84.9 million in 2015 and 2014, respectively.

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 Versus December 31, 2015 Increase (Decrease) Due to | | | December 31, 2015 Versus December 31, 2014 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:

| | Year Ended December 31, | | | | | | Change | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| (Dollars in thousands) | 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:

| | Year Ended December 31, | | | Change | |
|---|---|---|---|---|---|
| (Dollars in thousands) | 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:

| | Year Ended December 31, | | | Change | |
|---|---|---|---|---|---|
| (Dollars in thousands) | 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.

| | At December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | | 2015 | | |
| (Dollars in thousands) | 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 |

Table of Contents

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

| (Dollars in thousands) | At December 31, 2016 | 2015 | 2014 | 2013 | 2012 | Compound Annual Growth Rate 1-Year 2016 / 2015 | 5-Year 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:

| | At December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | | 2015 | | |
| (In thousands) | 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:

| | At December 31, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| (Dollars in thousands) | 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:

| | At December 31, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| (Dollars in thousands) | 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.

| | At December 31, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| (Dollars in thousands) | 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:

| | At December 31, 2016 | | |
|---|---|---|---|
| (Dollars in thousands) | 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. |

| | At December 31, 2015 | | |
|---|---|---|---|
| (Dollars in thousands) | 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:

| | At December 31, | | | | |
|---|---|---|---|---|---|
| (Dollars in thousands) | 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:

| | At December 31, 2016 | | | | |
|---|---|---|---|---|---|
| | Non-classified | | Classified | | |
| (In thousands) | Pass | Special Mention | Substandard | Doubtful | Total |
| 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 |

| | At December 31, 2015 | | | | |
|---|---|---|---|---|---|
| | Non-classified | | Classified | | |
| (In thousands) | Pass | Special Mention | Substandard | Doubtful | Total |
| 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:

| | Credit Loss Reserves | | | | | Credit Loss Reserves as a Percentage of Portfolio | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | At December 31, | | | | | At December 31, | | | | |
| (Dollars in thousands) | 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 | 21,350 | 19,018 | 18,446 | 18,733 | 21,037 | 0.49 | 0.47 | 0.49 | 0.55 | 0.66 |
| Inventory finance | 13,932 | 11,128 | 10,020 | 8,592 | 7,569 | 0.56 | 0.52 | 0.53 | 0.52 | 0.48 |
| Auto finance | 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:

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| (Dollars in thousands) | 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:

| | Payments Due by Period | | | | |
|---|---|---|---|---|---|
| (In thousands) | 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.

| | Amount of Commitment - Expiration by Period | | | | |
|---|---|---|---|---|---|
| (In thousands) | 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 depositary shares outstanding, each representing a 1/1,000$^{th}$ 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 depositary 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:

| | | At December 31, | | | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | | 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) | $ 1,936,865 | $ 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.

| | Impact on Net Interest Income |
|---|---|

| (Dollars in millions) | 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 TCFCFC. 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 TCFCFC. 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.

/s/ 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 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of Shares Issued | | | | | | | | | | | |
| (Dollars in thousands) | Preferred | Common | 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 |
| **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:

| | At December 31, | |
|---|---|---|
| (In thousands) | 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:

| | At December 31, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2015 | | | |
| (In thousands) | 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:

| | At December 31, 2016 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 months | | 12 months or more | | Total | |
| (In thousands) | 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 |

| | At December 31, 2015 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 months | | 12 months or more | | Total | |
| (In thousands) | 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.

| | At December 31, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| (In thousands) | 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:

| | Year Ended December 31, | | |
|---|---|---|---|
| (In thousands) | 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:

| | At December 31, | |
|---|---|---|
| (In thousands) | 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.

| | Year Ended December 31, 2016 | | | |
|---|---|---|---|---|
| (In thousands) | 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 |

| | Year Ended December 31, 2015 | | | |
|---|---|---|---|---|
| (In thousands) | 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 |

| | Year Ended December 31, 2014 | | | |
|---|---|---|---|---|
| (In thousands) | 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:

| | At December 31, | |
|---|---|---|
| (In thousands) | 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:

| | At December 31, 2016 | | | | | |
|---|---|---|---|---|---|---|
| (In thousands) | 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 |

| | At December 31, 2015 | | | | | |
|---|---|---|---|---|---|---|
| (In thousands) | 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:

| | Year Ended December 31, | | |
|---|---|---|---|
| (In thousands) | 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:

| | At December 31, | |
|---|---|---|
| (In thousands) | 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:

| | Year Ended December 31, | | |
|---|---|---|---|
| (In thousands) | 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:

| | At December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | | 2015 | | |
| (In thousands) | 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:

| | Year Ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2014 | |
| (In thousands) | 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:

| | At December 31, | |
|---|---|---|
| (In thousands) | 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:

| | At December 31, | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | | | 2015 | | | | | |
| (In thousands) | | 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:

| | At December 31, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2015 | | | |
| (Dollars in thousands) | 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:

| | At December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2014 | |
| (Dollars in thousands) | 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:

| | | At December 31, | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2016 | | | 2015 | | |
| (Dollars in thousands) | Stated Maturity | 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:

| | At or For the Year Ended December 31, | | |
|---|---|---|---|
| (In thousands) | 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 | At December 31, 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 | At December 31, 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.

**Depositary Shares Representing 7.50% Series A Non-Cumulative Perpetual Preferred Stock** TCF had 6,900,000 depositary 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 | | | |
|---|---|---|---|---|---|---|
| | At December 31, | | At December 31, | | | |
| (Dollars in thousands) | 2016 | 2015 | 2016 | 2015 | Well-capitalized Standard | Minimum Capital Requirement[1] |
| **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:

| | At or For the Year Ended December 31, | | |
|---|---|---|---|
| (Dollars in thousands) | 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:

| | Year Ended December 31, | | |
|---|---|---|---|
| (In thousands) | 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:

| | Pension Plan | | Postretirement Plan | |
|---|---|---|---|---|
| | Year Ended December 31, | | | |
| (In thousands) | 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:

| | Pension Plan | |
|---|---|---|
| | Year Ended December 31, | |
| (In thousands) | 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:

| | Postretirement Plan | | |
|---|---|---|---|
| | Year Ended December 31, | | |
| (In thousands) | 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:

| | Pension Plan | | |
|---|---|---|---|
| | Year Ended December 31, | | |
| (In thousands) | 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 |

| | Postretirement Plan | | |
|---|---|---|---|
| | Year Ended December 31, | | |
| (In thousands) | 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:

| | 1-Percentage-Point | |
|---|---|---|
| (In thousands) | 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:

| | At December 31, | |
|---|---|---|
| (In thousands) | 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:

| | At December 31, 2016 | | | |
|---|---|---|---|---|
| (In thousands) | 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 |

| | At December 31, 2015 | | | |
|---|---|---|---|---|
| (In thousands) | 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:

| | Fair Value Measurements at December 31, 2016 | | | |
|---|---|---|---|---|
| (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 | $ — | $ 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.

| (In thousands) | Fair Value Measurements at December 31, 2015 | | | |
|---|---|---|---|---|
| | 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 | At December 31, 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.

| | Carrying | Estimated Fair Value at December 31, 2016 | | | |
|---|---|---|---|---|---|
| (In thousands) | Amount | 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:

| | Year Ended December 31, | | |
|---|---|---|---|
| (In thousands) | 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 | | |

<div style="overflow:hidden;font-size:10pt;"