BOK FINANCIAL CORP ET AL
Form 10-K
February 29, 2016

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

FORM 10-K
(Mark One)

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

For the quarterly period ended December 31, 2015

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. 0-19341

BOK FINANCIAL CORPORATION
(Exact name of registrant as specified in its charter)

Oklahoma	73-1373454
(State or other jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)

Bank of Oklahoma Tower Boston Avenue at Second Street Tulsa, Oklahoma	74172
(Address of Principal Executive Offices)	(Zip Code)

(918) 588-6000
(Registrant’s telephone number, including area code)

Securities registered pursuant to Section 12 (b) of the Act: None

Securities registered pursuant to Section 12 (g) of the Act:
Common stock, $0.00006 par value

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý 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 ý

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 ý No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, 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 ý No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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. ¨

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 definitions of "larger accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):
Large accelerated filer ý Accelerated filer ¨ Non-accelerated filer ¨ Smaller reporting company ¨

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

The aggregate market value of the registrant's common stock ("Common Stock") held by non-affiliates is approximately $1.5 billion (based on the June 30, 2015 closing price of Common Stock of $69.58 per share). As of January 31, 2016, there were 66,119,435 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates certain information by reference from the Registrant's Proxy Statement for the 2016 Annual Meeting of Shareholders.

BOK Financial Corporation
Form 10-K
Year Ended December 31, 2015

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PART I

ITEM 1. BUSINESS

General

Developments relating to individual aspects of the business of BOK Financial Corporation (“BOK Financial” or “the Company”) are described below. Additional discussion of the Company’s activities during the current year appears within Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Description of Business

BOK Financial is a financial holding company incorporated in the state of Oklahoma in 1990 whose activities are governed by the Bank Holding Company Act of 1956 (“BHCA”), as amended by the Financial Services Modernization Act or Gramm-Leach-Bliley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). BOK Financial offers full service banking in Oklahoma, Texas, New Mexico, Northwest Arkansas, Colorado, Arizona, and Kansas/Missouri. At December 31, 2015, the Company reported total consolidated assets of $31 billion and ranked as the 53rd largest bank holding company based on asset size.

BOKF, NA (“the Bank”) is a wholly owned subsidiary bank of BOK Financial. BOKF, NA operates TransFund, Cavanal Hill Investment Management, BOK Financial Asset Management, Inc. and seven banking divisions: Bank of Albuquerque, Bank of Arizona, Bank of Arkansas, Bank of Kansas City, Bank of Oklahoma, Bank of Texas and Colorado State Bank and Trust. Other wholly owned subsidiaries of BOK Financial include BOSC, Inc., a broker/dealer that engages in retail and institutional securities sales and municipal bond underwriting and The Milestone Group, Inc., an investment adviser to high net worth clients. Other non-bank subsidiary operations do not have a significant effect on the Company’s financial statements.

Our overall strategic objective is to emphasize growth in long-term value by building on our leadership position in Oklahoma through expansion into other high-growth markets in contiguous states. We operate primarily in the metropolitan areas of Tulsa and Oklahoma City, Oklahoma; Dallas, Fort Worth and Houston, Texas; Albuquerque, New Mexico; Denver, Colorado; Phoenix, Arizona, and Kansas City, Kansas/Missouri. Our acquisition strategy targets fairly priced quality organizations with demonstrated solid growth that would supplement our principal lines of business. We provide additional growth opportunities by hiring talent to enhance competitiveness, adding locations and broadening product offerings. Our operating philosophy embraces local decision-making in each of our geographic markets while adhering to common Company standards.

Our primary focus is to provide a comprehensive range of nationally competitive financial products and services in a personalized and responsive manner. Products and services include loans and deposits, cash management services, fiduciary services, mortgage banking and brokerage and trading services to middle-market businesses, financial institutions and consumers. Commercial banking represents a significant part of our business. Our credit culture emphasizes building relationships by making high quality loans and providing a full range of financial products and services to our customers. Our energy financing expertise enables us to offer commodity derivatives for customers to use in their risk management. We also offer derivative products for customers to use in managing their interest rate and foreign exchange risk. Our diversified base of revenue sources is designed to generate returns in a range of economic situations. Historically, fees and commissions provide 43% to 49% of our total revenue. Approximately 48% of our revenue came from fees and commissions in 2015.

BOK Financial’s corporate headquarters is located at Bank of Oklahoma Tower, Boston Avenue at Second Street, Tulsa, Oklahoma 74172.

The Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports are available on the Company's website at www.bokf.com as soon as reasonably practicable after the Company electronically files such material with or furnishes it to the Securities and Exchange Commission.

Operating Segments

BOK Financial operates three principal lines of business: Commercial Banking, Consumer Banking and Wealth Management. Commercial Banking includes lending, treasury and cash management services and customer risk management products for small businesses, middle market and larger commercial customers. Commercial Banking also includes the TransFund electronic funds network. Consumer Banking includes retail lending and deposit services, lending and deposit services to small business customers served through the retail branch network and all mortgage banking activities. Wealth Management provides fiduciary services, private bank services and investment advisory services in all markets. Wealth Management also underwrites state and municipal securities and engages in brokerage and trading activities. Discussion of these principal lines of business appears within the Lines of Business section of “Management's Discussion and Analysis of Financial Condition and Results of Operations” and within Note 17 of the Company’s Notes to Consolidated Financial Statements, both of which appear elsewhere herein.

Competition

BOK Financial and its operating segments face competition from other banks, thrifts, credit unions and other non-bank financial institutions, such as investment banking firms, investment advisory firms, brokerage firms, investment companies, government agencies, mortgage brokers and insurance companies. The Company competes largely on the basis of customer services, interest rates on loans and deposits, lending limits and customer convenience. Some operating segments face competition from institutions that are not as closely regulated as banks, and therefore are not limited by the same capital requirements and other restrictions. All market share information presented below is based upon share of deposits in specified areas according to SNL DataSource as of June 30, 2015.

We are the largest financial institution in the state of Oklahoma with 15% of the state’s total deposits. Bank of Oklahoma has 32% and 13% of the market share in the Tulsa and Oklahoma City areas, respectively. We compete with two banks that have operations nationwide and have greater access to funds at lower costs, higher lending limits, and greater access to technology resources. We also compete with regional and locally-owned banks in both the Tulsa and Oklahoma City areas, as well as in every other community in which we do business throughout the state.

Bank of Texas competes against numerous financial institutions, including some of the largest in the United States, and has a market share of approximately 2% in the Dallas, Fort Worth area and less than 1% in the Houston area. Bank of Albuquerque has a number four market share position with 9% of deposits in the Albuquerque area and competes with four large national banks, some regional banks and several locally-owned smaller community banks. Colorado State Bank and Trust has a market share of approximately 2% in the Denver area. Bank of Arkansas serves Benton and Washington counties in Arkansas with a market share of approximately 4%. Bank of Arizona operates as a community bank with locations in Phoenix, Mesa and Scottsdale with a market share of approximately 1%. Bank of Kansas City serves the Kansas City, Kansas/Missouri market with a market share of approximately 2%. The Company’s ability to expand into additional states remains subject to various federal and state laws.

Employees

As of December 31, 2015, BOK Financial and its subsidiaries employed 4,789 full-time equivalent employees. None of the Company’s employees are represented by collective bargaining agreements. Management considers its employee relations to be good.

Supervision and Regulation

BOK Financial and its subsidiaries are subject to extensive regulations under federal and state laws. These regulations are designed to promote safety and soundness, protect consumers and ensure the stability of the banking system as a

whole. The purpose of these regulations is not necessarily to protect shareholders and creditors. As detailed below, these regulations require the Company and its subsidiaries to maintain certain capital balances and require the Company to provide financial support to its subsidiaries. These regulations may restrict the Company’s ability to diversify, to acquire other institutions and to pay dividends on its capital stock. These regulations also include requirements on certain programs and services offered to our customers, including restrictions on fees charged for certain services.

The following information summarizes certain existing laws and regulations that affect the Company’s operations. It does not summarize all provisions of these laws and regulations and does not include all laws and regulations that affect the Company presently or in the future.

General

As a financial holding company, BOK Financial is regulated under the BHCA and is subject to regular inspection, examination and supervision by the Board of Governors of the Federal Reserve System (the “Federal Reserve Board”). Under the BHCA, BOK Financial files quarterly reports and other information with the Federal Reserve Board.

The Bank is organized as a national banking association under the National Banking Act, and is subject to regulation, supervision and examination by the Office of the Comptroller of the Currency (the “OCC”), the Federal Deposit Insurance Corporation (the “FDIC”), the Federal Reserve Board, the Consumer Financial Protection Bureau and other federal and state regulatory agencies. The OCC has primary supervisory responsibility for national banks and must approve certain corporate or structural changes, including changes in capitalization, payment of dividends, change of place of business, and establishment of a branch or operating subsidiary. The OCC performs examinations concerning safety and soundness, the quality of management and directors, information technology and compliance with applicable regulations. The National Banking Act authorizes the OCC to examine every national bank as often as necessary.

A financial holding company, and the companies under its control, are permitted to engage in activities considered “financial in nature” as defined by the BHCA, Gramm-Leach-Bliley Act and Federal Reserve Board interpretations. Activities that are “financial in nature” include securities underwriting and dealing, insurance underwriting, merchant banking, operating a mortgage company, performing certain data processing operations, servicing loans and other extensions of credit, providing investment and financial advice, owning and operating savings and loan associations, and leasing personal property on a full pay-out, non-operating basis. A financial holding company is required to notify the Federal Reserve Board within thirty days of engaging in new activities determined to be “financial in nature.” BOK Financial is engaged in some of these activities and has notified the Federal Reserve Board.

In order for a financial holding company to commence any new activity permitted by the BHCA, each insured depository institution subsidiary of the financial holding company must be "well capitalized" and "well managed" and received a rating of at least "satisfactory" in its most recent examination under the Community Reinvestment Act. A financial holding company and its depository institution subsidiaries are considered to be "well capitalized" if they meet the requirements discussed in the section captioned "Capital Adequacy and Prompt Corrective Action" which follows. A financial holding company and its depository institution subsidiaries are considered to be "well managed" if they receive a composite rating and management rating of at least "satisfactory" in their most recent examinations. If a financial holding company fails to meet these requirements, the Federal Reserve Board may impose limitations or conditions on the conduct of its activities and the company may not commence any new financial activities without prior approval.

The BHCA requires the Federal Reserve Board’s prior approval for the direct or indirect acquisition of more than five percent of any class of voting stock of any non-affiliated bank. Under the Federal Bank Merger Act, the prior approval of the OCC is required for a national bank to merge with another bank or purchase the assets or assume the deposits of another bank. In reviewing applications seeking approval of merger and acquisition transactions, the bank regulatory authorities consider, among other things, the competitive effect and public benefits of the transactions, the capital position of the combined organization, the applicant’s performance record under the Community Reinvestment Act and fair housing laws and the effectiveness of the subject organizations in combating money laundering activities.

A financial holding company and its subsidiaries are prohibited under the BHCA from engaging in certain tie-in arrangements in connection with the provision of any credit, property or services. Thus, a subsidiary of a financial holding company may not extend credit, lease or sell property, furnish any services or fix or vary the consideration for these activities on the condition that (1) the customer obtain or provide additional credit, property or services from or

to the financial holding company or any subsidiary thereof, or (2) the customer may not obtain some other credit, property or services from a competitor, except to the extent reasonable conditions are imposed to insure the soundness of credit extended.

The Bank and other non-bank subsidiaries are also subject to other federal and state laws and regulations. For example, BOSC, Inc. is regulated by the Securities and Exchange Commission ("SEC"), the Financial Industry Regulatory Authority ("FINRA"), the Federal Reserve Board, and state securities regulators. Such regulations generally include licensing of certain personnel, customer interactions, and trading operations.

Dodd-Frank Wall Street Reform and Consumer Protection Act

On July 21, 2010, the Dodd-Frank Act was signed into law, giving federal banking agencies authority to increase regulatory capital requirements, impose additional rules and regulations over consumer financial products and services and limit the amount of interchange fees that may be charged in an electronic debit transaction. In addition, the Dodd-Frank Act made permanent the $250,000 limit for federal deposit insurance. It also repealed prohibitions on payment of interest on demand deposits, which could impact how interest is paid on business transaction and other accounts. Further, the Dodd-Frank Act prohibits banking entities from engaging in proprietary trading and restricts banking entities sponsorship of or investment in private equity funds and hedge funds. Final rules required to implement the Dodd-Frank Act have largely been issued. Many of these rules have extended phase-in periods and the full impact of this legislation on the banking industry, including the Company, remains unknown.

The Durbin Amendment to the Dodd-Frank Act required that interchange fees on electronic debit transactions paid by merchants must be “reasonable and proportional to the cost incurred by the issuer” and prohibited card network rules that have limited price competition among networks. Effective October 1, 2011, the Federal Reserve issued its final ruling to implement the Durbin Amendment. This ruling established a cap on interchange fees banks with more than $10 billion in total assets can charge merchants for certain debit card transactions. The Durbin Amendment also required all banks to comply with the prohibition on network exclusivity and routing requirements. Debit card issuers are required to make at least two unaffiliated networks available to merchants.

The Dodd-Frank Act established the Consumer Financial Protection Bureau ("CFPB") with powers to supervise and enforce consumer protection laws. The CFPB has broad rule-making authority for a wide range of consumer protection laws that apply to all banks and savings institutions, including the authority to prohibit "unfair, deceptive or abusive" acts and practices. Established July 21, 2011, the CFPB has examination and enforcement authority over all banks and savings institutions with more than $10 billion in assets for certain designated consumer laws and regulations. The CFPB issued mortgage servicing standards and mortgage lending rules, including “qualified mortgage” rules that are designed to protect consumers and ensure the reliability of mortgages. Mortgage lenders are required to make a reasonable and good faith determination based on verified and documented information that a consumer applying for a mortgage loan has a reasonable ability to repay the loan according to its terms. Qualified mortgages that meet this requirement and other specified criteria are given a safe harbor of compliance. Rules affecting mortgage lenders and servicers became effective on January 10, 2014.

Title VI of the Dodd-Frank Act, commonly known as the Volcker Rule, prohibits banking entities from engaging in proprietary trading as defined by the Dodd-Frank Act and restricts sponsorship of, or investment in, private equity funds and hedge funds, subject to limited exceptions and exclusions. In December 2013, Federal banking agencies approved regulations that implement the Volcker Rule. In December 2014, the Federal Reserve extended the conformance period for key elements of the Rule relating to relationships with funds until July 2017. The Company’s private equity investment activities will be curtailed. The Company’s trading activity were largely unaffected, as most trading activities are exempted or excluded from the Volcker Rule trading prohibitions.

Title VII of the Dodd-Frank Act subjects nearly all derivative transactions to the regulations of the Commodity Futures Trading Commission (“CFTC”) or SEC. This includes registration, recordkeeping, reporting, capital, margin and business conduct requirements on swap dealers and major swap participants. The CFTC and SEC both approved interim final rules on the definition "swap" and “swap dealer" which were effective October 2012. Under these rules, entities transacting in less than $8 billion in notional value of swaps over any 12 month period during the first three years after these rules are effective will be exempt from the definition of "swap dealer." After December 2017, this threshold may be reduced to $3 billion subject to the results of studies the commissions intend to undertake once the derivative rules are effective. The Company currently estimates that the nature and volume of swap activity will not require it to register as a swap dealer any time prior to December 2017. Although the ultimate impact of Title VII

remains uncertain, we currently believe its full implementation is likely not to impose significantly higher compliance costs on the Company.

Capital Adequacy and Prompt Corrective Action

The Federal Reserve Board, the OCC and the FDIC have issued substantially similar risk-based and leverage capital guidelines applicable to United States banking organizations to ensure capital adequacy based upon the risk levels of assets and off-balance sheet financial instruments. In addition, these regulatory agencies may from time to time require that a banking organization maintain capital above the minimum levels, whether because of its financial condition or actual or anticipated growth. Capital adequacy guidelines and prompt corrective action regulations involve quantitative measures of assets, liabilities, and certain off-balance sheet items calculated under regulatory accounting practices. Capital amounts and classifications are also subject to qualitative judgments by regulators regarding components, risk weighting and other factors.

Prior to January 1, 2015, the Federal Reserve Board risk-based guidelines defined a three-tier capital framework. Core capital (Tier 1) included common shareholders' equity and qualifying preferred stock, less goodwill, most intangible assets and other adjustments. Supplementary capital (Tier 2) consisted of preferred stock not qualifying as Tier 1 capital, qualifying mandatory convertible debt securities, limited amounts of subordinated debt, other qualifying term debt and allowances for credit losses, subject to limitations. Market risk capital (Tier 3) included qualifying unsecured subordinated debt. Assets and off-balance sheet exposures were assigned to one of four categories of risk-weights, based primarily upon relative credit risk. Risk-based capital ratios are calculated by dividing Tier 1 and total capital by risk-weighted assets.

New capital rules were effective for banks and bank holding companies, including BOK Financial on January 1, 2015 as part of a package of regulatory reforms developed by the Basel Committee on Banking Supervision ("BCBS") to strengthen the regulation, supervision and risk management of the banking sector, commonly referred to as the Basel III framework. Components of these rules will phase in through January 1, 2019. The new capital rules reduced instruments that qualify as regulatory capital and generally increased risk weighted assets. The new capital rules established a 7% threshold for common equity Tier 1 ratio consisting of a minimum level plus a capital conservation buffer. The rules also changed both the Tier 1 risk based capital requirements and the total risk based requirements to a minimum of 6% and 8%, respectively, plus a capital conservation buffer of 2.5% totaling 8.5% and 10.5%, respectively. The Company elected to exclude unrealized gains and losses from available for sale securities from its calculation of Tier 1 capital, consistent with the treatment under previous capital rules.

As of December 31, 2015, BOK Financial's common equity Tier 1 ratio was 12.13%. BOK Financial's Tier 1 and total capital were 12.13% and 13.30%, respectively.

The leverage ratio is determined by dividing Tier 1 capital by adjusted average total assets. Banking organizations are required to maintain a ratio of at least 4%. A bank which falls below these levels, including the capital conservation buffer, would be subject to regulatory restrictions on capital distributions (including but not limited to dividends and share repurchases) and executive bonus payments. BOK Financial's leverage ratio at December 31, 2015 was 9.25%.

The Federal Deposit Insurance Corporation Improvement Act of 1991 (the “FDICIA”), among other things, identifies five capital categories for insured depository institutions from well capitalized to critically undercapitalized and requires the respective federal regulatory agencies to implement systems for prompt corrective action for institutions failing to meet minimum capital requirements within such categories. FDICIA imposes progressively more restrictive covenants on operations, management and capital distributions, depending upon the category in which an institution is classified. The various regulatory agencies have adopted substantially similar regulations that define the five capital categories identified by FDICIA, using the total risk-based capital, Tier 1 risk-based capital and leverage capital ratios as the relevant capital measures. Such regulations establish various degrees of corrective action to be taken when an institution is considered undercapitalized. Under these guidelines, the Bank was considered well capitalized as of December 31, 2015.

Liquidity Requirements

The Basel III framework also requires bank holding companies and banks to measure their liquidity against specific liquidity tests. One test, referred to as the liquidity coverage ratio, is designed to ensure that the banking entity maintains a prescribed minimum level of unencumbered high-quality liquid assets equal to expected net cash outflows as defined. The other test, referred to as the net stable funding ratio, is designed to promote greater reliance on medium and long term funding sources.

On September 3, 2014, U.S. federal banking agencies published the final rule covering Liquidity Risk Management Standards that would standardize minimum liquidity requirements for internationally active banking organizations as defined (generally those with total consolidated assets in excess of $250 billion) as well as modified liquidity requirements for other banking organizations with total consolidated assets in excess of $50 billion that are not internationally active. Although the final rule does not apply to banking organizations with total assets less than $50 billion, including the Company, if growth in the balance sheet of the Company were to approach the $50 billion threshold, the costs of such liquidity regulations would begin to be realized.

Stress Testing

As required by the Dodd-Frank Act, the Federal Reserve published regulations that require bank holding companies with $10 billion to $50 billion in assets to perform annual capital stress tests. The requirements for annual capital stress test became effective for the Company in the fourth quarter of 2013. The Dodd-Frank Act Stress Test ("DFAST") is a forward-looking exercise under which the Company and its banking subsidiary estimate the impact of a hypothetical severely adverse macroeconomic scenario provided by the Federal Reserve and the Office of the Comptroller of the Currency on its financial condition and regulatory capital ratios over a nine-quarter time horizon. Under the scenario provided by the regulatory agencies for the Company's most recently completed stress test, all capital ratio measures remain comfortably above the minimum regulatory thresholds. Additional information concerning the annual stress test may be found on the Company's Investor Relations page at www.bokf.com under the "Presentations" tab. The results of future capital stress tests may place constraints on capital distributions or increases in required regulatory capital under certain circumstances.

Further discussion of regulatory capital, including regulatory capital amounts and ratios, is set forth under the heading “Liquidity and Capital” within “Management's Discussion and Analysis of Financial Condition and Results of Operations” and in Note 15 of the Company's Notes to Consolidated Financial Statements, both of which appear elsewhere herein.

Executive and Incentive Compensation

Guidelines adopted by federal banking agencies prohibit excessive compensation as an unsafe and unsound practice and describe compensation as excessive when the amounts paid are unreasonable or disproportionate to the services performed by an executive officer, employee, director or principal shareholder. The Federal Reserve Board has issued comprehensive guidance on incentive compensation intended to ensure that the incentive compensation policies do not undermine safety and soundness by encouraging excessive risk taking. This guidance covers all employees that have the ability to materially affect the risk profile of an organization, either individually or as part of a group, based on key principles that (i) incentives do not encourage risk-taking beyond the organization's ability to identify and manage risk, (ii) compensation arrangements are compatible with effective internal controls and risk management, and (iii) compensation arrangements are supported by strong corporate governance, including active and effective board oversight. Deficiencies in compensation practices may affect supervisory ratings and enforcement actions may be taken if incentive compensation arrangements pose a risk to safety and soundness.

Deposit Insurance

Substantially all of the deposits held by the Bank are insured up to applicable limits by the Deposit Insurance Fund (“DIF”) of the FDIC and are subject to deposit insurance assessments to maintain the DIF. In 2011, the FDIC released a final rule to implement provisions of the Dodd-Frank Act that affect deposit insurance assessments. Among other things, the Dodd-Frank Act raised the minimum designated reserve ratio from 1.15% to 1.35% of estimated insured deposits, removed the upper limit of the designated reserve ratio, required that the designated reserve ratio reach 1.35% by September 30, 2020, and required that the FDIC offset the effect of increasing the minimum designated

reserve ratio on depository institutions with total assets of less than $10 billion. The Dodd-Frank Act provided the FDIC flexibility in implementation of the increase in the designated reserve ratio, but it will ultimately result in increased deposit insurance costs to the Company. The Dodd-Frank Act also required that the FDIC redefine the assessment base to average consolidated assets minus average tangible equity.

Dividends

A key source of liquidity for BOK Financial is dividends from the Bank, which is limited by various banking regulations to net profits, as defined, for the year plus retained profits for the preceding two years. Dividends are further restricted by minimum capital requirements and the Company's internal capital policy. The Bank's dividend limitations are discussed under the heading “Liquidity and Capital” within “Management's Discussion and Analysis of Financial Condition and Results of Operations”.

Source of Strength Doctrine

According to Federal Reserve Board policy, a bank holding company is expected to act as a source of financial strength to each subsidiary bank and to commit resources to support each such subsidiary. This support may be required at times when a bank holding company may not be able to provide such support.

Transactions with Affiliates

The Federal Reserve Board regulates transactions between the Company and its subsidiaries. Generally, the Federal Reserve Act and Regulation W, as amended by the Dodd-Frank Act, limit the Company’s banking subsidiary and its subsidiaries, to lending and other “covered transactions” with affiliates. The aggregate amount of covered transactions a banking subsidiary or its subsidiaries may enter into with an affiliate may not exceed 10% of the capital stock and surplus of the banking subsidiary. The aggregate amount of covered transactions with all affiliates may not exceed 20% of the capital stock and surplus of the banking subsidiary.

Covered transactions with affiliates are also subject to collateralization requirements and must be conducted on arm’s length terms. Covered transactions include (a) a loan or extension of credit by the banking subsidiary, including derivative contracts, (b) a purchase of securities issued to a banking subsidiary, (c) a purchase of assets by the banking subsidiary unless otherwise exempted by the Federal Reserve, (d) acceptance of securities issued by an affiliate to the banking subsidiary as collateral for a loan, and (e) the issuance of a guarantee, acceptance or letter of credit by the banking subsidiary on behalf of an affiliate.

Bank Secrecy Act and USA PATRIOT Act

The Bank Secrecy Act (“BSA”) and the The USA PATRIOT Act of 2001 (“PATRIOT Act”) imposes many requirements on financial institutions in the interest of national security and law enforcement. BSA requires banks to maintain records and file suspicious activity reports that are of use to law enforcement and regulators in combating money laundering and other financial crimes. The PATRIOT Act is intended to deny terrorists and criminals the ability to access the U.S. financial services system and places significantly greater requirements on financial institutions. Financial institutions, such as the Company and its subsidiaries, must have a designated BSA Officer, internal controls, independent testing and training programs commensurate with their size and risk profile. As part of its internal control program, a financial institution is expected to have effective customer due diligence and enhanced due diligence requirements for high-risk customers, as well as processes to prohibit transaction with entities subject to Office of Foreign Asset Control sanctions. Documentation and recordkeeping requirements, as well as system requirements, aimed at identifying and reporting suspicious activity reporting, must increase with the institution's size and complexity. Failure to implement or maintain adequate programs and controls to combat terrorist financing and money laundering may have serious legal, financial, and reputational consequences.

Governmental Policies and Economic Factors

The operations of BOK Financial and its subsidiaries are affected by legislative changes and by the policies of various regulatory authorities and, in particular, the policies of the Federal Reserve Board. The Federal Reserve Board has statutory objectives to maximize employment and maintain price stability. Among the instruments of monetary policy used by the Federal Reserve Board to implement these objectives are: open-market operations in U.S. Government securities, changes in the discount rate and federal funds rate on bank borrowings, and changes in reserve requirements on bank deposits. The effect of future changes in such policies on the business and earnings of BOK Financial and its subsidiaries is uncertain.

In response to the significant recession in business activity which began in 2007, the Federal Reserve took aggressive actions to reduce interest rates and provide liquidity. While many of the crisis-related programs have expired or been closed, government legislation and policies continue to be accommodative, including increases in government spending, reduction of certain taxes and promotion of home affordability programs.

The Federal Reserve completed its bond purchase program designed to reduce longer-term rates in October of 2014, although it continues to maintain an accommodative policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and to rollover maturing Treasury securities. The Federal Reserve has indicated that it will likely foster a low-interest rate environment for a considerable time, dependent on inflation and employment levels the progress. The short-term effectiveness and long-term impact of these programs on the economy in general and on BOK Financial Corporation in particular are uncertain.

Foreign Operations

BOK Financial does not engage in operations in foreign countries, nor does it lend to foreign governments.

ITEM 1A. RISK FACTORS

BOK Financial Corporation and its subsidiaries could be adversely affected by risks and uncertainties that could have a material impact on its financial condition and results of operations, as well as on its common stock and other financial instruments. Risk factors which are significant to the Company include, but are not limited to:

General and Regulatory Risk Factors

Adverse factors could impact BOK Financial's ability to implement its operating strategy.

Although BOK Financial has developed an operating strategy which it expects to result in continuing improved financial performance, BOK Financial cannot assure that it will be successful in fulfilling this strategy or that this operating strategy will be successful. Achieving success is dependent upon a number of factors, many of which are beyond BOK Financial's direct control. Factors that may adversely affect BOK Financial's ability to implement its operating strategy include:

- deterioration of BOK Financial's asset quality;
- deterioration in general economic conditions, especially in BOK Financial's core markets;
- inability to control BOK Financial's non-interest expenses;
- inability to increase non-interest income;
- inability to access capital;
- decreases in net interest margins;
- increases in competition;
- adverse regulatory developments.

Substantial competition could adversely affect BOK Financial.

Banking is a competitive business. BOK Financial competes actively for loan, deposit and other financial services business in the southwest region of the United States. BOK Financial's competitors include a large number of small and large local and national banks, savings and loan associations, credit unions, trust companies, broker-dealers and underwriters, as well as many financial and non-financial firms that offer services similar to those of BOK Financial. Large national financial institutions have substantial capital, technology and marketing resources. Such large financial institutions may have greater access to capital at a lower cost than BOK Financial does, which may adversely affect BOK Financial's ability to compete effectively.

BOK Financial has expanded into markets outside of Oklahoma, where it competes with a large number of financial institutions that have an established customer base and greater market share than BOK Financial. BOK Financial may not be able to continue to compete successfully in these markets outside of Oklahoma. With respect to some of its services, BOK Financial competes with non-bank companies that are not subject to regulation. The absence of regulatory requirements may give non-banks a competitive advantage.

Government regulations could adversely affect BOK Financial.

BOKF and BOKF, NA are subject to banking laws and regulations that limit the type of acquisitions and investments that we may make. In addition, certain permitted acquisitions and investments are subject to prior review and approval by banking regulators, including the Federal Reserve, OCC and FDIC. Banking regulators have broad discretion on whether to approve proposed acquisitions and investments. In deciding whether to approve a proposed acquisition, federal banking regulators will consider, among other things, the effect of the acquisition on competition; the convenience and needs of the communities to be served, including our record of compliance under the Community

Reinvestment Act; and our effectiveness in combating money laundering. They will also consider our financial condition and our future prospects, including projected capital ratios and levels; the competence, experience, and integrity of our management; and our record of compliance with laws and regulations.

The trend of increasingly extensive regulation is likely to continue and become more costly in the future. Laws, regulations or policies currently affecting BOK Financial and its subsidiaries may change. The implementation of the Dodd-Frank Act has and will continue to affect BOK Financial's businesses, including interchange revenue, mortgage banking, derivative and trading activities on behalf of customers, consumer products and funds management.

Regulatory authorities may change their interpretation of these statutes and regulations and are likely to increase their supervisory activities, including the OCC, our primary regulator, and the CFPB, our new regulator for certain designated consumer laws and regulations. Violations of laws and regulations could limit the growth potential of BOK Financial's businesses. We have made extensive investments in human and technological resources to address enhanced regulatory expectations, including investments in the areas of risk management, compliance, and capital planning.

Adverse political environment could negatively impact BOK Financial’s business.

As a result of the financial crisis and related government intervention to stabilize the banking system, there have been a series of laws and related regulations proposed or enacted in an attempt to ensure the crisis is not repeated. Many of the proposed new regulations are far-reaching. The intervention by the government also impacted populist sentiment with a negative view of financial institutions. This sentiment may increase litigation risk to the Company. While the Company did not participate in the Troubled Asset Relief Program and performed well throughout the downturn, the adverse political environment could have an adverse impact on BOK Financial’s future operations.

Credit Risk Factors

Adverse regional economic developments could negatively affect BOK Financial's business.

At December 31, 2015, loans to businesses and individuals with collateral primarily located in Texas represented approximately 33% of the total loan portfolio and loans to businesses and individuals with collateral primarily located in Oklahoma represented approximately 24% of our total loan portfolio. These geographic concentrations subject the loan portfolio to the general economic conditions within these areas. Poor economic conditions in Oklahoma, Texas or other markets in the southwest region may cause BOK Financial to incur losses associated with higher default rates and decreased collateral values in BOK Financial's loan portfolio. A regional economic downturn could also adversely affect revenue from brokerage and trading activities, mortgage loan originations and other sources of fee-based revenue.

Extended oil and gas commodity price downturns could negatively effect BOK Financial customers

At December 31, 2015, 19% of BOK Financial's total loan portfolio is comprised of loans to borrowers in the energy industry. The energy industry is historically cyclical and prolonged periods of low oil and gas commodity prices could negatively impact borrowers' ability to pay. In addition, the Company does business in several major oil and natural gas producing states including Oklahoma, Texas and Colorado. The economies of these states could be negatively impacted by prolonged periods of low oil and gas commodity prices resulting in increased credit migration to classified and nonaccruing categories, higher loan loss provisions and risk of credit losses from both energy borrowers and businesses and individuals in those regional economies.

Other adverse economic factors affecting particular industries could have a negative effect on BOK Financial customers and their ability to make payments to BOK Financial.

Certain industry-specific economic factors also affect BOK Financial. For example, BOK Financial's loan portfolio includes commercial real estate loans. A downturn in the real estate industry in general or in certain segments of the commercial real estate industry in the southwest region could also have an adverse effect on BOK Financial's operations.

Adverse global economic factors could have a negative effect on BOK Financial customers and counter-parties.

Economic conditions globally, including those of the European Union and China, could impact BOK Financial's customers and counter-parties with which we do business. We have no direct exposure to European sovereign debt and our aggregate gross exposure to European financial institutions totaled $8.8 million at December 31, 2015. Our exposure to Chinese financial institution is limited. In addition, we have an aggregate gross exposure to internationally active domestic financial institutions of approximately $200 million at December 31, 2015 composed of $182 million of cash and securities positions and $19 million of gross derivative positions. The financial condition of these institutions is monitored on an on-going basis. We have not identified any significant customer exposures to European sovereign debt, European financial institutions or Chinese financial institutions.

Liquidity and Interest Rate Risk Factors

Fluctuations in interest rates could adversely affect BOK Financial's business.

BOK Financial's business is highly sensitive to:

- the monetary policies implemented by the Federal Reserve Board, including the discount rate on bank borrowings and changes in reserve requirements, which affect BOK Financial's ability to make loans and the interest rates we may charge;
- changes in prevailing interest rates, due to the dependency of the Bank on interest income;
- open market operations in U.S. Government securities.

A significant increase in market interest rates, or the perception that an increase may occur, could adversely affect both BOK Financial's ability to originate new loans and BOK Financial's ability to grow. Conversely, a decrease in interest rates could result in acceleration in the payment of loans, including loans underlying BOK Financial's holdings of residential mortgage-backed securities and termination of BOK Financial's mortgage servicing rights. In addition, changes in market interest rates, changes in the relationships between short-term and long-term market interest rates or changes in the relationships between different interest rate indices, could affect the interest rates charged on interest-earning assets differently than the interest rates paid on interest-bearing liabilities. This difference could result in an increase in interest expense relative to interest income which would reduce the Company’s net interest revenue. In a low interest rate environment, the Company's ability to support net interest revenue through continued securities portfolio growth or further reduce deposit costs could be limited. An increase in market interest rates also could adversely affect the ability of BOK Financial's floating-rate borrowers to meet their higher payment obligations. If this occurred, it could cause an increase in nonperforming assets and net charge-offs, which could adversely affect BOK Financial's business.

Changes in mortgage interest rates could adversely affect mortgage banking operations as well as BOK Financial's substantial holdings of residential mortgage-backed securities and mortgage servicing rights.

Our available for sale residential mortgage-backed security portfolio represents investment interests in pools of residential mortgages, composing $6.0 billion or 19% of total assets of the Company at December 31, 2015. Residential mortgage-backed securities are highly sensitive to changes in interest rates. BOK Financial mitigates this risk somewhat by investing principally in shorter duration mortgage products, which are less sensitive to changes in interest rates. A significant decrease in interest rates has led mortgage holders to refinance the mortgages constituting the pool backing the securities, subjecting BOK Financial to a risk of prepayment and decreased return on investment due to subsequent reinvestment at lower interest rates. A significant decrease in interest rates has also accelerated premium amortization. Conversely, a significant increase in interest rates could cause mortgage holders to extend the term over which they repay their loans, which delays the Company’s opportunity to reinvest funds at higher rates.

Residential mortgage-backed securities are also subject to credit risk from delinquency or default of the underlying loans. BOK Financial mitigates this risk somewhat by investing in securities issued by U.S. government agencies. Principal and interest payments on the loans underlying these securities are guaranteed by these agencies.

The Federal Reserve Board and other government agencies have implemented policies and programs to stimulate the U.S. economy and housing market. These policies and programs have significantly reduced both primary mortgage interest rates, the rates paid by borrowers, and secondary mortgage interest rates, the rates required by investors in mortgage backed securities. They have also reduced barriers to mortgage refinancing such as insufficient home values.

BOK Financial derives a substantial amount of revenue from mortgage banking activities, including $78 million from the production and sale of mortgage loans, $56 million from the servicing of mortgage loans and $34 million from sales of financial instruments to other mortgage lenders in 2015. These activities, as well our substantial holdings of residential mortgage backed securities and mortgage servicing rights may be adversely affected by changes in government policies and programs.

In addition, as part of BOK Financial's mortgage banking business, BOK Financial has substantial holdings of mortgage servicing rights, totaling $219 million or 0.69% of total assets at December 31, 2015. The value of these rights is also very sensitive to changes in interest rates. Falling interest rates tend to increase loan prepayments, which may lead to cancellation of the related servicing rights. BOK Financial attempts to manage this risk by maintaining an active hedging program for its mortgage servicing rights. The Company's hedging program focuses on partially hedging the risk of changes in fair value, primarily related to changes mortgage interest rates. Other factors, such as short-term interest rates, also impact the value of mortgage servicing rights, may not be hedged. The value of mortgage servicing rights may also decrease due to rising delinquency or default of the loans serviced which are not hedged. This risk is mitigated somewhat by adherence to underwriting standards on loans originated for sale.

Market disruptions could impact BOK Financial’s funding sources.

BOK Financial’s subsidiary bank may rely on other financial institutions and the Federal Home Loan Bank of Topeka as a significant source of funds. Our ability to fund loans, manage our interest rate risk and meet other obligations depends on funds borrowed from these sources. The inability to borrow funds at market interest rates could have a material adverse effect on our operations.

Operating Risk Factors

Dependence on technology increases cybersecurity risk.

As a financial institution, we process a significant number of customer transactions and possess a significant amount of sensitive customer information. As technology advances, the ability to initiate transactions and access data has become more widely distributed among mobile phones, personal computers, automated teller machines, remote deposit capture sites and similar access points. These technological advances increase cybersecurity risk. While the Company maintains programs intended to prevent or limit the effects of cybersecurity risk, there is no assurance that unauthorized transactions or unauthorized access to customer information will not occur. The financial, reputational and regulatory impact of unauthorized transactions or unauthorized access to customer information could be significant.

We depend on third parties for critical components of our infrastructure.

We outsource a significant portion of our information systems, communications, data management and transaction processing to third parties. These third parties are sources of risk associated with operational errors, system interruptions or breaches, unauthorized disclosure of confidential information and misuse of intellectual property. If the service providers encounter any of these issues, we could be exposed to disruption of service, reputation damages, and litigation risk that could be material to our business.

Risks Related to an Investment in Our Stock

Although publicly traded, BOK Financial's common stock has substantially less liquidity than the average trading market for a stock quoted on the NASDAQ National Market System.

A relatively small fraction of BOK Financial's outstanding common stock is actively traded. The risks of low liquidity include increased volatility of the price of BOK Financial's common stock. Low liquidity may also limit holders of BOK Financial's common stock in their ability to sell or transfer BOK Financial's shares at the price, time and quantity desired.

BOK Financial's principal shareholder controls a majority of BOK Financial's common stock.

Mr. George B. Kaiser owns approximately 61% of the outstanding shares of BOK Financial's common stock at December 31, 2015. Mr. Kaiser is able to elect all of BOK Financial's directors and effectively control the vote on all matters submitted to a vote of BOK Financial's common shareholders. Mr. Kaiser's ability to prevent an unsolicited bid for BOK Financial or any other change in control could have an adverse effect on the market price for BOK Financial's common stock. A substantial majority of BOK Financial's directors are not officers or employees of BOK Financial or any of its affiliates. However, because of Mr. Kaiser's control over the election of BOK Financial's directors, he could change the composition of BOK Financial's Board of Directors so that it would not have a majority of outside directors.

Possible future sales of shares by BOK Financial's principal shareholder could adversely affect the market price of BOK Financial's common stock.

Mr. Kaiser has the right to sell shares of BOK Financial's common stock in compliance with the federal securities laws at any time, or from time to time. The federal securities laws will be the only restrictions on Mr. Kaiser's ability to sell. Because of his current control of BOK Financial, Mr. Kaiser could sell large amounts of his shares of BOK Financial's common stock by causing BOK Financial to file a registration statement that would allow him to sell shares more easily. In addition, Mr. Kaiser could sell his shares of BOK Financial's common stock without registration under Rule 144 of the Securities Act. Although BOK Financial can make no predictions as to the effect, if any, that such sales would have on the market price of BOK Financial's common stock, sales of substantial amounts of BOK Financial's common stock, or the perception that such sales could occur, could adversely affect market prices. If Mr. Kaiser sells or transfers his shares of BOK Financial's common stock as a block, another person or entity could become BOK Financial's controlling shareholder.

Statutory restrictions on subsidiary dividends and other distributions and debts of BOK Financial's subsidiaries could limit amounts BOK Financial's subsidiaries may pay to BOK Financial.

A substantial portion of BOK Financial's cash flow typically comes from dividends paid by the Bank. Statutory provisions and regulations restrict the amount of dividends the Bank may pay to BOK Financial without regulatory approval. Management also developed, and the BOK Financial board of directors approved, an internal capital policy that is more restrictive than the regulatory capital standards. In the event of liquidation, creditors of the Bank and other non-bank subsidiaries of BOK Financial are entitled to receive distributions from the assets of that subsidiary before BOK Financial, as holder of an equity interest in the subsidiaries, is entitled to receive any distributions.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

BOK Financial and its subsidiaries own and lease improved real estate that is carried at $178 million, net of depreciation and amortization. The Company’s principal offices are located in leased premises in the Bank of Oklahoma Tower in Tulsa, Oklahoma. Banking offices are primarily located in Tulsa and Oklahoma City, Oklahoma; Dallas, Fort Worth and Houston, Texas; Albuquerque, New Mexico; Denver, Colorado; Phoenix, Arizona; and Kansas City, Kansas/Missouri. Primary operations facilities are located in Tulsa and Oklahoma City, Oklahoma; Dallas, Texas and Albuquerque, New Mexico. The Company’s facilities are suitable for their respective uses and present needs.

The information set forth in Notes 5 and 14 of the Company’s Notes to Consolidated Financial Statements, which appear elsewhere herein, provides further discussion related to properties.

ITEM 3. LEGAL PROCEEDINGS

The information set forth in Note 14 of the Company’s Notes to Consolidated Financial Statements, which appear elsewhere herein, provides discussion related to legal proceedings.

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

BOK Financial's $0.00006 par value common stock is traded on the NASDAQ Stock Market under the symbol BOKF. As of January 31, 2016, common shareholders of record numbered 798 with 66,119,435 shares outstanding.

The highest and lowest quarterly closing bid price for shares and cash dividends declared per share of BOK Financial common stock follows:

	First	Second	Third	Fourth
2015:				
Low	$53.37	$60.18	$57.09	$58.92
High	61.67	70.72	70.15	72.44
Cash dividends declared	0.42	0.42	0.42	0.43
2014:				
Low	$62.34	$62.18	$63.47	$57.87
High	69.69	70.18	68.71	62.28
Cash dividends declared	0.40	0.40	0.40	0.42

Shareholder Return Performance Graph

Set forth below is a line graph comparing the change in cumulative shareholder return of the NASDAQ Index, the NASDAQ Bank Index, and the KBW 50 Bank Index for the period commencing December 31, 2010 and ending December 31, 2015.*

	Period Ending December 31,					
Index	2010	2011	2012	2013	2014	2015
BOK Financial Corporation	100.00	105.19	109.01	136.04	126.24	129.04
NASDAQ Composite	100.00	99.21	116.82	163.75	188.03	201.40
NASDAQ Bank Index	100.00	89.50	106.23	150.55	157.95	171.92
KBW 50	100.00	76.82	102.19	140.78	153.96	154.73

* Graph assumes value of an investment in the Company's Common Stock for each index was $100 on December 31, 2010. The KBW 50 Bank index is the Keefe, Bruyette & Woods, Inc. index, which is available only for calendar quarter end periods. Cash dividends on Common Stock are assumed to have been reinvested in BOK Financial Common Stock.

The following table provides information with respect to purchases made by or on behalf of the Company or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934), of the Company's common stock during the three months ended December 31, 2015.

Period	Total Number of Shares Purchased [2]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs [1]	Maximum Number of Shares that May Yet Be Purchased Under the Plans
October 1, 2015 to October 31, 2015	47,720	$67.36	40,000	4,960,000
November 1, 2015 to November 30, 2015	424,340	$68.90	423,000	4,537,000
December 1, 2015 to December 31, 2015	1,416,069	$62.88	1,411,074	3,125,926
Total	1,888,129		1,874,074	

[1] On October 1, 2015, the Company's board of directors authorized the Company to repurchase up to five million shares of the Company's common stock. As of December 31, 2015, the Company had repurchased 1,874,074 shares under this plan. Future repurchases of the Company's common stock will vary based on market conditions, regulatory limitations and other factors.

[2] The Company routinely repurchases shares from employees to cover the exercise price and taxes in connection with employee shared-based compensation.

ITEM 6. SELECTED FINANCIAL DATA

The selected financial data is set forth within Table 1 of Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

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

Table 1 -- Consolidated Selected Financial Data
(Dollars in thousands, except per share data)

	December 31, 2015	2014	2013	2012	2011
Selected Financial Data					
For the year:					
Interest revenue	$766,828	$732,239	$745,371	$794,871	$813,146
Interest expense	63,474	67,045	70,894	87,322	120,101
Net interest revenue	703,354	665,194	674,477	707,549	693,045
Provision for for credit losses	34,000	—	(27,900)	(22,000)	(6,050)
Fees and commissions revenue	659,019	621,319	603,844	628,880	527,093
Net income attributable to BOK Financial Corporation shareholders	288,565	292,435	316,609	351,191	285,875
Period-end:					
Loans	15,941,154	14,208,037	12,792,264	12,311,456	11,269,743
Assets	31,476,128	29,089,698	27,015,432	28,148,631	25,493,946
Deposits	21,088,158	21,140,859	20,269,327	21,179,060	18,762,580
Subordinated debentures	226,350	347,983	347,802	347,633	398,881
Shareholders' equity	3,230,556	3,302,179	3,020,049	2,957,860	2,750,468
Nonperforming assets[1]	251,908	256,617	247,743	276,716	356,932
Profitability Statistics					
Earnings per share (based on average equivalent shares):					
Basic	$4.22	$4.23	$4.61	$5.15	$4.18
Diluted	4.21	4.22	4.59	5.13	4.17
Percentages (based on daily averages):					
Return on average assets	0.94 %	1.04 %	1.16 %	1.34 %	1.17 %
Return on average total equity	8.66	9.20	10.59	12.19	10.81
Average total equity to average assets	11.03	11.47	11.00	11.05	10.95
Common Stock Performance					
Per Share:					
Book value per common share	$49.03	$47.78	$43.88	$43.29	$40.36
Market price: December 31 close	59.79	60.04	66.32	54.46	54.93
Market range – High close bid price	72.44	70.18	69.36	59.77	56.30
Market range – Low close bid price	53.37	57.87	55.05	52.56	44.00
Cash dividends declared	1.69	1.62	1.54	2.47 [4]	1.13
Dividend payout ratio	40.03 %	38.35 %	33.43 %	48.01 %[4]	27.01 %

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Table 1 -- Consolidated Selected Financial Data
(Dollars in thousands, except per share data)

	December 31, 2015	2014	2013	2012	2011
Selected Balance Sheet Statistics					
Period-end:					
Common equity Tier 1 ratio[2]	12.13 %	N/A	N/A	N/A	N/A
Tier 1 capital ratio[2]	12.13 %	13.33 %	13.77 %	12.78 %	13.27 %
Total capital ratio[2]	13.30	14.66	15.56	15.13	16.49
Leverage ratio[2]	9.25	9.96	10.05	9.01	9.15
Allowance for loan losses to nonaccruing loans[5]	180.09	245.34	184.71	160.92	125.93
Allowance for loan losses to loans	1.41	1.33	1.45	1.75	2.25
Combined allowances for credit losses to loans [3]	1.43	1.34	1.47	1.77	2.33
Miscellaneous (at December 31)					
Number of employees (full-time equivalent)	4,789	4,743	4,632	4,704	4,511
Number of banking locations	152	182	206	217	212
Number of TransFund locations	1,972	2,080	1,998	1,970	1,912
Fiduciary assets	$38,333,638	$35,997,877	$30,137,092	$25,829,038	$22,821,813
Mortgage loans serviced for others	19,678,226	16,162,887	13,718,942	11,981,624	11,300,986

[1] Includes nonaccruing loans, renegotiated loans and assets acquired in satisfaction of loans. Excludes loans past due 90 days or more and still accruing.

[2] Risk-based capital ratios for 2015 calculated under revised regulatory capital rules issued July 2013 and effective for the Company on January 1, 2015. Previous risk-based ratios presented are calculated in accordance with then current regulatory capital rules.

[3] Includes allowance for loan losses and accrual for off-balance sheet credit risk.

[4] Includes $1.00 per share special dividend.

[5] Excludes residential mortgage loans guaranteed by agencies of the U.S. government.

Management's Assessment of Operations and Financial Condition

Overview

The following discussion is management's analysis to assist in the understanding and evaluation of the financial condition and results of operations of BOK Financial Corporation ("BOK Financial" or "the Company"). This discussion should be read in conjunction with the consolidated financial statements and footnotes and selected financial data presented elsewhere in this report.

Economic activity expanded at a solid pace and unemployment continued to improve during 2015. National unemployment rates were 5.0% in December of 2015 compared to 5.6% in December of 2014. Inflationary pressure have remained subdued and the U.S. government has continued to provide accommodative economic policy to support growth in the economy and further reduction in the unemployment rate. According to the minutes of the Federal Open Market Committee ("FOMC") of the Federal Reserve for December, household spending and business investment has expanded at a moderate rate toward the end of 2015 and the housing sector has improved, but net exports have been

soft and inventory investment has slowed. Investment returns for 2015 were flat for large cap U.S. equities, bonds, and developed international markets. Total return was negative for small cap U.S. stocks and down double digits for emerging market equities. And although the S&P 500 was flat, there was considerable volatility during the year.

The FOMC voted to raise the target range for the federal funds rate by ¼ percentage point, bringing it to ¼ to ½ percent, ending an extraordinary seven-year period during which the federal funds rate was held near zero to support the recovery of the economy from the worst financial crisis and recession since the Great Depression. The long end of the yield curve remains under pressure due to weakness in Europe and Japan and the curve will likely continue to flatten in 2016. The continued low interest rate environment has continued to present challenges for all financial institutions as cash flows from loan and securities portfolios are reinvested at current rates and competition for high-quality borrowers has been significant.

Increases in the global supply of oil and other factors caused energy prices to continue to decline in 2015. West Texas Intermediate crude oil fell from a high just below $108/bbl in June 2014 to a low of $27/bbl in January 2016. The longer the

prices remain in a sustained downturn, energy borrowers and the local economies in our geographical footprint will be more significantly impacted.

Performance Summary

Net income for the year ended December 31, 2015 totaled $288.6 million or $4.21 per diluted share compared with net income of $292.4 million or $4.22 per diluted share for the year ended December 31, 2014.

Highlights of 2015 included:

- Net interest revenue totaled $703.4 million for 2015, up from $665.2 million for 2014. Growth in average earning assets primarily related to growth in average loans was partially offset by the impact of lower average rates. Net interest margin was 2.60% for 2015 compared to 2.68% for 2014.
- Fees and commissions revenue increased $37.7 million or 6% over 2014 to $659.0 million for 2015. Mortgage banking revenue increased $25.3 million primarily due to a record level of mortgage loan originations during the year. Fiduciary and asset management revenue grew by $10.5 million due to acquisitions and organic growth.
- Operating expenses totaled $904.6 million, an increase of $57.0 million or 7% over the prior year. Personnel costs increased $46.6 million. Deferred compensation expense for 2014 included a $12.6 million net reduction in the accrual for amounts payable to certain executive officers of the Company under the 2011 True-Up Plan. In addition, cash-based incentive compensation and regular salaries also increased over the prior year. Non-personnel expenses increased $10.5 million or 3% over the prior year due to increased mortgage banking and data processing and communications expense.
- After evaluating all credit factors, the Company determined that a $34.0 million provision for credit losses was necessary in 2015, primarily due to credit migration in the energy portfolio and overall loan portfolio growth. No provision for credit losses was necessary in 2014. The Company had a net recovery of $2.9 million or (0.02)% of average loans for 2015 compared to a net recovery of $2.8 million or (0.02)% of average loans for 2014. Gross charge-offs decreased to $15.2 million in 2015 from $16.2 million in 2014.
- The combined allowance for credit losses totaled $227 million or 1.43% of outstanding loans at December 31, 2015 compared to $190 million or 1.34% of outstanding loans at December 31, 2014.
- Nonperforming assets not guaranteed by U.S. government agencies totaled $156 million or 0.99% of outstanding loans and repossessed assets (excluding those guaranteed by U.S. government agencies) at December 31, 2015 and $129 million or 0.92% of outstanding loans and repossessed assets (excluding those guaranteed by U.S. government agencies) at December 31, 2014. Excluding assets guaranteed by U.S. government agencies, nonaccruing loans increased $48 million and repossessed assets decreased $21 million during 2015.
- Period-end outstanding loan balances were $15.9 billion at December 31, 2015, an increase of $1.7 billion over the prior year. Commercial loan balances grew by $1.2 billion or 13% and commercial real estate loans increased $531 million or 19%. Residential mortgage loans decreased $73 million. Personal loans increased $118 million.
- Period-end deposits totaled $21.1 billion at December 31, 2015, largely unchanged compared to December 31, 2014. Demand deposit accounts increased by $231 million, offset by a $115 million decrease in interest-bearing transaction deposits and a $203 million decrease in time deposit balances.
- New regulatory capital rules were effective for BOK Financial on January 1, 2015 and established a 7% threshold for the common equity Tier 1 ratio. The Company's common equity Tier 1 capital ratio was 12.13% at December 31, 2015. In addition, the Company's Tier 1 capital ratio was 12.13%, total capital ratio was 13.30% and leverage ratio was 9.25% at December 31, 2015. At December 31, 2014, the Company's Tier 1 capital ratio was 13.33% at December 31, 2014, the total capital ratio was 14.66% and the leverage ratio was 9.96%. The decrease in capital ratios was primarily due to share repurchases. The Company repurchased 3,634,578 shares at an average price of $63.15 per share.
- The Company paid cash dividends of $1.69 per common share during 2015 and $1.62 per common share in 2014.

Net income for the fourth quarter of 2015 totaled $59.6 million or $0.89 per diluted share compared to $64.3 million or $0.93 per diluted share for the fourth quarter of 2014.

Highlights of the fourth quarter of 2015 included:

- Net interest revenue totaled $181.3 million for the fourth quarter of 2015, up $11.6 million over the fourth quarter of 2014. Net interest margin was 2.64% for the fourth quarter of 2015 compared to 2.61% for the fourth quarter of 2014. Net interest revenue increased primarily due to the growth in average loan balances, partially offset by a decrease in available for sale securities and interest-bearing cash and cash equivalent balances. An increase in the yield on the available for sale securities portfolio and lower funding costs was partially offset by a decrease in loan yields.
- Fees and commissions revenue was $155.8 million for the fourth quarter of 2015 compared to $157.9 million for the fourth quarter of 2014. Mortgage banking revenue was $5.1 million lower than in the fourth quarter of 2014, partially offset by growth in all other fee categories.
- Operating expenses totaled $232.6 million, an increase of $6.7 million over the prior year, primarily due to increased personnel expense compared to the fourth quarter of 2014. Incentive compensation expense, employee healthcare costs and regular salaries expense all increased over the prior year. The fourth quarter of 2014 included $4.9 million of branch closure costs and a $1.8 million contribution of developed commercial real estate to the BOKF Foundation.
- A $22.5 million provision for credit losses was recorded in the fourth quarter of 2015 due to credit migration and increased impairment in the energy loan portfolio. No provision for credit losses was recorded in the fourth quarter of 2014. Net charge-offs totaled $3.0 million in the fourth quarter of 2015 compared to $2.2 million in the fourth quarter of 2014. Gross charge-offs were $4.9 million compared to $7.2 million in the prior year.

Critical Accounting Policies & Estimates

The Consolidated Financial Statements and accompanying notes are prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”). The Company's accounting policies are more fully described in Note 1 of the Consolidated Financial Statements. Management makes significant assumptions and estimates in the preparation of the Consolidated Financial Statements and accompanying notes in conformity with GAAP that may be highly subjective, complex and subject to variability. Actual results could differ significantly from these assumptions and estimates. The following discussion addresses the most critical areas where these assumptions and estimates could affect the financial condition, results of operations and cash flows of the Company. These critical accounting policies and estimates have been discussed with the appropriate committees of the Board of Directors.

Allowance for Loan Losses and Accrual for Off-Balance Sheet Credit Risk

The appropriateness of the allowance for loan losses and accrual for off-balance sheet credit risk is assessed quarterly by management based on an ongoing evaluation of the probable estimated losses inherent in the loan portfolio and probable estimated losses on unused commitments to provide financing. A consistent, well-documented methodology has been developed and is applied by an independent Credit Administration department to assure consistency across the Company. The allowance for loan losses consists of specific allowances attributed to certain impaired loans that have not yet been charged down to amounts we expect to recover, general allowances for unimpaired loans that are based on estimated loss rates by loan class and nonspecific allowances for risks beyond factors specific to a particular portfolio segment or loan class. There have been no material changes in the approach or techniques utilized in developing the allowance for loan losses and accrual for off-balance sheet credit risk during 2015.

Loans are considered impaired when it is probable that we will not collect all amounts due according to the contractual terms of the loan agreements, including loans modified in a troubled debt restructuring. Internally risk graded loans are evaluated individually for impairment. Substantially all commercial and commercial real estate loans and certain residential mortgage and consumer loans are risk graded through a quarterly evaluation of the borrower's ability to repay. Certain commercial loans and most residential mortgage and consumer loans which represent small balance, homogeneous pools are not risk graded. Non-risk graded loans are identified as impaired based on

performance status. Generally, non-risk graded loans are considered impaired when 90 or more days past due, in bankruptcy or modified in a troubled debt restructuring.

Specific allowances for impaired loans that have not yet been charged down to amounts we expect to recover are measured by an evaluation of estimated future cash flows discounted at the loan's initial effective interest rate or the fair value of collateral for certain collateral dependent loans. Collateral value of real property is generally based on third party appraisals that conform to Uniform Standards of Professional Appraisal Practice, less estimated selling costs. Appraised values are on an “as-is” basis and generally are not adjusted by the Company. Updated appraisals are obtained at least annually or more frequently if market conditions indicate collateral values may have declined. Collateral value of mineral rights is determined by our internal staff of engineers based on projected cash flows under current market conditions. The value of other collateral is generally determined by our special assets staff based on liquidation cash flows under current market conditions. Collateral values and available cash resources that support impaired loans are evaluated quarterly. Historical statistics may be used as a practical way to estimate impairment in limited situations, such as when a collateral dependent loan is identified as impaired near the end of a reporting period until an updated appraisal of collateral value is received or a full assessment of future cash flows is completed. Estimates of future cash flows and collateral values require significant judgments and may be volatile.

General allowances for unimpaired loans are based on estimated loss rates by loan class. The appropriate historical gross loss rate for each loan class is determined by the greater of the current loss rate based on the most recent twelve months or a ten-year average gross loss rate. Recoveries are not directly considered in the estimation of historical loss rates. Recoveries generally do not follow predictable patterns and are not received until well-after the charge-off date as a result of protracted legal proceedings. For risk graded loans, historical loss rates are adjusted for changes in risk rating. For each loan class, the weighted average current risk grade is compared to the weighted average long-term risk grade. This comparison determines whether the risk in each loan class is increasing or decreasing. Historical loss rates are adjusted upward or downward in proportion to changes in weighted average risk grading. General allowances for unimpaired loans also consider inherent risks identified for a given loan class. Inherent risks include consideration of the loss rates that most appropriately represent the current credit cycle and other factors attributable to a specific loan class which have not yet been represented in the historical gross loss rates or risk grading. Examples of these factors include changes in commodity prices or engineering imprecision which may affect the value of reserves that secure our energy loan portfolio, construction risk that may affect commercial real estate loans, changes in regulations and public policy that may disproportionately impact health care loans and changes in loan product types.

Nonspecific allowances are maintained for risks beyond factors specific to a particular portfolio segment or loan class. These factors include trends in the economy in our primary lending areas, concentrations in loans with large balances and other relevant factors.

Fair Value Measurement

Certain assets and liabilities are recorded at fair value in the Consolidated Financial Statements. Fair value is defined by applicable accounting guidance as the price to sell an asset or transfer a liability in an orderly transaction between market participants in the principal markets for the given asset or liability at the measurement date based on markets conditions at that date. An orderly transaction assumes exposure to the market for a customary period for marketing activities prior to the measurement date and not a forced liquidation or distressed sale.

A hierarchy for fair value has been established that prioritizes the inputs of valuation techniques used to measure fair value into three broad categories: unadjusted quoted prices in active markets for identical assets or liabilities (Level 1), other observable inputs that can be observed either directly or indirectly (Level 2) and unobservable inputs for assets or liabilities (Level 3). Fair value may be recorded for certain assets and liabilities every reporting period on a recurring basis or under certain circumstances on a non-recurring basis.

The following represents significant fair value measurements included in the Consolidated Financial Statements based on estimates. See Note 18 of the Consolidated Financial Statements for additional discussion of fair value

measurement and disclosure included in the Consolidated Financial Statements.

Mortgage Servicing Rights

We have a significant investment in mortgage servicing rights. Our mortgage servicing rights are primarily retained from sales in the secondary market of residential mortgage loans we have originated or purchased from correspondent lenders. Occasionally mortgage servicing rights may be purchased from other lenders. Both originated and purchased mortgage servicing rights are initially recognized at fair value. We carry all mortgage servicing rights at fair value. Changes in fair value are recognized in earnings as they occur.

There is no active market for mortgage servicing rights after origination. The fair value of mortgage servicing rights are determined by discounting the projected cash flows. Certain significant assumptions and estimates used in valuing mortgage servicing rights are based on current market sources including projected prepayment speeds, assumed servicing costs, earnings on escrow deposits, ancillary income and discount rates. Assumptions used to value our mortgage servicing rights are considered significant unobservable inputs and represent our best estimate of assumptions that market participants would use to value this asset. A separate third party model is used to estimate prepayment speeds based on interest rates, housing turnover rates, estimated loan curtailment, anticipated defaults and other relevant factors. The prepayment model is updated daily for changes in market conditions and adjusted to better correlate with actual performance of our servicing portfolio. The discount rate is based on benchmark rates for mortgage loans plus a market spread expected by investors in servicing rights. Significant assumptions used to determine the fair value of our mortgage servicing rights are presented in Note 7 to the Consolidated Financial Statements. At least annually, we request estimates of fair value from outside sources to corroborate the results of the valuation model.

The assumptions used in this model are primarily based on mortgage interest rates. Evaluation of the effect of a change in one assumption without considering the effect of that change on other assumptions is not meaningful. Considering all related assumptions, we expect a 50 basis point increase in primary mortgage interest rates to increase the fair value of our servicing rights by $17 million. We expect a $19 million decrease in the fair value of our mortgage servicing rights from a 50 basis point decrease in primary mortgage interest rates.

Valuation of Derivative Instruments

We use interest rate derivative instruments to manage our interest rate risk. We also offer interest rate, commodity, foreign exchange and equity derivative contracts to our customers. All derivative instruments are carried on the balance sheet at fair value. Fair values for exchange-traded contracts are based on quoted prices in an active market for identical instruments. Fair values for over-the-counter interest rate contracts used to manage our interest rate risk are generated internally using third-party valuation models. Inputs used in third-party valuation models to determine fair values are considered significant other observable inputs. Fair values for interest rate, commodity, foreign exchange and equity contracts used in our customer hedging programs are based on valuations generated internally by third-party provided pricing models. These models use significant other observable market inputs to estimate fair values. Changes in assumptions used in these pricing models could significantly affect the reported fair values of derivative assets and liabilities, though the net effect of these changes should not significantly affect earnings.

Credit risk is considered in determining the fair value of derivative instruments. Deterioration in the credit rating of customers or dealers reduces the fair value of asset contracts. The reduction in fair value is recognized in earnings during the current period. Fair value adjustments are based on various risk factors including but not limited to counterparty credit rating or equivalent loan grading, derivative contract notional size, price volatility of the underlying commodity, duration of the derivative contracts and expected loss severity. Expected loss severity is based on historical losses for similarly risk-graded commercial loan customers. Deterioration in our credit rating below investment grade would affect the fair value of our derivative liabilities. In the event of a credit down-grade, the fair value of our derivative liabilities would decrease. The reduction in fair value would be recognized in earnings in the current period. The impact of credit valuation adjustments on the total valuation of derivative contracts was not significant.

Valuation of Securities

The fair value of our securities portfolio is generally based on a single price for each financial instrument provided to us by a third-party pricing service determined by one or more of the following:

- Quoted prices for similar, but not identical, assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable, such as interest rate and yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates;
- Other inputs derived from or corroborated by observable market inputs.

The underlying methods used by the third-party pricing services are considered in determining the primary inputs used to determine fair values. We evaluate the methodologies employed by the third-party pricing services by comparing the price provided by the pricing service with other sources, including brokers' quotes, sales or purchases of similar instruments and discounted cash flows to establish a basis for reliance on the pricing service values. Significant differences between the pricing service provided value and other sources are discussed with the pricing service to understand the basis for their values. Based on all observable inputs, management may adjust prices obtained from third-party pricing services to more appropriately reflect the prices that would be received to sell assets or paid to transfer liabilities in orderly transactions in the current market. No significant adjustments were made to prices provided by third-party pricing services at December 31, 2015 or December 31, 2014.

Valuation of Impaired Loans and Real Estate and Other Repossessed Assets

The fair value of collateral for certain impaired loans and real estate and other repossessed assets is measured on a non-recurring basis. The fair value of real estate is generally based on unadjusted third-party appraisals derived principally from or corroborated by observable market data. Fair value measurements based on these appraisals are considered to be based on Level 2 inputs. Fair value measurements based on appraisals that are not based on observable inputs or that require significant adjustments by us or fair value measurements that are not based on third-party appraisals are considered to be based on Level 3 inputs. Significant unobservable inputs include listing prices for comparable assets, uncorroborated expert opinions or management's knowledge of the collateral or industry.

The fair value of mineral rights is generally determined by our internal staff of engineers based on projected cash flows from proven oil and gas reserves under existing economic and operating conditions. Proven oil and gas reserves are estimated quantities that geological and engineering data demonstrate, with reasonable certainty, to be recoverable in future years from known reservoirs using existing prices and costs. Projected cash flows incorporate assumptions related to a number of factors including production, sales prices, operating expenses, severance, ad valorem taxes, capital costs and appropriate discount rate. Fair values determined through this process are considered to be based on Level 3 inputs.

Goodwill Impairment

Goodwill for each reporting unit is evaluated for impairment annually as of October 1st or more frequently if conditions indicate that impairment may have occurred. The evaluation of possible goodwill impairment involves significant judgment based upon short-term and long-term projections of future performance.

We perform a qualitative assessment that evaluates, based on the weight of the evidence, the significance of all identified events and circumstances in the context of determining whether it is more likely than not that the fair value of our reporting units are less than their carrying amounts, including goodwill. This qualitative assessment considers general economic conditions including trends in unemployment rates in our primary geographical areas, our earnings and stock price changes during the year, current and anticipated credit quality performance and the prolonged low interest rate environment and the impact of increased regulation. The qualitative assessment is supplemented by quantitative analysis that compares the Company's overall performance and each individual reporting unit's performance against prior period actual results and management's plans, and the excess of each reporting unit's most recently measured fair value over its carrying value, including goodwill attributed to the reporting unit.

If we conclude that it is not more likely than not that the fair value of each reporting unit is less than its carrying amount, including goodwill through the qualitative assessment, we perform a quantitative assessment. The quantitative assessment considers goodwill to be impaired if the estimated fair value of the reporting unit is less than its carrying value, including goodwill. Impairment is measured through additional assessment of the estimated fair values for each asset and liability assigned to the reporting unit when necessary.

Numerous other factors could affect future impairment analyses including credit losses that exceed projected amounts or failure to meet growth projections. Additionally, fee income may be adversely affected by increasing residential mortgage interest rates and changes in federal regulations.

Other-Than-Temporary Impairment

On a quarterly basis, the Company performs separate evaluations of impaired debt and equity investment and available for sale securities to determine if the unrealized losses are temporary or other-than-temporary.
For impaired debt securities, management determines whether it intends to sell or if it is more-likely-than-not that it will be required to sell the impaired securities. This determination considers current and forecasted liquidity requirements, regulatory and capital requirements and securities portfolio management. All impaired debt securities we intend to sell or we expect to be required to sell are considered other-than-temporarily impaired and the full impairment loss is recognized as a charge against earnings. All impaired debt securities we do not intend or expect to be required to sell are evaluated further.
Impairment of debt securities rated investment grade by all nationally-recognized rating agencies is considered temporary unless specific contrary information is identified. Impairment of securities rated below investment grade by at least one of the nationally-recognized rating agencies is evaluated to determine if we expect to recover the entire amortized cost basis of the security based on the present value of projected cash flows from individual loans underlying each security. Below investment grade securities we own consist primarily of privately issued residential mortgage-backed securities. The primary assumptions used to project cash flows are disclosed in Note 2 to the Consolidated Financial Statements.

We consider the principal and interest cash flows from the underlying loan pool as well as the remaining credit enhancement coverage as part of our assessment of cash flows available to recover the amortized cost of our securities. The credit enhancement coverage is an estimate of currently remaining subordinated tranches available to absorb losses on pools of loans that support the security. Credit losses, which are defined as the excess of current amortized cost over the present value of projected cash flows, on other-than-temporarily impaired debt securities are recognized as a charge against earnings. Any remaining impairment attributed to factors other than credit losses are recognized in accumulated other comprehensive losses.

Credit losses are based on long-term projections of cash flows which are sensitive to changes in assumptions. Changes in assumptions and differences between assumed and actual results regarding unemployment rates, delinquency rates, default rates, foreclosures costs and home price depreciation can affect estimated and actual credit losses. Deterioration of these factors beyond those described in Note 2 to the Consolidated Financial Statements could result in the recognition of additional credit losses.

We performed a sensitivity analysis of all privately issued residential mortgage-backed securities. Significant assumptions of this analysis included an increase in the unemployment rate to 10% with an additional 25.4% home price depreciation indicates an additional $300 thousand of credit losses are possible.

Impaired equity securities, including perpetual preferred stocks, are evaluated based on our ability and intent to hold the securities until fair value recovers over a period not to exceed three years. The assessment of the ability and intent to hold these securities considers liquidity needs, asset / liability management objectives and securities portfolio objectives. Factors considered when assessing recovery include forecasts of general economic conditions and specific performance of the issuer, analyst ratings, and credit spreads for preferred stocks which have debt-like characteristics.

Income Taxes

Determination of income tax expense and related assets and liabilities is complex and requires estimates and judgments when applying tax laws, rules, regulations and interpretations. It also requires judgments as to future earnings and the timing of future events. Accrued income taxes represent an estimate of net amounts due to or from taxing jurisdictions based upon these estimates, interpretations and judgments.

Management evaluates the Company's current tax expense or benefit based upon estimates of taxable income, tax credits and statutory tax rates. Annually, we file tax returns with each jurisdiction where we conduct business and adjust recognized income tax expense or benefit to filed tax returns.

We recognize deferred tax assets and liabilities based upon the differences between the values of assets and liabilities as recognized in the financial statements and their related tax basis using enacted tax rates in effect for the year in which the differences are expected to be recovered or settled. A valuation allowance is provided when it is more likely than not that some portion of the entire deferred tax asset may not be realized based on taxes previously paid in net loss carry-back periods and other factors.

We also recognize the benefit of uncertain income tax positions when based upon all relevant evidence it is more-likely-than-not that our position would prevail upon examination, including resolution of related appeals or litigation, based upon the technical merits of the position. Unrecognized tax benefits, including estimated interest and penalties, are part of our current accrued income tax liability. Estimated penalties and interest are recognized in income tax expense. Income tax expense in future periods may decrease if an uncertain tax position is favorably resolved, generally upon completion of an examination by the taxing authorities, expiration of a statute of limitations, or changes in facts and circumstances.

Results of Operations

Net Interest Revenue and Net Interest Margin

Net interest revenue is the interest earned on debt securities, loans and other interest-earning assets less interest paid for interest-bearing deposits and other borrowings. The net interest margin is calculated by dividing tax-equivalent net interest revenue by average interest-earning assets. Net interest spread is the difference between the average rate earned on interest-earning assets and the average rate paid on interest-bearing liabilities. Net interest margin is typically greater than net interest spread due to interest income earned on assets funded by non-interest bearing liabilities such as demand deposits and equity.

Tax-equivalent net interest revenue totaled $715.8 million for 2015, up from $676.1 million for 2014. Net interest margin was 2.60% for 2015 and 2.68% for 2014. Tax-equivalent net interest revenue increased $39.7 million over the prior year. Net interest revenue increased $60.1 million from growth in earning assets, partially offset by a $20.4 million decrease due to rates. Loan yields narrowed, partially offset by lower funding costs and increased yield on the available for sale securities portfolio. Table 2 shows the effects on net interest revenue of changes in average balances and interest rates for the various types of earning assets and interest-bearing liabilities. In addition, see the Annual and Quarterly Financial Summary of consolidated daily average balances, yields and rates following the Consolidated Financial Statements.

The tax-equivalent yield on earning assets was 2.84% for 2015 compared to 2.95% in 2014. The decrease was primarily due to the change in the mix of earning asset during 2015. Loan yields decreased 23 basis points compared to the prior year primarily due to market pricing pressure and lower interest rates during the majority of 2015. The available for sale securities portfolio yield increased 4 basis points to 1.99%. Yields on restricted equity securities, fair value option securities and interest-bearing cash and cash equivalents all improved over the prior year. Funding costs were down 6 basis points compared to 2014. The cost of interest-bearing deposits decreased 6 basis points, while the cost of other borrowed funds increased 5 basis points largely due to the mix of funding sources. The cost of subordinated debentures decreased 66 basis points as $122 million of fixed-rate subordinated debt matured on June 1, 2015. The cost of this subordinated debt was 5.56%. The benefit to net interest margin from earning assets funded by non-interest bearing liabilities was 11 basis points for 2015, compared to 14 basis points for 2014.

Average earning assets for 2015 increased $2.4 billion or 9% over 2014. Average loans, net of allowance for loan losses, increased $1.6 billion due primarily to growth in average commercial and commercial real estate loans. The average balance of interest-bearing cash and cash equivalents was up $904 million over the prior year, as borrowings from the Federal Home Loan Bank were deposited in the Federal Reserve to earn a spread. The average balance of available for sale securities, which consists largely of residential and commercial mortgage-backed securities guaranteed by U.S. government agencies, decreased $620 million. We purchase securities to supplement earnings and to manage interest rate risk. We reduced the size of our bond portfolio during 2014 and 2015 through normal monthly runoff to better position the balance sheet for an environment of rising longer-term rates. Our outlook for earning assets is for continued growth in loan balances, partially offset by a reduction in the securities portfolio balance. We expect mid to high single digit annualized loan growth for 2016 and a decrease in the size of the bond portfolio as we migrate toward interest rate neutral. We expect stable to rising net interest margin and increasing net interest revenue.

Growth in average assets was funded by a $518 million increase in average deposits. Average demand deposit balances increased $361 million over the prior year. Average interest-bearing transaction accounts were up $182 million, partially offset by a $57 million decrease in average time deposits. Average borrowed funds increased $1.7 billion over the prior year. Borrowings from the Federal Home Loan Banks increased $3.0 billion, partially offset by decreased funds purchased, repurchase agreements and subordinated debenture balances compared to the prior year.

Our overall objective is to manage the Company's balance sheet to be relatively neutral to changes in interest rates as is further described in the Market Risk section of this report. As shown in Table 20, approximately 82% of our commercial and commercial real estate loan portfolios are either variable rate loans or fixed rate loans that will re-price within one year. These loans are funded primarily by deposit accounts that are either non-interest bearing, or that re-price more slowly than the loans. The result is a balance sheet that would be asset sensitive, which means that assets generally re-price more quickly than liabilities. Among the strategies that we use to manage toward a relatively rate-neutral position, we purchase fixed rate residential mortgage-backed securities issued primarily by U.S. government agencies and fund them with market rate sensitive liabilities. The liability-sensitive nature of this strategy provides an offset to the asset-sensitive characteristics of our loan portfolio. We also may use derivative instruments to manage our interest rate risk.

The effectiveness of these strategies is reflected in the overall change in net interest revenue due to changes in interest rates as shown in Table 2 and in the interest rate sensitivity projections as shown in the Market Risk section of this report.

Fourth Quarter 2015 Net Interest Revenue

Tax-equivalent net interest revenue totaled $184.5 million for the fourth quarter of 2015, up from $172.5 million for the fourth quarter of 2014. Net interest margin was 2.64% for the fourth quarter of 2015 and 2.61% for the fourth quarter of 2014.

Tax-equivalent net interest revenue increased $12.0 million over the fourth quarter of 2014. Net interest revenue increased $15.4 million primarily due to the growth in average loan balances, partially offset by a decrease in available for sale securities and interest-bearing cash and cash equivalent balances. Net interest revenue decreased $3.4 million due primarily to lower loan yields, partially offset by lower funding costs and increased yield on the available for sale securities portfolio.

The tax-equivalent yield on earning assets was 2.86% for the fourth quarter of 2015, unchanged compared to the fourth quarter of 2014. Loan yields decreased 18 basis points due primarily to continued market pricing pressure and lower interest rates compared to the fourth quarter of 2014. The available for sale securities portfolio yield increased 5 basis points to 2.04%. The yield on interest-bearing cash and cash equivalents increased 1 basis point to 0.29%. Funding costs were down 5 basis points from the fourth quarter of 2014. The cost of interest-bearing deposits decreased 6 basis points and the cost of other borrowed funds increased 9 basis points. The benefit to net interest margin from earning assets funded by non-interest bearing liabilities was 12 basis points in the fourth quarter of 2015 and 14 basis points in the fourth quarter of 2014.

Average earning assets for the fourth quarter of 2015 increased $1.6 billion over the fourth quarter of 2014. Average loans, net of allowance for loan losses, increased $1.7 billion over the fourth quarter of 2014 due primarily to growth in average commercial and commercial real estate loans. The average balance of interest-bearing cash and cash equivalents and available for sale securities decreased compared to the fourth quarter of 2014, partially offset by an increase in the average balance of fair value option securities held as an economic hedge of mortgage servicing rights and restricted equity securities.

Average deposits increased $7.4 million over the fourth quarter of 2014. Average demand deposit balances increased $339 million. Average interest-bearing transaction accounts decreased $203 million and average time deposits decreased $164 million. Average borrowed funds increased $1.6 billion over the fourth quarter of 2014 primarily due to increased Federal Home Loan Bank borrowings.

2014 Net Interest Revenue

Tax-equivalent net interest revenue for 2014 was $676.1 million compared to $684.8 million for 2013. Net interest margin was 2.68% for 2014 compared to 2.80% for 2013. The decrease in net interest margin was due primarily to narrowing loan yields during the year, partially offset by growth in earning assets.

The tax-equivalent yield on average earning assets decreased 14 basis points from 2013. Loan yields decreased 29 basis points. Spreads narrowed primarily due to market pricing pressure. The available for sale securities portfolio yield was down 2 basis points due to cash flow reinvestment at lower rates. The cost of interest-bearing liabilities decreased 2 basis points. The cost of interest-bearing deposits was down 4 basis points and the cost of other borrowed funds increased 3 basis points largely due to the mix of funding sources.

Average earning assets increased $537 million during 2014. Average loans, net of allowance for loan losses, increased $1.1 billion and the average balance of the available for sale securities portfolio decreased $1.2 billion. We began to proactively shrink the size of our securities portfolio beginning in the fourth quarter of 2013 to better position the balance sheet for an environment of rising longer-term rates. The average balance of interest-bearing cash and cash equivalents grew by $624 million over 2013. Growth in average assets was funded by a $692 million increase in average deposit balances and a $20 million decrease in average borrowed funds balances. Average demand deposit account balances grew by $597 million and average interest-bearing transaction account balances grew by $214 million, partially offset by a $151 million decrease in average time deposit balances. At the end of August 2014, we increased our borrowings from the Federal Home Loan Banks by approximately $1.5 billion, earning a small spread by depositing the proceeds in the Federal Reserve. Increased borrowings from the Federal Home Loan Banks and increased repurchase agreement balances were offset by a decrease in average funds purchased compared to 2013.

Table 2 – Volume/Rate Analysis
(In thousands)

	Year Ended December 31, 2015 / 2014			Year Ended December 31, 2014 / 2013		
		Change Due To[1]			Change Due To[1]	
	Change	Volume	Yield / Rate	Change	Volume	Yield /Rate
Tax-equivalent interest revenue:						
Interest-bearing cash and cash equivalents	$2,831	$2,331	$500	$1,674	$1,417	$257
Trading securities	535	625	(90)	(176)	(813)	637
Investment securities:						
Taxable securities	(251)	172	(423)	(1,077)	(670)	(407)
Tax-exempt securities	(814)	(579)	(235)	461	1,281	(820)
Total investment securities	(1,065)	(407)	(658)	(616)	611	(1,227)
Available for sale securities:						
Taxable securities	(10,341)	(13,401)	3,060	(21,907)	(19,705)	(2,202)
Tax-exempt securities	20	(417)	437	(177)	(778)	601
Total available for sale securities	(10,321)	(13,818)	3,497	(22,084)	(20,483)	(1,601)
Fair value option securities	5,653	5,025	628	(296)	(446)	150
Restricted equity securities	6,492	5,659	833	1,969	(505)	2,474
Residential mortgage loans held for sale	3,459	4,540	(1,081)	1,638	206	1,432
Loans	28,510	61,236	(32,726)	5,413	42,410	(36,997)
Total tax-equivalent interest revenue	36,094	65,191	(29,097)	(12,478)	22,397	(34,875)
Interest expense:						
Transaction deposits	(936)	110	(1,046)	(1,398)	382	(1,780)
Savings deposits	(18)	45	(63)	(41)	33	(74)
Time deposits	(5,559)	(839)	(4,720)	(3,442)	(2,346)	(1,096)
Funds purchased	(276)	(336)	60	(507)	(310)	(197)
Repurchase agreements	(301)	(106)	(195)	80	75	5
Other borrowings	7,109	7,744	(635)	1,510	780	730
Subordinated debentures	(3,590)	(1,537)	(2,053)	(51)	(6)	(45)
Total interest expense	(3,571)	5,081	(8,652)	(3,849)	(1,392)	(2,457)
Tax-equivalent net interest revenue	39,665	60,110	(20,445)	(8,629)	23,789	(32,418)
Change in tax-equivalent adjustment	1,505			654		
Net interest revenue	$38,160			$(9,283)		

[1] Changes attributable to both volume and yield/rate are allocated to both volume and yield/rate on an equal basis.

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Table 2 – Volume/Rate Analysis (continued)
(In thousands)

	Three Months Ended December 31, 2015 / 2014		
		Change Due To[1]	
	Change	Volume	Yield / Rate
Tax-equivalent interest revenue:			
Interest-bearing cash and cash equivalents	$(34)	$(77)	$43
Trading securities	(61)	(187)	126
Investment securities:			
Taxable securities	(324)	(164)	(160)
Tax-exempt securities	(173)	(146)	(27)
Total investment securities	(497)	(310)	(187)
Available for sale securities:			
Taxable securities	(304)	(1,507)	1,203
Tax-exempt securities	(118)	(116)	(2)
Total available for sale securities	(422)	(1,623)	1,201
Fair value option securities	1,408	1,306	102
Restricted equity securities	1,270	1,142	128
Residential mortgage loans held for sale	(133)	(120)	(13)
Loans	8,994	15,661	(6,667)
Total tax-equivalent interest revenue	10,525	15,792	(5,267)
Interest expense:			
Transaction deposits	(230)	(138)	(92)
Savings deposits	(7)	10	(17)
Time deposits	(1,896)	(552)	(1,344)
Funds purchased	7	1	6
Repurchase agreements	(41)	(39)	(2)
Other borrowings	2,277	1,691	586
Subordinated debentures	(1,545)	(555)	(990)
Total interest expense	(1,435)	418	(1,853)
Tax-equivalent net interest revenue	11,960	15,374	(3,414)
Change in tax-equivalent adjustment	363		
Net interest revenue	$11,597		

[1] Changes attributable to both volume and yield/rate are allocated to both volume and yield/rate on an equal basis.

Other Operating Revenue

Other operating revenue was $666.9 million for 2015, up $44.9 million or 7% over 2014. Fees and commissions revenue increased $37.7 million or 6% over 2014. The change in the fair value of mortgage servicing rights, net of economic hedges, decreased other operating revenue by $7.9 million in 2015 and decreased other operating revenue by $3.7 million in 2014. Net gains on available for sale securities were $10.5 million more than net gains recognized in 2014. Other-than-temporary impairment charges recognized in earnings in 2015 were $1.4 million more than charges recognized in 2014.

Table 3 – Other Operating Revenue
(In thousands)

	Year Ended December 31,				
	2015	2014	2013	2012	2011
Brokerage and trading revenue	$129,556	$134,437	$125,478	$126,930	$104,181
Transaction card revenue	128,621	123,689	116,823	107,985	116,757
Fiduciary and asset management revenue	126,153	115,652	96,082	80,053	73,290
Deposit service charges and fees	90,431	90,911	95,110	98,917	95,872
Mortgage banking revenue	134,375	109,093	121,934	169,302	91,643
Bank-owned life insurance	9,304	9,086	10,155	11,089	11,280
Other revenue	40,579	38,451	38,262	34,604	34,070
Total fees and commissions revenue	659,019	621,319	603,844	628,880	527,093
Gain on other assets, net	5,702	2,953	4,875	2,397	8,666
Gain (loss) on derivatives, net	430	2,776	(4,367)	(301)	2,686
Gain (loss) on fair value option securities, net	(3,684)	10,189	(15,212)	9,230	24,413
Change in fair value of mortgage servicing rights	(4,853)	(16,445)	22,720	(9,210)	(40,447)
Gain on available for sale securities, net	12,058	1,539	10,720	33,845	34,144
Total other-than-temporary impairment	(2,443)	(373)	(2,574)	(1,144)	(10,578)
Portion of loss recognized in (reclassified from) other comprehensive income	624	—	266	(6,207)	(12,929)
Net impairment losses recognized in earnings	(1,819)	(373)	(2,308)	(7,351)	(23,507)
Total other operating revenue	$666,853	$621,958	$620,272	$657,490	$533,048

Fees and commissions revenue

Diversified sources of fees and commissions revenue are a significant part of our business strategy and represented 48% of total revenue for 2015, excluding provision for credit losses and gains and losses on asset sales, securities and derivatives and the change in the fair value of mortgage servicing rights. We believe that a variety of fee revenue sources provide an offset to changes in interest rates, values in the equity markets, commodity prices and consumer spending, all of which can be volatile. As an example of this strength, many of the economic factors that cause net interest revenue compression such as falling interest rates may also drive growth in our mortgage banking revenue. We expect growth in other operating revenue to come through offering new products and services and by further development of our presence in other markets. However, current and future economic conditions, regulatory constraints, increased competition and saturation in our existing markets could affect the rate of future increases.

Brokerage and trading revenue, which includes revenues from securities trading, retail brokerage, customer hedging and investment banking decreased $4.9 million compared to the prior year.

Securities trading revenue totaled $44.7 million for 2015, an increase of $4.0 million or 10% over the prior year. Securities trading revenue represents net realized and unrealized gains primarily related to sales of U.S.

government securities, residential mortgage-backed securities guaranteed by U.S. government agencies and municipal securities to institutional customers.

Customer hedging revenue is based primarily on realized and unrealized changes in the fair value of derivative contracts held for customer risk management programs. As more fully discussed under Customer Derivative Programs in Note 3 of the Consolidated Financial Statements, we offer commodity, interest rate, foreign exchange and equity derivatives to our customers. Customer hedging revenue totaled $40.9 million for 2015, an increase of $3.1 million or 8% compared to 2014. The volume of derivative contracts sold to our mortgage banking customers used to hedge their pipelines of mortgage loan originations increased as average mortgage rates trended down during 2015. This increase was partially offset by a decrease in revenue from derivative contracts sold to energy customers primarily due to the decrease in energy prices during 2015. The Company also received recoveries from the Lehman Brothers and MF Global bankruptcies related to derivative contract losses incurred in 2008 of $669 thousand during 2015 and $2.2 million during 2014.

Revenue earned from retail brokerage transactions totaled $24.5 million for 2015, a decrease of $9.5 million or 28% compared to the prior year. Retail brokerage revenue is primarily based on fees and commissions earned on sales of fixed income securities, annuities and mutual funds to retail customers. Revenue is primarily based on the volume of customer transactions and applicable commission rate for each type of product. During 2015, activity shifted from sales of products that pay us at a higher commission rate to sales of products that pay us at a lower commission rate. The decrease in revenue from changes in product mix was partially offset by growth in transaction volume. In addition, volume shifted from sales of products that pay us a one-time transaction fee to accounts that pay us an ongoing management fee.

Investment banking, which includes fees earned upon completion of underwriting, financial advisory services and loan syndication fees totaled $19.4 million for 2015, a decrease of $2.5 million or 11% compared to 2014 related to the timing and volume of completed transactions.

Transaction card revenue depends largely on the volume and amount of transactions processed, the number of TransFund automated teller machine (“ATM”) locations and the number of merchants served. Transaction card revenue totaled $128.6 million for 2015, a $4.9 million or 4% increase over 2014. Revenues from the processing of transactions on behalf of the members of our TransFund electronic funds transfer ("EFT") network totaled $65.2 million, up $1.5 million or 2% over 2014, due primarily to increased transaction volumes. The number of TransFund ATM locations totaled 1,972 at December 31, 2015 compared to 2,080 at December 31, 2014. Merchant services fees paid by customers for account management and electronic processing of card transactions totaled $44.3 million, an increase of $3.1 million or 7% over the prior year. The increase was primarily due to higher transaction processing volume throughout our geographical footprint. Revenue from interchange fees paid by merchants for transactions processed from debit cards issued by the Company totaled $19.0 million, an increase of $292 thousand or 2% over 2014 due to increased transaction volume.

Fiduciary and asset management revenue grew $10.5 million or 9% over 2014. A full year of revenue in 2015 from the acquisitions of Topeka, Kansas-based GTRUST Financial Corporation in the first quarter of 2014 and Houston, Texas-based MBM Advisors in the second quarter of 2014 added $4.0 million in revenue in 2015. The remaining increase was primarily due to the growth in the fair value of fiduciary assets administered by the Company. Fiduciary assets are assets for which the Company possesses investment discretion on behalf of another, or any other similar capacity. The fair value of fiduciary assets administered by the Company totaled $38.3 billion at December 31, 2015 and $36.0 billion at December 31, 2014.

We also earn fees as administrator to and investment adviser for the Cavanal Hill Funds, a diversified, open-ended investment company established as a business trust under the Investment Company Act of 1940 (the "1940 Act"). The Bank is custodian and BOSC, Inc. is distributor for the Funds. The Funds’ products are offered to customers, employee benefit plans, trusts and the general public in the ordinary course of business. We have voluntarily waived administration fees on the Cavanal Hill money market funds in order to maintain positive yields on these funds in the

current low short-term interest rate environment. Waived fees totaled $12.5 million for 2015 compared to $10.1 million for 2014.

Deposit service charges and fees decreased $480 thousand or 1% compared to 2014. Overdraft fees totaled $41.2 million for 2015, a decrease of $3.4 million or 8% compared to last year. Commercial account service charge revenue totaled $42.1 million, an increase $3.4 million or 9% over the prior year. Service charges on deposit accounts with a standard monthly fee were $7.0 million, a decrease of $405 thousand or 5% compared to the prior year.

Mortgage banking revenue totaled $134.4 million for 2015, a $25.3 million or 23% increase over 2014. Mortgage production revenue totaled $78.0 million, an increase of $16.9 million over the prior year. A record $6.4 billion of mortgage loans were funded for sale during 2015, an increase of $1.9 billion or 42% over 2014. The record volume of originations was due primarily to the expansion of our correspondent and Home Direct online lending channels and a decrease in average primary mortgage interest rates during 2015. Approximately 46% of loans originated in 2015 were through correspondent channels and 15% were through our Home Direct online channel. The correspondent and Home Direct online lending channels have lower margins than the retail lending channel. Loan refinances, which have higher margins than loans to finance home purchases, were 42% of loans originated in 2015, compared to 30% in 2014.

The unpaid principal balance of mortgage loans closed but not yet sold was $294 million at December 31, 2015, $2.1 million or 1% higher than the prior year. Outstanding commitments to originate mortgage loans decreased $26 million or 4% compared to December 31, 2014 to $601 million at December 31, 2015. The cumulative change in the valuation of mortgage loans held for sale and mortgage commitments, net of forward sales contracts, was a $2.2 million gain for 2015, compared to a $4.4 million gain for 2014.

Mortgage servicing revenue was $56.4 million, an increase of $8.4 million or 17% over the prior year. The outstanding principal balance of mortgage loans serviced for others totaled $19.7 billion, a $3.5 billion increase over December 31, 2014.

Table 4 – Mortgage Banking Revenue
(In thousands)

	Year Ended December 31,				
	2015	2014	2013	2012	2011
Net realized gains on mortgage loans sold	$75,780	$56,696	$95,309	$115,879	$50,812
Change in net unrealized gains on mortgage loans held for sale	2,180	4,365	(15,764)	13,238	1,170
Total mortgage production revenue	77,960	61,061	79,545	129,117	51,982
Servicing revenue	56,415	48,032	42,389	40,185	39,661
Total mortgage revenue	$134,375	$109,093	$121,934	$169,302	$91,643
Mortgage loans funded for sale	$6,372,956	$4,484,394	$4,081,390	$3,708,350	$2,293,834
Mortgage loan refinances to total funded	42%	30%	43%	60%	53%
Mortgage loans sold	$6,446,659	$4,441,819	$4,254,151	$3,731,830	$2,369,895
Primary residential mortgage interest rate – average	3.89%	4.17%	3.99%	3.66%	4.45%
Secondary residential mortgage interest rate – average	2.91%	3.22%	3.05%	2.52%	3.71%

Primary rates disclosed in Table 4 above represent rates generally available to borrowers on 30 year conforming mortgage loans. Secondary rates represent rates generally paid on 30 year residential mortgage-backed securities guaranteed by U.S. government agencies.

	Dec. 31,				
	2015	2014	2013	2012	2011
Outstanding principal balance of mortgage loans serviced for others	$19,678,226	$16,162,887	$13,718,942	$11,981,624	$11,300,986

Outstanding mortgage loan commitments	601,147	627,505	258,873	356,634	189,770

Net gains on securities, derivatives and other assets

We recognized $12.1 million of net gains from sales of $1.6 billion of available for sale securities in 2015. We recognized $1.5 million of net gains from sales of $2.7 billion of available for sale securities in 2014. Securities were sold either because they had reached their expected maximum potential or to move into securities that are expected to perform better in a rising rate environment.

We also maintain a portfolio of residential mortgage-backed securities issued by U.S. government agencies and interest rate derivative contracts that are held as an economic hedge of the changes in the fair value of our mortgage servicing rights. The fair value of our mortgage servicing rights fluctuates due to changes in prepayment speeds and other assumptions as more fully described in Note 7 to the Consolidated Financial Statements. As primary mortgage rates increase, prepayment speeds slow and the value of our mortgage servicing rights increases. As primary mortgage rates fall, prepayment speeds increase and the value of our mortgage servicing rights decreases.

Changes in the fair value of mortgage servicing rights are highly dependent on changes in primary mortgage rates, rates offered to borrowers, and assumptions about servicing revenues, servicing costs and discount rates. Changes in the fair value of residential mortgage-backed securities and interest rate derivative contracts are highly dependent on changes in secondary mortgage rates, or rates required by investors. While primary and secondary mortgage rates generally move in the same direction, the spread between them may widen and narrow due to market conditions and government intervention. Changes in the spread between the primary and secondary rates can cause significant earnings volatility. Additionally, the fair value of mortgage servicing rights is dependent on short-term interest rates that affect the value of custodial funds. Changes in the spread between short-term and long-term interest rates can also cause significant earnings volatility.

Table 5 following shows the relationship between changes in the fair value of mortgage servicing rights and the fair value of fair value option residential mortgage-backed securities and interest rate derivative contracts held as an economic hedge. The decrease in the fair value of mortgage servicing rights for 2015 included factors that we do not hedge, such as an increase in the servicing cost assumption.

Table 5 – Gain (Loss) on Mortgage Servicing Rights, Net of Economic Hedge
(In thousands)

	Year Ended December 31,				
	2015	2014	2013	2012	2011
Gain (loss) on mortgage hedge derivative contracts, net	$634	$2,776	$(5,080)	$116	$2,974
Gain (loss) on fair value option securities, net	(3,684)	10,003	(15,436)	7,793	24,413
Gain (loss) on economic hedge of mortgage servicing rights	(3,050)	12,779	(20,516)	7,909	27,387
Gain (loss) on change in fair value of mortgage servicing rights	(4,853)	(16,445)	22,720	(9,210)	(40,447)
Gain (loss) on changes in fair value of mortgage servicing rights, net of economic hedges	$(7,903)	$(3,666)	$2,204	$(1,301)	$(13,060)
Net interest revenue on fair value option securities[1]	$8,001	$3,253	$3,290	$7,811	$17,650

[1] Actual interest earned on fair value option securities less internal transfer-priced cost of funds.

Net gains on other assets totaled $5.7 million for 2015. The Company recognized a $1.7 million gain on the sale of bank premises and a $2.8 million gain on underlying investments held by two consolidated private equity funds. Private equity gains are largely attributed to non-controlling interests.

Fourth Quarter 2015 Other Operating Revenue

Other operating revenue was $161.1 million for the fourth quarter of 2015, up $9.2 million over the fourth quarter of 2014. Fees and commissions revenue decreased $2.0 million. The change in the fair value of mortgage servicing rights, net of economic hedges, increased operating revenue $2.6 million for the fourth quarter of 2015 and decreased operating revenue $6.1 million for the fourth quarter of 2014. Net gains on sales of available for sale securities were $2.0 million less than the prior year. Other-than-temporary impairment charges were $1.4 million more in the fourth

quarter of 2015 than in the fourth quarter of 2014.

Brokerage and trading revenue decreased $347 thousand compared to the fourth quarter of 2014. Securities trading revenue totaled $11.7 million for the fourth quarter of 2015, an increase of $2.4 million. Customer hedging revenue totaled $9.6 million, a decrease of $342 thousand compared to the prior year. Revenue earned from retail brokerage transactions was $5.8 million, unchanged compared to the fourth quarter of 2014. Investment banking revenue totaled $3.1 million, a $2.4 million decrease compared to the fourth quarter of 2014 related to the timing and volume of completed transactions.

Transaction card revenue for the fourth quarter of 2015 increased $852 thousand or 3% over the fourth quarter of 2014, primarily due to a $586 thousand increase in merchant services fees. Revenues from the processing of transactions on behalf of the members of our TransFund EFT network totaled $16.5 million, merchant services fees totaled $11.0 million and revenue from interchange fees paid by merchants for transactions processed from debit cards issued by the Company totaled $4.8 million.

Fiduciary and asset management revenue increased $516 thousand over the fourth quarter of 2014 to $31.2 million primarily due to an increase in the fair value of assets managed. Waived administration fees on the Cavanal Hill money market funds totaled $3.5 million for the fourth quarter of 2015, compared to $2.8 million for the fourth quarter of 2014.

Deposit service charges and fees were $22.8 million for the fourth quarter of 2015 compared to $22.6 million for the fourth quarter of 2014. Overdraft fees totaled $10.7 million, largely unchanged compared to the fourth quarter of 2014. Commercial account service charge revenue totaled $10.4 million, an increase of $496 thousand. Service charges on deposit accounts with a standard monthly fee were $1.7 million, a decrease of $175 thousand.

Mortgage banking revenue was $25.0 million for the fourth quarter of 2015, compared to $30.1 million for the fourth quarter of 2014. Primary mortgage interest rates fell during the fourth quarter of 2014, driving loan production volume and higher loan commitment levels as of December 31, 2014. Average primary mortgage interest rates were approximately 8 basis points lower compared with the fourth quarter of 2014, resulting in continued loan production volume growth and refinancing activity, but primary mortgage rates began trending upward at the end of the fourth quarter of 2015. This resulted in a reduced level of outstanding commitments as of December 31, 2015. Mortgage loans funded for sale totaled $1.4 billion in the fourth quarter of 2015 compared to $1.3 billion in the fourth quarter of 2014. Mortgage loan refinances represented 41% of total loans funded during the fourth quarter of 2015, compared to 37% in the fourth quarter of 2014. Loans originated by our correspondent channel increased to 46% of total loans funded during the fourth quarter of 2015 from 44% of total loans funded in the fourth quarter of 2014. Outstanding mortgage loan commitments decreased $26 million while the unpaid principal balance of mortgage loans held for sale was largely unchanged.

For the fourth quarter of 2015, changes in the fair value of mortgage servicing rights increased operating revenue by $7.4 million, partially offset by a net loss of $4.9 million on fair value option securities and derivative contracts held as an economic hedge. For the fourth quarter of 2014, changes in the fair value of mortgage servicing rights decreased operating revenue by $10.8 million, partially offset by a $4.8 million net gain on fair value option securities and derivative contracts held as an economic hedge.

2014 Other Operating Revenue

Other operating revenue totaled $622.0 million for 2014, compared to $620.3 million for 2013. Fees and commissions revenue increased $17.5 million. The change in the fair value of mortgage servicing rights, net of economic hedges, decreased operating revenue in 2014 by $3.7 million and increased operating revenue $2.2 million in 2013. Net gains on sales of available for sale securities were $1.5 million for 2014 compared to $10.7 million for 2013. Other-than-temporary impairment charges recognized in earnings were $1.9 million less than charges recognized in 2013.

Brokerage and trading revenue for 2014 increased $9.0 million over 2013. Revenue in 2013 was reduced $8.7 million from the impact of the fair value adjustment to our trading securities inventory due to a sharp increase in interest rates during 2013. Excluding this adjustment, securities trading revenue decreased $2.3 million. Customer hedging revenue decreased $4.2 million. The decrease was primarily due to a decrease in revenue from derivative contracts sold to our mortgage banking and energy customers, partially offset by growth related to increased volumes of foreign exchange

contracts. Customer hedging revenue for 2014 included $2.2 million of recoveries from the Lehman Brothers and MF Global bankruptcies and 2013 included $2.4 million of recoveries. Retail brokerage revenue was largely unchanged compared to 2013 and investment banking revenue increased $6.8 million. Transaction card revenue grew by $6.9 million over 2013 primarily due to TransFund network transaction volume growth and higher merchant services transaction volumes. Fiduciary and asset management fees increased $19.6 million. The GTRUST Financial Corporation and MBM Advisors acquisitions during 2014 added $7.8 million of revenue. The remaining was primarily due to growth in the fair value of fiduciary assets. Deposit service charges and fees decreased $4.2 million primarily due to lower overdraft fees partially offset by increased commercial account service charges. Mortgage banking revenue decreased $12.8 million compared to 2013. While the volume of loans funded for sale and outstanding loan commitments increased, our product mix shifted toward lower margin products.

Net gains on other assets totaled $3.0 million for 2014. The fair value of certain alternative investments held as a hedge of a deferred compensation liability were adjusted downward by $1.7 million and a $1.5 million charge was taken against a merchant-banking investment accounted for under the equity method. These losses were partially offset by a $6.6 million gain on underlying investments held by two consolidated private equity funds. Private equity gains are largely attributed to non-controlling interests.

Other Operating Expense

Other operating expense for 2015 totaled $904.6 million, a $57.0 million or 7% increase over the prior year. Personnel expense for 2014 included a $12.6 million net reduction in the accrual for amounts payable to certain executive officers under the 2011 True-Up Plan. Excluding the impact of the 2011 True-Up Plan adjustment, personnel expense increased $33.9 million or 7%. Non-personnel expenses increased $10.5 million or 3% over the prior year.

Table 6 – Other Operating Expense
(In thousands)

	Year Ended December 31,				
	2015	2014	2013	2012	2011
Regular compensation	$315,389	$298,420	$279,493	$262,736	$247,945
Incentive compensation:					
Cash-based compensation	119,887	111,748	110,871	116,718	97,222
Share-based compensation	12,358	10,875	8,189	9,668	9,995
Deferred compensation	361	(13,692)	32,083	27,502	10,563
Total incentive compensation	132,606	108,931	151,143	153,888	117,780
Employee benefits	75,492	69,580	74,589	74,409	64,261
Total personnel expense	523,487	476,931	505,225	491,033	429,986
Business promotion	27,851	26,649	22,598	23,338	20,549
Charitable contributions to BOKF Foundation	796	4,267	2,062	2,062	4,000
Professional fees and services	40,123	44,440	32,552	34,015	28,798
Net occupancy and equipment	76,016	77,232	69,773	66,726	64,611
Insurance	20,375	18,578	16,122	15,356	16,799
Data processing & communications	122,383	115,225	105,967	98,904	97,976
Printing, postage and supplies	13,498	13,518	13,885	14,228	14,085
Net losses & operating expenses of repossessed assets	1,446	6,019	5,160	20,528	23,715
Amortization of intangible assets	4,359	3,965	3,428	2,927	3,583
Mortgage banking costs	38,997	31,705	31,196	44,334	37,621
Other expense	35,233	28,993	32,652	26,912	37,575
Total other operating expense	$904,564	$847,522	$840,620	$840,363	$779,298
Average number of employees (full-time equivalent)	4,797	4,679	4,683	4,614	4,474

Personnel expense

Regular compensation expense, which consists of salaries and wages, overtime pay and temporary personnel costs, increased $17.0 million or 6% over 2014. The average number of employees grew by 3% over the prior year. Recent additions have been higher-costing compliance and risk management, technology and wealth management positions. In addition, standard annual merit increases in regular compensation were effective for the majority of our staff March 1. Regular compensation expense for 2014 included $800 thousand related to branch closure costs.

Excluding the impact of the 2011 True-Up Plan adjustment in 2014, incentive compensation increased $11.1 million or 9% over 2014. Cash-based incentive compensation plans are either intended to provide current rewards to employees who generate long-term business opportunities for the Company based on growth in loans, deposits, customer relationships and other measurable metrics or intended to compensate employees with commissions on completed transactions. Total cash-based incentive compensation increased $8.1 million or 7% over 2014.

Share-based compensation expense represents expense for equity awards based on the grant-date fair value. Share-based compensation expense for equity awards increased $1.5 million or 14% over 2014 primarily due to a change in the vesting period on non-vested shares awarded. Non-vested shares awarded prior to 2013 generally cliff vest in 5 years. Non-vested shares awarded since January 1, 2013 generally cliff vest in 3 years and are subject to a two year holding period after vesting.

The Company currently offers a deferred compensation plan for certain executive and senior officers. Deferred compensation expense totaled $361 thousand for 2015. Deferred compensation expense for 2014 and prior years was largely based on the 2011 True-Up Plan. Approved by shareholders on April 26, 2011, the True-Up Plan was designed to adjust annual and long-term performance-based incentive compensation for certain senior executives for 2006 through 2013. The 2011 True-Up Plan ended on December 31, 2013 and amounts accrued were paid in May 2014.

Employee benefit expense increased $5.9 million or 8% compared to 2014. Employee medical costs totaled $25.0 million, a $3.6 million or 17% increase over the prior year. The Company self-insures a portion of its employee health care coverage and these costs may be volatile. Payroll tax expense increased $1.1 million over 2014 to $28.6 million. Employee retirement plan costs totaled $20.6 million, up $2.0 million.

Non-personnel operating expense

Non-personnel expense increased $10.5 million or 3% over the prior year. Mortgage banking expense increased $7.3 million or 23% primarily due to an $8.7 million increase in amortization of mortgage servicing rights due to higher actual prepayments. Data processing and communications expense increased $7.2 million or 6% primarily related to increased transaction activity costs. In addition, data processing and communications expense increased over the prior year as risk management and compliance projects were completed. We expect these costs to continue to increase in 2016 as we continue to invest in upgrades in information technology infrastructure and cybersecurity. Professional fees and services expense decreased $4.3 million or 10% compared to the prior year primarily as risk management and regulatory compliance costs stabilized in 2015 after growing 37% during 2014. Net losses and operating expenses of repossessed assets decreased $4.6 million compared to the prior year. All other non-personnel operating expenses were up $4.9 million, net.

Fourth Quarter 2015 Operating Expenses

Other operating expense for the fourth quarter of 2015 totaled $232.6 million, a $6.7 million increase over the fourth quarter of 2014.

Personnel expense increased $7.4 million over the fourth quarter of 2014. Regular compensation expense increased $2.0 million over the fourth quarter of 2014. Incentive compensation increased $2.7 million compared to the fourth quarter of 2014 primarily due to a change in estimated share-based compensation expense. Share-based compensation includes grants with vesting criteria based on the Company's earnings per share growth relative to peers over a forward looking three-year performance period. The Company's forecasted earnings per share growth over the performance period increased largely due to common shares repurchased during the third and fourth quarters of 2015. Employee benefit expense increased $2.7 million compared to the fourth quarter of 2014 primarily due to an increase in employee medical insurance claim expense.

Non-personnel expense decreased $760 thousand compared to the fourth quarter of 2014. Premises and equipment expense for the fourth quarter of 2014 included a $4.1 million accrual of costs related the discontinuance of the grocery store branch model and closure of 28 in-store branches. The Company also made a $1.8 million contribution of developed commercial real estate to the BOKF Foundation during the fourth quarter of 2014. Net losses and operating expenses of repossessed assets were $343 thousand for the fourth quarter of 2015, compared to a net gain of $1.5 million in the fourth quarter of 2014. All other non-personnel expenses were up $2.5 million over the prior year on a net basis.

2014 Operating Expenses

Other operating expense totaled $847.5 million for 2014, a $6.9 million or 1% increase over 2013. The Company's investment in risk management and regulatory compliance resulted in a $16.7 million increase, primarily in personnel, professional fees and services and data processing and communications expense for 2014. In addition, approximately $4.9 million was expensed in the fourth quarter of 2014 related to the announced closure of the grocery store branch network, primarily related to facilities and employee costs.

Personnel expense decreased $28.3 million or 6%. Regular compensation expense totaled $298.4 million, up $18.9 million primarily due to the investment in higher-costing wealth management, compliance and risk management positions. Incentive compensation expense decreased $42.2 million, primarily due to the adjustment of amounts payable under the 2011 True-Up Plan. Employee benefit expense decreased $5.0 million primarily due to employee medical costs.
Non-personnel expense for 2014 was $35.2 million or 10% higher than 2013. Professional fees and services expense increased $11.9 million primarily due to increased risk management and regulatory compliance costs. Data processing and communications expense increased $9.3 million primarily related to increased transaction activity costs. Net occupancy and equipment expense increased $7.5 million, including $4.1 million of branch closure costs. All other non-personnel operating expenses were up $4.9 million, net.
Income Taxes

Income tax expense was $139.4 million or 32.3% of net income before taxes for 2015, $144.2 million or 32.8% of net income before taxes for 2014 and $163.1 million or 33.8% of net income before taxes for 2013. Tax expense currently payable totaled $130 million in 2015, $105 million in 2014 and $146 million in 2013.

The statute of limitations expired on an uncertain tax position and the Company adjusted its current income tax liability to amounts on filed tax returns for 2014 in 2015, 2013 in 2014 and 2012 in 2013. Excluding these adjustments income tax expense would have been $141.4 million or 32.7% of net income before taxes for 2015, $146.4 million or 33.3% of net income before taxes for 2014 and $164.5 million or 34.1% of net income before taxes for 2013.

The Company adopted FASB Accounting Standards Update No. 2014-01, Accounting for Investments in Qualified Affordable Housing Projects, on January 1, 2015. This standard allows amortization expense related to qualified affordable housing investment costs to be recognized in provision for income taxes and was retrospectively applied to all periods presented. Prior to 2015, these amounts were recognized in other operating expense, and therefore, for comparative purposes,
$9.3 million and $5.8 million of amortization expense has been reclassified to federal and state income taxes for the years ended December 31, 2014 and 2013, respectively. This reclassification increased the effective tax rate by 150 basis points in 2014 and 80 basis points in 2013. Adoption of this standard did not affect net income.

Net deferred tax liabilities totaled $1.4 million at December 31, 2015 and $7.2 million at December 31, 2014. We have evaluated the recoverability of our deferred tax assets based on taxes previously paid in net loss carry-back periods and other factors and determined that no valuation allowance was required in 2015 and 2014.

Unrecognized tax benefits totaled $13 million at December 31, 2015 and December 31, 2014. BOK Financial operates in numerous jurisdictions, which requires judgment regarding the allocation of income, expense and earnings under various laws and regulations of each of these taxing jurisdictions. Each jurisdiction may audit our tax returns and may take different positions with respect to these allocations.

Income tax expense was $26.2 million or 30.1% of net income before taxes for the fourth quarter of 2015 compared to $30.1 million or 31.5% of net income before taxes for the fourth quarter of 2014. Income tax expense as a percentage

of net income before taxes was lower in the fourth quarter of 2015, primarily due to a decrease in net income before taxes during the fourth quarter. This resulted in a year to date decrease in tax expense that was recognized in the fourth quarter of 2015.

Table 7 – Selected Quarterly Financial Data
(In thousands, except per share data)

	2015			
	First	Second	Third	Fourth
Interest revenue	$184,569	$191,813	$193,664	$196,782
Interest expense	16,843	16,082	15,028	15,521
Net interest revenue	167,726	175,731	178,636	181,261
Provision for credit losses	—	4,000	7,500	22,500
Net interest revenue after provision for credit losses	167,726	171,731	171,136	158,761
Fees and commissions revenue	165,991	172,547	164,657	155,824
Gain (loss) on financial instruments and other assets, net	8,640	(4,272)	10,536	(398)
Change in fair value of mortgage servicing rights	(8,522)	8,010	(11,757)	7,416
Other-than-temporary impairment losses	(92)	—	—	(1,727)
Other operating revenue	166,017	176,285	163,436	161,115
Personnel expense	128,548	132,695	129,062	133,182
Other non-personnel expense	91,717	94,418	95,566	99,376
Total other operating expense	220,265	227,113	224,628	232,558
Net income before taxes	113,478	120,903	109,944	87,318
Federal and state income taxes	38,384	40,630	34,128	26,242
Net income	75,094	80,273	75,816	61,076
Net income attributable to non-controlling interests	251	1,043	925	1,475
Net income attributable to shareholders of BOK Financial Corp. shareholders	$74,843	$79,230	$74,891	$59,601
Earnings per share:				
Basic	$1.08	$1.15	$1.09	$0.89
Diluted	$1.08	$1.15	$1.09	$0.89
Average shares:				
Basic	68,255	68,096	67,668	66,378
Diluted	68,345	68,210	67,762	66,468

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Table 7 – Selected Quarterly Financial Data (continued)
(In thousands, except per share data)

	2014			
	First	Second	Third	Fourth
Interest revenue	$179,120	$182,631	$183,868	$186,620
Interest expense	16,478	16,534	17,077	16,956
Net interest revenue	162,642	166,097	166,791	169,664
Provision for credit losses	—	—	—	—
Net interest revenue after provision for credit losses	162,642	166,097	166,791	169,664
Fees and commissions revenue	140,863	164,054	158,547	157,855
Gain (loss) on financial instruments and other assets, net	2,540	8,532	1,143	5,242
Change in fair value of mortgage servicing rights	(4,461)	(6,444)	5,281	(10,821)
Other-than-temporary impairment losses	—	—	—	(373)
Other operating revenue	138,942	166,142	164,971	151,903
Personnel expense	104,433	123,714	123,043	125,741
Other non-personnel expense	80,671	90,993	98,791	100,136
Total other operating expense	185,104	214,707	221,834	225,877
Net income before taxes	116,480	117,532	109,928	95,690
Federal and state income taxes	39,437	40,803	33,802	30,109
Net income	$77,043	$76,729	$76,126	$65,581
Net income (loss) attributable to non-controlling interests	453	834	494	1,263
Net income attributable to shareholders of BOK Financial Corp. shareholders	$76,590	$75,895	75,632	64,318
Earnings per share:				
Basic	$1.11	$1.10	$1.09	$0.93
Diluted	$1.11	$1.10	$1.09	$0.93
Average shares:				
Basic	68,274	68,360	68,456	68,482
Diluted	68,436	68,511	68,610	68,616

Lines of Business

We operate three principal lines of business: Commercial Banking, Consumer Banking and Wealth Management. Commercial Banking includes lending, treasury and cash management services and customer risk management products for small businesses, middle market and larger commercial customers. Commercial banking also includes the TransFund EFT network. Consumer Banking includes retail lending and deposit services, lending and deposit services to small businesses served through our consumer branch network and all mortgage banking activities. Wealth Management provides fiduciary services, private bank services and investment advisory services in all markets. Wealth Management also underwrites state and municipal securities and engages in brokerage and trading activities.

In addition to our lines of business, we have a Funds Management unit. The primary purpose of this unit is to manage our overall liquidity needs and interest rate risk. Each line of business borrows funds from and provides funds to the Funds Management unit as needed to support their operations. Operating results for Funds Management and other include the effect of interest rate risk positions and risk management activities, securities gains and losses including impairment charges, the provision for credit losses in excess of net loans charged off, tax planning strategies and certain executive compensation costs that are not attributed to the lines of business.

We allocate resources and evaluate the performance of our lines of business using the net direct contribution which includes the allocation of funds, actual net credit losses and capital costs. In addition, we measure the performance of our business lines after allocations of certain direct expenses and taxes based on statutory rates.

The cost of funds borrowed from the Funds Management unit by the operating lines of business is transfer priced at rates that approximate market rates for funds with similar duration. Market rates are generally based on the applicable LIBOR or interest rate swap rates, adjusted for prepayment risk. This method of transfer-pricing funds that support assets of the operating lines of business tends to insulate them from interest rate risk.

The value of funds provided by the operating lines of business to the Funds Management unit is also based on rates which approximate wholesale market rates for funds with similar duration and re-pricing characteristics. Market rates are generally based on LIBOR or interest rate swap rates. The funds credit formula applied to deposit products with indeterminate maturities is established based on their re-pricing characteristics reflected in a combination of the short-term LIBOR rate and a moving average of an intermediate term swap rate, with an appropriate spread applied to both. Shorter duration products are weighted towards the short term LIBOR rate and longer duration products are weighted towards the intermediate swap rates. The expected duration ranges from 30 days for certain rate-sensitive deposits to five years.

Economic capital is assigned to the business units by a capital allocation model that reflects management's assessment of risk. This model assigns capital based upon credit, operating, interest rate and market risk inherent in our business lines and recognizes the diversification benefits among the units. The level of assigned economic capital is a combination of the risk taken by each business line, based on its actual exposures and calibrated to its own loss history where possible. Average invested capital includes economic capital and amounts we have invested in the lines of business.

As shown in Table 8 following, net income attributable to our lines of business increased $21.3 million or 10% over the prior year. The increase in net income attributed to our lines of business was due primarily to a $49.2 million increase in net interest revenue mostly from commercial loan growth and a $40.4 million increase in fees and commission revenue mostly from growth in mortgage banking revenue and fiduciary and asset management fee revenue growth. These increases were partially offset by a $21.4 million increase in personnel expense primarily from regular salaries and incentive compensation expense growth and a $13.6 million increase in non-personnel expense

primarily from increased mortgage banking expense. The decrease in net income provided by Funds Management was largely due to a $34.0 million provision for credit losses being recorded in the current year, compared to no provision for credit losses being recorded in the prior year. Lower net interest revenue from our securities portfolio and increased operating expenses primarily due to incentive compensation expense was partially offset by increased gains on sales from our available for sale securities portfolio. Funds Management and other also included $4.9 million that was accrued during 2014 related to the closure of 29 in-store branches during the first quarter of 2015. This accrual was reversed and actual costs related to these closures was attributed to the Consumer Banking segment in 2015.

Table 8 – Net Income by Line of Business
(In thousands)

	Year Ended December 31,		
	2015	2014	2013
Commercial Banking	$201,334	$164,410	$148,602
Consumer Banking	22,415	33,736	60,766
Wealth Management	16,885	21,215	17,014
Subtotal	240,634	219,361	226,382
Funds Management and other	47,931	73,074	90,227
Total	$288,565	$292,435	$316,609

Commercial Banking

Commercial Banking contributed $201.3 million to consolidated net income in 2015, up $36.9 million or 22% over the prior year. Net interest revenue grew by $51.3 million as the balance of average commercial loans increased $1.7 billion or 16%. Net recoveries were $1.4 million less than in 2014. Fees and commission revenue increased $7.0 million or 4% over the prior year primarily due to growth in transaction card and deposit service charges and fees revenue. Other operating expense increased $3.2 million or 2% compared to 2014, primarily due to increased personnel expense.

Table 9 – Commercial Banking
(Dollars in thousands)

	Year Ended December 31,		
	2015	2014	2013
Net interest revenue from external sources	$439,727	$381,687	$363,961
Net interest expense from internal sources	(50,678)	(43,939)	(51,592)
Total net interest revenue	389,049	337,748	312,369
Net loans charged off (recovered)	(6,018)	(7,447)	(4,372)
Net interest revenue after net loans charged off	395,067	345,195	316,741
Fees and commissions revenue	178,333	171,332	159,715
Gain (loss) on financial instruments and other assets, net	(811)	(1,628)	3,491
Other operating revenue	177,522	169,704	163,206
Personnel expense	113,385	110,637	106,293
Other non-personnel expense	94,009	93,593	86,336
Other operating expense	207,394	204,230	192,629
Net direct contribution	365,195	310,669	287,318
Corporate allocations	35,680	41,585	44,107
Net income before taxes	329,515	269,084	243,211
Federal and state income taxes	128,181	104,674	94,609
Net income	$201,334	$164,410	$148,602
Average assets	$13,342,585	$11,384,782	$10,386,502
Average loans	12,404,065	10,712,559	9,657,793
Average deposits	8,775,048	8,887,809	8,365,466
Average invested capital	1,050,759	946,383	906,717
Return on average assets	1.51%	1.45%	1.43%
Return on invested capital	19.18%	17.40%	16.39%
Efficiency ratio	36.51%	40.06%	40.74%
Net charge-offs (recoveries) to average loans	(0.05)%	(0.07)%	(0.05)%

Net interest revenue increased $51.3 million or 15% over 2014. Growth in net interest revenue was due to a $1.7 billion increase in average loan balances, partially offset by decreased loan yields and a $113 million decrease in average deposit balances.

Fees and commissions revenue increased $7.0 million or 4% over 2014. Transaction card revenue generated by the TransFund EFT network increased $4.8 million or 5% due to increased customer transaction volume. Commercial

deposit service charges and fees increased $3.0 million or 8% over the prior year. Other revenue increased $2.3 million or 10% primarily related to merchant banking activity. Brokerage and trading revenue decreased $3.1 million or 27%. Loan syndication fees were lower due to the timing and volume of completed deals. Customer hedging revenue decreased primarily related to lower energy prices.

Operating expenses increased $3.2 million or 2% over 2014. Personnel costs increased $2.7 million or 2% primarily due to standard annual merit increases. Non-personnel expense was largely unchanged compared to the prior year. Net losses and operating expenses on repossessed assets were $5.5 million lower than the prior year, offset by higher data processing expenses related to increased transaction card activity and increased other expenses primarily related to merchant banking activity. Corporate expense allocations decreased $5.9 million compared to the prior year.

The average outstanding balance of loans attributed to Commercial Banking grew by $1.7 billion to $12.4 billion for 2015. See the Loans section of Management's Discussion and Analysis of Financial Condition following for additional discussion of changes in commercial and commercial real estate loans which are primarily attributed to the Commercial Banking segment. Commercial Banking experienced a net recovery of $6.0 million for 2015, compared to a net recovery of $7.4 million or 0.07% of average loans attributed to this line of business for 2014.

Average deposits attributed to Commercial Banking were $8.8 billion for 2015, a decrease of $113 million or 1% compared to 2014. Decreased interest-bearing transaction account and time deposit balances, were partially offset by growth in demand deposit balances. Average balances attributed to our commercial & industrial loan customers increased $495 million or 13%. Average balances attributed to our healthcare customers grew by $82 million or 15% over the prior year. Small business banking customer average balances increased $118 million or 10%. Average balances attributed to our energy customers decreased $98 million or 6%. Average balances held by treasury services customers decreased $768 million or 57% compared to the prior year. Commercial customers continue to maintain large cash reserves primarily due to low yields available on other high quality investment alternatives and to minimize deposit service charges through the earnings credit. The earnings credit is a non-cash method that enables commercial customers to offset deposit service charges based on account balances.

Consumer Banking

Consumer banking services are provided through four primary distribution channels: traditional branches, the 24-hour ExpressBank call center, Internet banking and mobile banking. Consumer banking also conducts mortgage banking activities through offices located outside of our consumer banking markets, through correspondent loan originators and through Home Direct Mortgage, an online origination channel.

Consumer banking contributed $22.4 million to consolidated net income for 2015, compared to $33.7 million in the prior year. Increased operating expense and corporate expense allocations and lower net interest revenue, was partially offset by growth in fees and commission revenue. Fees and commission revenue increased primarily due to mortgage banking revenue, partially offset by lower deposit service charges and fees. The change in the fair value of mortgage servicing rights, net of economic hedges, decreased other operating revenue attributed to Consumer Banking by $7.9 million in 2015 and decreased other operating revenue by $3.7 million in 2014.

Table 10 – Consumer Banking
(Dollars in thousands)

	Year Ended December 31,		
	2015	2014	2013
Net interest revenue from external sources	$84,848	$81,852	$85,813
Net interest revenue from internal sources	29,824	36,801	39,628
Total net interest revenue	114,672	118,653	125,441
Net loans charged off	6,108	5,477	5,622
Net interest revenue after net loans charged off	108,564	113,176	119,819
Fees and commissions revenue	218,188	196,641	217,269
Gain (loss) on financial instruments and other assets, net	3,437	20,619	(14,653)
Change in fair value of mortgage servicing rights	(4,853)	(16,445)	22,720
Other operating revenue	216,772	200,815	225,336
Personnel expense	105,252	96,681	94,145
Other non-personnel expense	108,530	99,089	94,600
Total other operating expense	213,782	195,770	188,745
Net direct contribution	111,554	118,221	156,410
Corporate allocations	74,868	63,006	56,957
Net income before taxes	36,686	55,215	99,453
Federal and state income taxes	14,271	21,479	38,687
Net income	$22,415	$33,736	$60,766
Average assets	$6,713,444	$6,584,157	$6,520,498
Average loans	1,900,768	1,987,668	2,013,416
Average deposits	6,668,520	6,520,835	6,432,498
Average invested capital	265,775	277,404	293,736
Return on average assets	0.33 %	0.51 %	0.93 %
Return on invested capital	8.43 %	12.16 %	20.69 %
Efficiency ratio	62.54 %	59.14 %	53.22 %
Net charge-offs to average loans	0.32 %	0.28 %	0.28 %

	December 31,		
	2015	2014	2013
Banking locations	152	182	206

Net interest revenue from consumer banking activities decreased $4.0 million compared to 2014 primarily due to a $4.7 million decrease in revenue related to a deposit advance product that was phased out during the second quarter of 2014. Average loan balances decreased $87 million or 4%. This impact was partially offset by a $148 million or 2% increase in average deposit balances, which are provided to the Funds Management unit and earn a spread. Net loans charged off by the Consumer Banking unit increased $631 thousand over 2014 to $6.1 million or 0.32% of average loans. Net consumer banking charge-offs include overdrawn deposit accounts and other consumer loans.

Fees and commissions revenue increased $21.5 million or 11% compared to the prior year. Mortgage banking revenue was up $25.1 million or 23% over the prior year primarily due to a record level of residential mortgage loans originated for sale. Deposit service charges and fees decreased $3.6 million or 7% compared to the prior year

primarily due to lower overdraft fees.

Operating expenses increased $18.0 million or 9% over 2014, including $3.0 million of actual facilities costs and $633 thousand of actual personnel costs related to the previously announced closure of 29 grocery store branches. These costs were accrued in 2014 in the Funds Management and Other unit, with the actual costs charged to Consumer Banking as incurred in 2015. Excluding the impact of the branch closure costs, personnel expenses were up $7.9 million or 8% primarily due to increased regular salary and incentive compensation expense. Non-personnel expense increased $6.5 million or 7%, excluding the impact of the branch closure costs. Mortgage banking costs were up $9.0 million primarily due to increased amortization of mortgage servicing rights due to higher actual prepayments. Corporate expense allocations increased $11.9 million or 19% over the prior year, primarily due to increased risk management and compliance costs.

Average consumer deposit balances increased $148 million or 2% over the prior year. Average demand deposit balances increased $166 million or 12% and average interest-bearing transaction accounts increased $124 million or 4%. Average savings account balances were up $35 million or 11%. Higher costing time deposit balances decreased $178 million or 11%.

Wealth Management

Wealth Management contributed $16.9 million to consolidated net income in 2015, compared to $21.2 million in the prior year. Net interest revenue increased $1.9 million or 4%, primarily due to an increase in average loan balances, partially offset by decreased loan yields. Fees and commissions revenue increased $11.9 million or 5% over the prior year. Other operating expense increased $13.8 million or 6%.

Table 11 – Wealth Management
(Dollars in thousands)

	Year Ended December 31,		
	2015	2014	2013
Net interest revenue from external sources	$24,770	$23,826	$25,478
Net interest revenue from internal sources	21,524	20,578	20,061
Total net interest revenue	46,294	44,404	45,539
Net loans charged off	(891)	213	1,275
Net interest revenue after net loans charged off	47,185	44,191	44,264
Fees and commissions revenue	252,490	240,621	212,878
Loss on financial instruments and other assets, net	(1,548)	(1,576)	(1,223)
Other operating revenue	250,942	239,045	211,655
Personnel expense	181,917	171,839	160,517
Other non-personnel expense	48,921	45,210	37,680
Other operating expense	230,838	217,049	198,197
Net direct contribution	67,289	66,187	57,722
Corporate allocations	39,654	31,465	29,876
Net income before taxes	27,635	34,722	27,846
Federal and state income tax	10,750	13,507	10,832
Net income	$16,885	$21,215	$17,014
Average assets	$4,689,850	$4,518,511	$4,556,132
Average loans	1,068,705	985,726	932,229
Average deposits	4,573,853	4,391,434	4,385,553
Average invested capital	225,968	215,089	203,914
Return on average assets	0.41%	0.51%	0.40%
Return on invested capital	8.45%	10.77%	8.95%
Efficiency ratio	77.05%	76.00%	76.49%
Net charge-offs to average loans	(0.08)%	0.02%	0.14%

Our Wealth Management division serves as custodian to or manages assets of customers. Fees are earned commensurate with the level of service provided. We may have sole or joint investment discretion over the assets of the customer or may be fiduciary for the assets, but investment selection authority remains with the customer or a manager outside of the Company. The Wealth Management division also provides safekeeping services for personal and institutional customers including holding of the customer's assets, processing of income and redemptions and other customer recordkeeping and reporting services. We also provide brokerage services for customers who maintain or delegate investment authority and for which BOK Financial does not have custody of the assets.

A summary of assets under management or in custody follows in Table 12.

Table 12 – Assets Under Management or In Custody
(Dollars in thousands)

	December 31,		
	2015	2014	2013
Fiduciary assets in custody for which BOKF has sole or joint discretionary authority	$14,012,350	$14,644,494	$12,752,460
Fiduciary assets not in custody for which BOKF has sole or joint discretionary authority	3,384,444	3,324,667	1,728,426
Non-managed fiduciary assets in custody	20,936,844	18,028,716	15,656,206
Total fiduciary assets	38,333,638	35,997,877	30,137,092
Assets held in safekeeping	26,897,107	22,952,394	22,087,207
Brokerage accounts under BOKF administration	5,817,028	5,653,095	4,882,930
Assets under management or in custody	$71,047,773	$64,603,366	$57,107,229

Net interest revenue increased $1.9 million or 4% compared to the prior year. Average loan balances were up $83 million or 8%. The benefit of this growth was partially offset by lower yields. Average deposit balances, which are sold to the Funds Management unit, increased $182 million over the prior year. Time deposit balances increased $178 million and non-interest-bearing demand deposits increased $106 million, partially offset by a $100 million decrease in interest-bearing transaction balances.

Fees and commissions revenue increased $11.9 million or 5% over the prior year. Fiduciary and asset management revenue increased $10.6 million or 9%. A full year of earnings from the acquisitions of Topeka, Kansas-based GTRUST Financial Corporation in the first quarter of 2014 and Houston, Texas-based MBM Advisors in the second quarter of 2014 added $4.0 million in revenue over 2014. The remaining increase was primarily due to the growth in the fair value of fiduciary assets administered by the Company. Brokerage and trading revenue increased $895 thousand or 1% over the prior year. A $10.1 million or 15% increase in securities trading revenue, was offset by an $8.6 million or 25% decrease in retail brokerage revenue and a $554 thousand or 3% decrease in investment banking fees.

Other operating revenue includes fees earned from state and municipal bond underwriting and financial advisory services, primarily in the Oklahoma and Texas markets. In 2015, the Wealth Management division participated in 434 underwritings that totaled $9.3 billion. As a participant, the Wealth Management division was responsible for facilitating the sale of approximately $2.9 billion of these underwritings. In 2014, the Wealth Management division participated in 422 underwritings that totaled approximately $8.6 billion. Our interest in these underwritings totaled approximately $2.5 billion. The Wealth Management division also participated in 16 corporate debt underwritings during 2015 that totaled $11.8 billion. Our interest in these underwritings was $230 million.

Operating expenses increased $13.8 million or 6% over the prior year. Personnel expenses increased $10.1 million or 6%. Regular compensation costs increased $5.4 million primarily due to increased headcount and annual merit increases. Incentive compensation increased $3.5 million over the prior year. Non-personnel expenses increased $3.7 million or 8%. Growth in net occupancy and equipment, data processing and communications and other expense, was partially offset by lower deposit insurance expense. Corporate expense allocations were up $8.2 million or 26%, primarily due to increased risk management and compliance costs.

Financial Condition
Securities

We maintain a securities portfolio to enhance profitability, manage interest rate risk, provide liquidity and comply with regulatory requirements. Securities are classified as trading, held for investment, or available for sale. See Note 2 to the consolidated financial statements for the composition of the securities portfolio as of December 31, 2015, December 31, 2014 and December 31, 2013.

Table 13 – Securities
(In thousands)

	December 31, 2015		2014		2013	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Trading:						
U.S. Government agency debentures	$61,366	$61,295	$85,154	$85,092	$34,043	$34,120
U.S. government agency residential mortgage-backed securities	10,972	10,989	30,930	31,199	20,888	21,011
Municipal and other tax-exempt securities	31,691	31,901	38,933	38,951	27,532	27,350
Other trading securities	18,235	18,219	33,496	33,458	9,142	9,135
Total trading securities	$122,264	$122,404	$188,513	$188,700	$91,605	$91,616
Investment:						
Municipal and other tax-exempt securities	$365,258	$368,910	$405,090	408,344	$440,187	$439,870
U.S. government agency residential mortgage-backed securities[1]	26,833	27,874	35,750	37,463	50,182	51,864
Other debt securities	205,745	232,375	211,520	227,819	187,509	195,393
Total investment securities	$597,836	$629,159	$652,360	$673,626	$677,878	$687,127
Available for sale:						
U.S. Treasury securities	$1,000	$995	$1,005	$1,005	$1,042	$1,042
Municipal and other tax-exempt securities	56,681	56,817	63,018	63,557	73,232	73,775
Residential mortgage-backed securities:						
U.S. government agencies	5,861,096	5,898,351	6,549,304	6,646,884	7,720,189	7,716,010
Private issue	128,111	139,118	154,360	165,957	214,181	221,099
Total residential mortgage-backed securities	5,989,207	6,037,469	6,703,664	6,812,841	7,934,370	7,937,109
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,919,044	2,905,796	2,064,091	2,048,609	2,100,146	2,055,804
Other debt securities	4,400	4,151	9,438	9,212	35,061	35,241
Perpetual preferred stock	17,171	19,672	22,171	24,277	22,171	22,863

Equity securities and mutual funds	17,121	17,833	18,603	19,444	19,069	21,328
Total available for sale securities	$9,004,624	$9,042,733	$8,881,990	$8,978,945	$10,185,091	$10,147,162
Fair value option securities:						
U.S. government agency residential mortgage-backed securities	$446,277	$444,217	$309,973	$311,597	$165,809	$157,431
Other securities	—	—	—	—	9,485	9,694
Total fair value option securities	$446,277	$444,217	$309,973	$311,597	$175,294	$167,125

[1] Includes net realized gain of $112 thousand at December 31, 2015, $615 thousand at December 31, 2014 and $1.8 million at December 31, 2013 remaining in Accumulated Other Comprehensive Income in the Consolidated Balance Sheets related to securities transferred from the available for sale securities portfolio to the investment portfolio in 2011. See Note 2 to the Consolidated Financial Statements for additional discussion.

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In addition to the above, restricted equity securities include stock we are required to hold as members of the Federal Reserve system and the Federal Home Loan Banks ("FHLB"). Restricted equity securities are carried at cost as these securities do not have a readily determined fair value because ownership of these shares are restricted and they lack a market. Federal Reserve Bank stock totaled $36 million at December 31, 2015, $35 million at December 31, 2014 and $34 million at December 31, 2013. Holdings of FHLB stock totaled $237 million at December 31, 2015, $106 million at December 31, 2014 and $51 million at December 31, 2013. Requirements to hold FHLB stock are directly related to borrowings from the FHLB.

At December 31, 2015, the carrying value of investment (held-to-maturity) securities was $598 million and the fair value was $629 million. Investment securities consist primarily of intermediate and long-term, fixed rate Oklahoma and Texas municipal bonds, taxable Texas school construction bonds and residential mortgage-backed securities issued by U.S. government agencies. The investment security portfolio is diversified among issuers. The largest obligation of any single issuer is $30 million. Substantially all of these bonds are general obligations of the issuers. Approximately $104 million of the Texas school construction bonds are also guaranteed by the Texas Permanent School Fund Guarantee Program supervised by the State Board of Education for the State of Texas.

Available for sale securities, which may be sold prior to maturity, are carried at fair value. Unrealized gains or losses, net of deferred taxes, are recorded as accumulated other comprehensive income in shareholders’ equity. The amortized cost of available for sale securities totaled $9.0 billion at December 31, 2015, an increase of $123 million over December 31, 2014. Available for sale securities consist primarily of U.S. government agency residential mortgage-backed securities and U.S. government agency commercial mortgage-backed securities. Commercial mortgage-backed securities have prepayment penalties similar to commercial loans. At December 31, 2015, residential mortgage-backed securities represented 67% of total available for sale securities. The increase in amortized cost during the year was primarily due to an increase in commercial mortgage-backed securites guaranteed by U.S. government agencies, partially offset by a decrease in U.S. government agency residential mortgage-backed securities.

A primary risk of holding residential mortgage-backed securities comes from extension during periods of rising interest rates or prepayment during periods of falling interest rates. We evaluate this risk through extensive modeling of risk both before making an investment and throughout the life of the security. Our best estimate of the duration of the combined investment and available for sale securities portfolios at December 31, 2015 is 3.25 years. Management estimates the combined portfolios' duration extends to 3.7 years assuming an immediate 200 basis point upward shock. The estimated combined portfolios' duration contracts to 3.0 years assuming a 50 basis point decline in the current low rate environment.

Residential mortgage-backed securities also have credit risk from delinquency or default of the underlying loans. We mitigate this risk by primarily investing in securities issued by U.S. government agencies. Principal and interest payments on the underlying loans are fully guaranteed. At December 31, 2015, approximately $5.9 billion of the amortized cost of the Company’s residential mortgage-backed securities were issued by U.S. government agencies. The fair value of these residential mortgage-backed securities totaled $5.9 billion at December 31, 2015.

We also hold amortized cost of $128 million in residential mortgage-backed securities privately issued by publicly-owned financial institutions. The amortized cost of these securities decreased $26 million from December 31, 2014. The fair value of our portfolio of privately issued residential mortgage-backed securities totaled $139 million at December 31, 2015.

The amortized cost of our portfolio of privately issued residential mortgage-backed securities included $72 million of Jumbo-A residential mortgage loans and $56 million of Alt-A residential mortgage loans. Jumbo-A residential mortgage loans generally meet government underwriting standards, but have loan balances that exceed agency maximums. Alt-A mortgage loans generally do not have sufficient documentation to meet government agency

underwriting standards. Approximately 91% of our Alt-A mortgage-backed securities represent pools of fixed rate residential mortgage loans. None of the adjustable rate mortgages are payment option adjustable rate mortgages ("ARMs"). Approximately 30% of our Jumbo-A residential mortgage-backed securities represent pools of fixed rate residential mortgage loans and none of the adjustable rate mortgages are payment option ARMs.

The aggregate gross amount of unrealized losses on available for sale securities totaled $42 million at December 31, 2015, an increase of $8.9 million compared to December 31, 2014. On a quarterly basis, we perform separate evaluations on debt and equity securities to determine if the unrealized losses are temporary as more fully described in Note 2 of the Consolidated Financial Statements. Other-than-temporary impairment charges of $1.8 million were recognized in earnings in 2015.

Certain residential mortgage-backed securities issued by U.S. government agencies and included in fair value option securities on the Consolidated Balance Sheets, have been segregated and designated as economic hedges of changes in the fair value of our mortgage servicing rights. We have elected to carry these securities at fair value with changes in fair value recognized in current period income. These securities are held with the intent that gains or losses will offset changes in the fair value of mortgage servicing rights and related derivative contracts.

Bank-Owned Life Insurance

We have approximately $303 million of bank-owned life insurance at December 31, 2015. This investment is expected to provide a long-term source of earnings to support existing employee benefit programs. Approximately $272 million is held in separate accounts. Our separate account holdings are invested in diversified portfolios of investment-grade fixed income securities and cash equivalents, including U.S. Treasury and Agency securities, residential mortgage-backed securities, corporate debt, asset-backed and commercial mortgage-backed securities. The portfolios are managed by unaffiliated professional managers within parameters established in the portfolio’s investment guidelines. The cash surrender value of certain life insurance policies is further supported by a stable value wrap, which protects against changes in the fair value of the investments. At December 31, 2015, the fair value of investments held in separate accounts was approximately $283 million. As the underlying fair value of the investments held in a separate account at December 31, 2015 exceeded the net book value of the investments, no cash surrender value was supported by the stable value wrap. The stable value wrap is provided by a domestic financial institution. The remaining cash surrender value of $31 million primarily represents the cash surrender value of policies held in general accounts and other amounts due from various insurance companies.

Loans

The aggregate loan portfolio before allowance for loan losses totaled $15.9 billion at December 31, 2015, growing $1.7 billion or 12% over December 31, 2014. Commercial loans have grown by $1.2 billion or 13% due largely to growth in healthcare, services and energy sector loans. Commercial real estate loans increased $531 million or 19% primarily due to growth in loans secured by office buildings, industrial facilities and retail facilities. Residential mortgage loans decreased $73 million and personal loans increased $118 million.

Table 14 – Loans
(In thousands)

	December 31,				
	2015	2014	2013	2012	2011
Commercial:					
Energy	$3,097,328	$2,860,428	$2,351,760	$2,460,659	$2,005,041
Services	2,784,276	2,391,530	2,282,210	2,164,186	1,761,538
Healthcare	1,883,380	1,454,969	1,274,246	1,081,406	978,160
Wholesale/retail	1,422,064	1,440,015	1,201,364	1,106,439	967,426
Manufacturing	556,729	532,594	391,751	348,484	336,733
Other commercial and industrial	508,754	416,134	441,890	480,738	506,172
Total commercial	10,252,531	9,095,670	7,943,221	7,641,912	6,555,070
Commercial real estate:					
Retail	796,499	666,889	586,047	522,786	509,402
Multifamily	751,085	704,298	576,502	402,896	369,028
Office	637,707	415,544	411,499	427,872	405,923
Industrial	563,169	428,817	243,877	245,994	278,186
Residential construction and land development	160,426	143,591	206,258	253,093	342,054
Other commercial real estate	350,147	369,011	391,170	376,358	386,710
Total commercial real estate	3,259,033	2,728,150	2,415,353	2,228,999	2,291,303
Residential mortgage:					
Permanent mortgage	945,336	969,951	1,062,744	1,123,965	1,157,133
Permanent mortgages guaranteed by U.S. government agencies	196,937	205,950	181,598	160,444	184,973
Home equity	734,620	773,611	807,684	760,631	632,421
Total residential mortgage	1,876,893	1,949,512	2,052,026	2,045,040	1,974,527
Personal	552,697	434,705	381,664	395,505	448,843
Total	$15,941,154	$14,208,037	$12,792,264	$12,311,456	$11,269,743

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Commercial

Commercial loans represent loans for working capital, facilities acquisition or expansion, purchases of equipment and other needs of commercial customers primarily located within our geographical footprint. Commercial loans are underwritten individually and represent on-going relationships based on a thorough knowledge of the customer, the customer's industry and market. While commercial loans are generally secured by the customer's assets including real property, inventory, accounts receivable, operating equipment, interests in mineral rights and other property and may also include personal guarantees of the owners and related parties, the primary source of repayment of the loans is the on-going cash flow from operations of the customer's business. Inherent lending risks are centrally monitored on a continuous basis from underwriting throughout the life of the loan for compliance with commercial lending policies.

Healthcare sector loans increased $428 million or 29% over December 31, 2014. Service sector loans increased $393 million or 16% and energy sector loans increased $237 million or 8%. Other commercial and industrial sector loans increased $93 million or 22% and manufacturing sector loans increased $24 million or 5%. This growth was partially offset by an $18 million or 1% decrease in wholesale/retail sector loans.

Table 15 presents our commercial loan portfolio distributed primarily by collateral location. Loans for which the collateral location is less relevant, such as unsecured loans and reserve-based energy loans, are distributed by the borrower's primary operating location.

Table 15 – Commercial Loans by Collateral Location
(In thousands)

	Oklahoma	Texas	New Mexico	Arkansas	Colorado	Arizona	Kansas/ Missouri	Other	Total
Energy	$819,338	$1,406,754	$61,642	$5,847	$314,017	$10,391	$94,863	$384,476	$3,097,328
Services	813,738	852,839	199,180	8,380	268,045	159,800	161,150	321,144	2,784,276
Healthcare	269,662	353,761	124,467	84,915	137,275	102,752	225,254	585,294	1,883,380
Wholesale/retail	369,582	569,827	37,053	37,089	62,918	51,569	29,807	264,219	1,422,064
Manufacturing	149,619	199,411	2,848	9,715	50,008	43,365	37,083	64,680	556,729
Other commercial and industrial	80,588	148,567	4,936	79,758	36,232	29,287	74,725	54,661	508,754
Total commercial loans	$2,502,527	$3,531,159	$430,126	$225,704	$868,495	$397,164	$622,882	$1,674,474	$10,252,531

The majority of our commercial portfolio is located within our geographic footprint. The Other category includes two primary locations, California and Louisiana, which represent $242 million or 2.4% of the commercial portfolio and $167 million or 1.6% of the commercial portfolio, respectively at December 31, 2015. All other states individually represent less than one percent of total commercial loans.

Supporting the energy industry with loans to producers and other energy-related entities has been a hallmark of the Company since its founding and represents a large portion of our commercial loan portfolio. In addition, energy production and related industries have a significant impact on the economy in our primary markets. Loans collateralized by oil and gas properties are subject to a semi-annual engineering review by our internal staff of petroleum engineers. This review is utilized as the basis for developing the expected cash flows supporting the loan amount. The projected cash flows are discounted according to risk characteristics of the underlying oil and gas properties. Loans are evaluated to demonstrate with reasonable certainty that crude oil, natural gas and natural gas liquids can be recovered from known oil and gas reservoirs under existing economic and operating conditions at current pricing levels and with existing conventional equipment and operating methods and costs. As part of our

evaluation of credit quality, we analyze rigorous stress tests over a range of commodity prices and take proactive steps to mitigate risk when appropriate.

Energy loans totaled $3.1 billion or 19% of total loans at December 31, 2015. Unfunded energy loan commitments decreased by $502 million during the year to $2.4 billion at December 31, 2015. Approximately $2.5 billion or 82% of energy loans were to oil and gas producers, an increase of $83 million over December 31, 2014. The majority of this portfolio is first lien, senior secured, reserve-based lending, which we believe is the lowest risk form of energy lending. The Company has largely avoided higher-risk energy lending areas including second-lien financing, mezzanine debt and subordinated debt. In addition, the Company has no direct exposure to energy company equity or to borrowers with deepwater offshore exposure. Approximately 62% of the committed production loans are secured by properties primarily producing oil and 38% of the committed production loans are secured by properties primarily producing natural gas. Loans to borrowers that provide services to the energy industry totaled $279 million or 9% of energy loans, an increase of $57 million during 2015. Loans to borrowers in the midstream sector of the industry totaled $193 million or 5% of energy loans, an increase of $92 million over the prior year. Loans to other energy borrowers, including those engaged in wholesale or retail energy sales totaled $86 million or 4% of energy loans, an increase of $4.7 million over the prior year.

The services sector of the loan portfolio totaled $2.8 billion or 17% of total loans and consists of a large number of loans to a variety of businesses, including governmental, financial & insurance, religious and not-for-profit, educational and professional/technical services. Approximately $1.2 billion of the services category is made up of loans with individual balances of less than $10 million. Service sector loans are generally secured by the assets of the borrower with repayment coming from the cash flows of ongoing operations of the customer’s business.

We participate in shared national credits when appropriate to obtain or maintain business relationships with local customers. Shared national credits are defined by banking regulators as credits of more than $20 million and with three or more non-affiliated banks as participants. At December 31, 2015, the outstanding principal balance of these loans totaled $3.4 billion. Approximately 83% of these loans are to borrowers with local market relationships. We serve as the agent lender in approximately 16% of our shared national credits, based on dollars committed. We hold shared credits to the same standard of analysis and perform the same level of review as internally originated credits. Our lending policies generally avoid loans in which we do not have the opportunity to maintain or achieve other business relationships with the customer. In addition to management’s quarterly assessment of credit risk, banking regulators annually review a sample of shared national credits for proper risk grading.

Commercial Real Estate

Commercial real estate represents loans for the construction of buildings or other improvements to real estate and property held by borrowers for investment purposes. The majority of commercial real estate loans are secured by properties within our geographic footprint, with the larger concentrations in Texas and Oklahoma, 30% and 13% at December 31, 2015. We require collateral values in excess of the loan amounts, demonstrated cash flows in excess of expected debt service requirements, equity investment in the project and a portion of the project already sold, leased or permanent financing already secured. The expected cash flows from all significant new or renewed income producing property commitments are stress tested to reflect the risks in varying interest rates, vacancy rates and rental rates. As with commercial loans, inherent lending risks are centrally monitored on a continuous basis from underwriting throughout the life of the loan for compliance with applicable lending policies.

Commercial real estate loans totaled $3.3 billion or 20% of the loan portfolio at December 31, 2015. The outstanding balance of commercial real estate loans increased $531 million over 2014, primarily due to growth in loans secured by office buildings, industrial facilities and retail facilities. The commercial real estate loan balance as a percentage of our total loan portfolio has ranged from 18% to 20% over the past five years. The commercial real estate segment of our loan portfolio distributed by collateral location follows in Table 16.

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Table 16 – Commercial Real Estate Loans by Collateral Location
(In thousands)

	Oklahoma	Texas	New Mexico	Arkansas	Colorado	Arizona	Kansas/ Missouri	Other	Total
Retail	86,217	289,217	91,184	3,831	60,135	39,873	8,723	217,319	796,499
Multifamily	90,035	255,815	32,056	18,646	73,435	72,157	55,324	153,617	751,085
Office	96,444	174,054	58,644	1,862	29,455	48,727	69,215	159,306	637,707
Industrial	54,231	162,871	37,003	219	5,778	14,942	43,224	244,901	563,169
Residential construction and land development	21,747	36,843	16,366	5,686	40,024	529	6,093	33,138	160,426
Other commercial real estate	68,295	68,502	15,201	9,844	23,252	27,393	3,392	134,268	350,147
Total commercial real estate loans	$416,969	$987,302	$250,454	$40,088	$232,079	$203,621	$185,971	$942,549	$3,259,033

The Other category includes California with $129 million or 3.9% of total commercial real estate loans, Florida with $87 million or 2.7% of total commercial real estate loans, Mississippi with $83 million or 2.6% of total commercial real estate loans and Utah with $64 million or 2.0% of total commercial real estate loans. All other locations included in Other individually represent less than 2.0% of the total commercial real estate loan population.

Commercial real estate in Houston, Texas, our most energy exposed market, was $320 million or 2% of the loan portfolio at December 31, 2015. Approximately 51% of our commercial real estate exposure in Houston was retail, 19% to loans secured by industrial facilities, 9% to multifamily residential properties, 9% to office buildings, with the balance in secured by other commercial real estate. We have no office exposure in downtown Houston.

Residential Mortgage and Personal

Residential mortgage loans provide funds for our customers to purchase or refinance their primary residence or to borrow against the equity in their home. Residential mortgage loans are secured by a first or second-mortgage on the customer's primary residence. Personal loans consist primarily of loans to wealth management clients secured by the cash surrender value of insurance policies and marketable securities. It also includes direct loans secured by and for the purchase of automobiles, recreational and marine equipment as well as unsecured loans. Residential mortgage and personal loans are made in accordance with underwriting policies we believe to be conservative and are fully documented. Credit scoring is assessed based on significant credit characteristics including credit history, residential and employment stability.

Residential mortgage loans totaled $1.9 billion, a $73 million or 4% decrease compared to December 31, 2014. In general, we sell the majority of our fixed rate loan originations that conform to U.S. government agency standards in the secondary market and retain the majority of our non-conforming and adjustable-rate mortgage loans. We have no concentration in sub-prime residential mortgage loans. Our mortgage loan portfolio does not include payment option adjustable rate mortgage loans or adjustable rate mortgage loans with initial rates that are below market. Collateral for 98% of our residential mortgage portfolio is located within our geographic footprint.

The majority of our permanent mortgage loan portfolio is primarily composed of various non-conforming mortgage programs to support customer relationships including jumbo mortgage loans, non-builder construction loans and special loan programs for high net worth individuals or certain professionals. Jumbo loans may be fixed or variable rate and are fully amortizing. The size of jumbo loans exceed maximums set under government sponsored entity standards, but otherwise generally conform to those standards. These loans generally require a minimum FICO score of 720 and a maximum debt-to-income ratio (“DTI”) of 38%. Loan-to-value ratios (“LTV”) are tiered from 60% to 100%, depending on the market. Special mortgage programs include fixed and variable rate fully amortizing loans tailored to the needs of certain healthcare professionals. Variable rate loans are fully indexed at origination and may have fixed rates for three to ten years, then adjust annually thereafter.

At December 31, 2015, $197 million of permanent residential mortgage loans are guaranteed by U.S. government agencies. We have minimal credit exposure on loans guaranteed by the agencies. This amount includes residential mortgage loans previously sold into GNMA mortgage pools that are eligible to be repurchased. We may repurchase these loans when certain defined delinquency criteria are met. Because of this repurchase right, the Company is deemed to have regained effective control over these loans and must include them in the Consolidated Balance Sheets. Permanent residential mortgage loans guaranteed by U.S. government agencies decreased $9.0 million or 4% compared to December 31, 2014.

Home equity loans totaled $735 million at December 31, 2015, a $39 million or 5% decrease compared to December 31, 2014. Our home equity portfolio is primarily composed of first-lien, fully amortizing home equity loans. Home equity loans generally require a minimum FICO score of 700 and a maximum DTI of 40%. The maximum loan amount available for our home equity loan products is generally $400 thousand. Revolving loans have a 5 year revolving period followed by 15 year term of amortizing repayments. Interest-only home equity loans may not be extended for any additional revolving time. All other home equity loans may be extended at management's discretion for an additional 5 year revolving term subject to an update of certain credit information. A summary of our home equity loan portfolio at December 31, 2015 by lien position and amortizing status follows in Table 17.

Table 17 – Home Equity Loans
(In thousands)

	Revolving	Amortizing	Total
First lien	$40,012	$459,116	$499,128
Junior lien	82,948	152,544	235,492
Total home equity	$122,960	$611,660	$734,620

The distribution of residential mortgage and personal loans at December 31, 2015 is presented in Table 18. Residential mortgage loans are distributed by collateral location. Personal loans are generally distributed by borrower location.

Table 18 – Residential Mortgage and Personal Loans by Collateral Location
(In thousands)

	Oklahoma	Texas	New Mexico	Arkansas	Colorado	Arizona	Kansas/Missouri	Other	Total
Residential mortgage:									
Permanent mortgage	$196,724	$389,713	$40,319	$15,376	$135,174	$93,580	$50,416	$24,034	$945,336
Permanent mortgages guaranteed by U.S. government agencies	63,794	24,065	66,054	5,160	7,853	1,496	12,855	15,660	196,937
Home equity	430,904	132,197	115,824	5,337	32,257	9,794	7,771	536	734,620
Total residential mortgage	$691,422	$545,975	$222,197	$25,873	$175,284	$104,870	$71,042	$40,230	$1,876,893
Personal	$250,017	$205,384	$11,597	$819	$23,501	$30,782	$26,931	$3,666	$552,697

The Company secondarily evaluates loan portfolio performance based on the primary geographical market managing the loan. Loans attributed to a geographical market may not represent the location of the borrower or the collateral. All permanent mortgage loans serviced by our mortgage banking unit and held for investment by the Bank are centrally managed by the Bank of Oklahoma.

Table 19 – Loans Managed by Primary Geographical Market
(In thousands)

	December 31, 2015	2014	2013	2012	2011
Bank of Oklahoma:					
Commercial	$3,782,687	$3,142,689	$2,902,140	$3,089,686	$2,826,649
Commercial real estate	739,829	603,610	602,010	580,694	607,030
Residential mortgage	1,409,114	1,467,096	1,524,212	1,488,486	1,411,560
Personal	255,387	206,115	192,283	220,096	235,909
Total Bank of Oklahoma	6,187,017	5,419,510	5,220,645	5,378,962	5,081,148
Bank of Texas:					
Commercial	3,908,425	3,549,128	3,052,274	2,726,925	2,249,888
Commercial real estate	1,204,202	1,027,817	816,574	771,796	830,642
Residential mortgage	219,126	235,948	260,544	275,408	268,053
Personal	203,496	154,363	131,297	116,252	126,570
Total Bank of Texas	5,535,249	4,967,256	4,260,689	3,890,381	3,475,153
Bank of Albuquerque:					
Commercial	375,839	383,439	342,336	265,830	258,668
Commercial real estate	313,422	296,358	308,829	326,135	303,500
Residential mortgage	120,507	127,999	133,900	130,337	104,695
Personal	11,557	10,899	13,842	15,456	19,369
Total Bank of Albuquerque	821,325	818,695	798,907	737,758	686,232
Bank of Arkansas:					
Commercial	92,359	95,510	81,556	62,049	76,199
Commercial real estate	69,320	88,301	78,264	90,821	136,170
Residential mortgage	8,169	7,261	7,922	13,046	15,772
Personal	819	5,169	8,023	15,421	35,911
Total Bank of Arkansas	170,667	196,241	175,765	181,337	264,052
Colorado State Bank & Trust:					
Commercial	987,076	977,961	735,626	776,610	544,020
Commercial real estate	223,946	194,553	190,355	173,327	156,013
Residential mortgage	53,782	57,119	62,821	59,363	64,627
Personal	23,384	27,918	22,686	19,333	21,598
Total Colorado State Bank & Trust	1,288,188	1,257,551	1,011,488	1,028,633	786,258
Bank of Arizona:					
Commercial	606,733	547,524	417,702	313,296	271,914
Commercial real estate	507,523	355,140	257,477	201,760	198,160
Residential mortgage	44,047	35,872	47,111	57,803	89,315
Personal	31,060	12,883	7,887	4,686	5,633
Total Bank of Arizona	1,189,363	951,419	730,177	577,545	565,022
Bank of Kansas City:					
Commercial	499,412	399,419	411,587	407,516	327,732
Commercial real estate	200,791	162,371	161,844	84,466	59,788

Residential mortgage	22,148	18,217	15,516	20,597	20,505
Personal	26,994	17,358	5,646	4,261	3,853
Total Bank of Kansas City	749,345	597,365	594,593	516,840	411,878
Total BOK Financial loans	$15,941,154	$14,208,037	$12,792,264	$12,311,456	$11,269,743

Table 20 – Loan Maturity and Interest Rate Sensitivity at December 31, 2015
(In thousands)

		Remaining Maturities of Selected Loans		
	Total	Within 1 Year	1-5 Years	After 5 Years
Loan maturity:				
Commercial	$10,252,531	$745,356	$5,953,627	$3,553,548
Commercial real estate	3,259,033	296,768	1,932,993	1,029,272
Total	$13,511,564	$1,042,124	$7,886,620	$4,582,820
Interest rate sensitivity for selected loans with:				
Predetermined interest rates	$2,506,596	$8,435	$575,187	$1,922,974
Floating or adjustable interest rates	11,004,968	1,033,689	7,311,433	2,659,846
Total	$13,511,564	$1,042,124	$7,886,620	$4,582,820

Loan Commitments

We enter into certain off-balance sheet arrangements in the normal course of business. These arrangements included unfunded loan commitments which totaled $8.5 billion and standby letters of credit which totaled $508 million at December 31, 2015. Loan commitments may be unconditional obligations to provide financing or conditional obligations that depend on the borrower's financial condition, collateral value or other factors. Standby letters of credit are unconditional commitments to guarantee the performance of our customer to a third party. Since some of these commitments are expected to expire before being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. Approximately $166 thousand of the outstanding standby letters of credit were issued on behalf of customers whose loans are nonperforming at December 31, 2015.

Table 21 – Off-Balance Sheet Credit Commitments
(In thousands)

	December 31,				
	2015	2014	2013	2012	2011
Loan commitments	$8,455,037	$8,328,416	$7,096,373	$6,636,587	$5,193,545
Standby letters of credit	507,988	447,599	444,248	466,477	534,565
Mortgage loans sold with recourse	155,489	179,822	191,299	226,922	289,021

As more fully described in Note 7 to the Consolidated Financial Statements, we have off-balance sheet commitments related to certain residential mortgage loans originated under community development loan programs that were sold to a U.S. government agency with full recourse. These mortgage loans were underwritten to standards approved by the agencies, including full documentation and originated under programs available only for owner-occupied properties. The Company no longer sells residential mortgage loans with recourse other than obligations under standard representations and warranties. We are obligated to repurchase these loans for the life of these loans in the event of foreclosure for the unpaid principal and interest at the time of foreclosure. At December 31, 2015, the principal balance of residential mortgage loans sold subject to recourse obligations totaled $155 million, down from $180 million at December 31, 2014. Substantially all of these loans are to borrowers in our primary markets including $102 million to borrowers in Oklahoma, $16 million to borrowers in Arkansas and $12 million to borrowers in New Mexico. At December 31, 2015, approximately 3% of these loans are nonperforming and 6% were past due 30 to 89 days. A separate accrual for credit risk of $4.6 million is available to absorb losses on these loans.

We also have an off-balance sheet obligation to repurchase residential mortgage loans sold to government sponsored entities through our mortgage banking activities due to standard representations and warranties made under contractual agreements as described further in Note 7 to the Consolidated Financial Statements. For the period from

2010 through 2015, approximately 21% of repurchase requests have currently resulted in actual repurchases or indemnification by the Company. The accrual for credit losses related to potential loan repurchases under representations and warranties totaled $3.4 million at December 31, 2015.

Customer Derivative Programs

We offer programs that permit our customers to hedge various risks, including fluctuations in energy, cattle and other agricultural product prices, interest rates and foreign exchange rates. Each of these programs work essentially the same way. Derivative contracts are executed between the customers and the Company. Offsetting contracts are executed between the Company and selected counterparties or exchanges to minimize market risk to us from changes in commodity prices, interest rates or foreign exchange rates. The counterparty contracts are identical to the customer contracts, except for a fixed pricing spread or a fee paid to us as compensation for administrative costs, credit risk and profit.

The customer derivative programs create credit risk for potential amounts due to the Company from our customers and from the counterparties. Customer credit risk is monitored through existing credit policies and procedures. The effects of changes in commodity prices, interest rates or foreign exchange rates are evaluated across a range of possible options to determine the maximum exposure we are willing to have individually to any customer. Customers may also be required to provide cash margin or other collateral in conjunction with our credit agreements to further limit our credit risk.

Counterparty credit risk is evaluated through existing policies and procedures. This evaluation considers the total relationship between BOK Financial and each of the counterparties. Individual limits are established by management, approved by Credit Administration and reviewed by the Asset / Liability Committee. Margin collateral is required if the exposure between the Company and any counterparty exceeds established limits. Based on declines in the counterparties' credit ratings, these limits may be reduced and additional margin collateral may be required.

A deterioration of the credit standing of one or more of the customers or counter-parties to these contracts may result in BOK Financial recognizing a loss as the fair value of the affected contracts may no longer move in tandem with the offsetting contracts. This occurs if the credit standing of the customer or counterparty deteriorated such that either the fair value of underlying collateral no longer supports the contract or the customer or counterparty's ability to provide margin collateral was impaired. Credit losses on customer derivatives reduce brokerage and trading revenue in the Consolidated Statement of Earnings.

Derivative contracts are carried at fair value. At December 31, 2015, the net fair values of derivative contracts, before consideration of cash margin, reported as assets under these programs totaled $611 million compared to $433 million at December 31, 2014. Derivative contracts carried as assets include foreign exchange contracts with fair values of $499 million, energy contracts with fair values of $60 million, interest rate swaps primarily sold to loan customers with fair values of $32 million, to-be-announced residential mortgage-backed securities with fair values of $15 million and equity option contracts with fair values of $3.8 million. Before consideration of cash margin paid to counterparties, the aggregate net fair values of derivative contracts held under these programs reported as liabilities totaled $606 million.

At December 31, 2015, total derivative assets were reduced by $25 million of cash collateral received from counterparties and total derivative liabilities were reduced by $25 million of cash collateral paid to counterparties related to instruments executed with the same counterparty under a master netting agreement.

A table showing the notional and fair value of derivative assets and liabilities on both a gross and net basis is presented in Note 3 to the Consolidated Financial Statements.

The fair value of derivative contracts reported as assets under these programs, net of cash margin held by the Company, by category of debtor at December 31, 2015 follows in Table 22.

Table 22 – Fair Value of Derivative Contracts

(In thousands)	
Customers	$316,048
Banks and other financial institutions	231,609
Exchanges	38,530
Fair value of customer hedge asset derivative contracts, net	$586,187

The largest exposure to a single counterparty was to an exchange for energy derivative contracts which totaled $34 million at December 31, 2015.

Our customer derivative program also introduces liquidity and capital risk. We are required to provide cash margin to certain counterparties when the net negative fair value of the contracts exceeds established limits. Also, changes in commodity prices affect the amount of regulatory capital we are required to hold as support for the fair value of our derivative assets. These risks are modeled as part of the management of these programs. Based on current prices, a decrease in market prices equivalent to $20.79 per barrel of oil would increase the fair value of derivative assets by $196 thousand. An increase in prices equivalent to $57.96 per barrel of oil would increase the fair value of derivative assets by $23 million. Liquidity requirements of this program are also affected by our credit rating. A decrease in credit rating to below investment grade would increase our obligation to post cash margin on existing contracts by approximately $20 million. The fair value of our to-be-announced residential mortgage-backed securities and interest rate swap derivative contracts is affected by changes in interest rates. Based on our assessment as of December 31, 2015, changes in interest rates would not materially impact regulatory capital or liquidity needed to support this portion of our customer derivative program.

Summary of Loan Loss Experience

We maintain an allowance for loan losses and an accrual for off-balance sheet credit risk. At December 31, 2015, the combined allowance for loan losses and accrual for off-balance sheet risk totaled $227 million or 1.43% of outstanding loans and 181% of nonaccruing loans, excluding loans guaranteed by U.S. Government agencies. The allowance for loan losses was $226 million and the accrual for off-balance sheet credit risk was $1.7 million. At December 31, 2014, the combined allowance for credit losses was $190 million or 1.34% of outstanding loans and 247% of nonaccruing loans, excluding loans guaranteed by U.S. Government agencies. The allowance for loan losses was $189 million and the accrual for off-balance sheet credit risk was $1.2 million.

The provision for credit losses is the amount necessary to maintain the allowance for loan losses and an accrual for off-balance sheet credit risk at an amount determined by management to be appropriate based on its evaluation. The provision includes the combined charge or credit to expense for both the allowance for loan losses and the accrual for off-balance sheet credit risk. All losses incurred from lending activities will ultimately be reflected in charge-offs against the allowance for loan losses following funds advanced against outstanding commitments. After evaluating all credit factors, the Company determined that a $34.0 million provision for credit losses was necessary due to increased impairment and continued credit migration in our energy loan portfolio and continued growth of the loan portfolio. In addition, a single energy borrower reported steeper than expected production declines and higher lease operating expenses, leading to a $14 million impairment on the loan. No provision for credit losses was necessary for 2014.

Based on currently available information, our expectations for loan growth, historical credit factors by loan type and other qualitative and environmental factors, and including the results of our energy stress testing, discussed in more detail following, we estimate a loan loss provision range of $60 million to $80 million may be necessary to maintain an appropriate loan loss reserve in 2016.

Table 23 – Summary of Loan Loss Experience
(In thousands)

	Year Ended December 31, 2015	2014	2013	2012	2011
Allowance for loan losses:					
Beginning balance	$189,056	$185,396	$215,507	$253,481	$292,971
Loans charged off:					
Commercial	(6,734)	(3,569)	(6,335)	(9,341)	(14,836)
Commercial real estate	(944)	(2,047)	(5,845)	(11,642)	(15,973)
Residential mortgage	(2,205)	(4,448)	(5,753)	(10,047)	(14,107)
Personal	(5,288)	(6,168)	(7,349)	(11,108)	(11,884)
Total	(15,171)	(16,232)	(25,282)	(42,138)	(56,800)
Recoveries of loans previously charged off:					
Commercial	2,729	5,703	7,488	6,128	7,478
Commercial real estate	11,079	7,003	9,420	5,706	2,780
Residential mortgage	1,260	2,000	1,558	1,928	2,334
Personal	3,052	4,328	4,778	5,056	5,758
Total	18,120	19,034	23,244	18,818	18,350
Net loans recovered (charged off)	2,949	2,802	(2,038)	(23,320)	(38,450)
Provision for loan losses	33,519	858	(28,073)	(14,654)	(1,040)
Ending balance	$225,524	$189,056	$185,396	$215,507	$253,481
Accrual for off-balance sheet credit risk:					
Beginning balance	$1,230	$2,088	$1,915	$9,261	$14,271
Provision for off-balance sheet credit risk	481	(858)	173	(7,346)	(5,010)
Ending balance	$1,711	$1,230	$2,088	$1,915	$9,261
Total combined provision for credit losses	$34,000	$—	$(27,900)	$(22,000)	$(6,050)
Allowance for loan losses to loans outstanding at period end	1.41%	1.33%	1.45%	1.75%	2.25%
Net charge-offs (recoveries) to average loans	(0.02)%	(0.02)%	0.02%	0.20%	0.35%
Total provision for credit losses to average loans	0.23%	—%	(0.23)%	(0.19)%	(0.06)%
Recoveries to gross charge-offs	119.44%	117.26%	91.94%	44.66%	32.31%
Allowance for loan losses as a multiple of net charge-offs	(76.47)x	(67.47)x	90.97x	9.24x	6.59x
Accrual for off-balance sheet credit risk to off-balance sheet credit commitments	0.02%	0.01%	0.03%	0.03%	0.14%
Combined allowance for credit losses to loans outstanding at period-end	1.43%	1.34%	1.47%	1.77%	2.33%

[1] Includes $7.1 million of negative recovery related to a refund of a settlement between BOK Financial and the City of Tulsa invalidated by the Oklahoma Supreme Court. Excluding this refund, BOK Financial net charge-offs to average loans was 0.14%, recoveries to gross charge-offs were 61.51% and the allowance for loan losses as a multiple of net charge-offs was 13.29x for 2012.

Allowance for Loan Losses

The appropriateness of the allowance for loan losses is assessed by management based on an ongoing quarterly evaluation of the probable estimated losses inherent in the portfolio. The allowance consists of specific allowances attributed to certain impaired loans, general allowances based on estimated loss rates by loan class and non-specific allowances based on general economic conditions, concentration in loans with large balances and other relevant factors.

Loans are considered to be impaired when it is probable that we will not collect all amounts due according to the contractual terms of the loan agreements. This includes all nonaccruing loans, all loans modified in trouble debt restructurings and all government guaranteed loans repurchased from GNMA pools. At December 31, 2015, impaired loans totaled $322 million, including $44 million with specific allowances of $16 million and $278 million with no specific allowances because the loan balances represent the amounts we expect to recover. At December 31, 2014, impaired loans totaled $283 million, including $1.2 million of impaired loans with specific allowances of $312 thousand and $282 million with no specific allowances.

General allowances for unimpaired loans are based on an estimated loss rate by loan class. Estimated loss rates for risk-graded loans are either increased or decreased based on changes in risk grading for each loan class. Estimated loss rates for both risk-graded and non-risk graded loans may be further adjusted for inherent risks identified for the given loan class which have not yet been captured in the loss rate.

The aggregate amount of general allowances for all unimpaired loans totaled $179 million at December 31, 2015, compared to $161 million at December 31, 2014. The general allowance for the commercial loan portfolio segment increased by $23 million primarily due to loan growth and exposure to lower energy prices. The general allowance for the commercial real estate loan portfolio segment decreased $1.0 million over December 31, 2014. The general allowance for residential mortgage loans decreased $3.9 million. The general allowance for personal loans was largely unchanged compared to the prior year.

Nonspecific allowances are maintained for risks beyond factors specific to a particular portfolio segment or loan class. These factors include trends in the economy in our primary lending areas, concentrations in loans with large balances and other relevant factors. Nonspecific allowances totaled $30 million at December 31, 2015, compared to $28 million at December 31, 2014. The nonspecific allowance includes consideration of the indirect impact of falling energy prices on the broader economies within our geographical footprint that are highly dependent on the energy industry.

An allocation of the allowance for loan losses by loan category follows in Table 24.

Table 24 – Allowance for Loan Losses Allocation
(Dollars in thousands)

	December 31,														
	2015			2014			2013			2012			2011		
	Allowance	% of Loans[1]		Allowance	% of Loans[1]		Allowance	% of Loans[1]		Allowance	% of Loans[1]		Allowance	% of Loans[1]	
Loan category:															
Commercial	$130,334	64.32	%	$90,875	64.02	%	$79,180	62.10	%	$65,280	62.07	%	$83,443	58.17	%
Commercial real estate	41,391	20.44	%	42,445	19.20	%	41,573	18.88	%	54,884	18.11	%	67,034	20.33	%
	19,509	11.77	%	23,458	13.72	%	29,465	16.04	%	41,703	16.61	%	46,476	17.52	%

Residential mortgage														
Personal	4,164	3.47	%	4,233	3.06	%	6,965	2.98	%	9,453	3.21	%	10,178	3.98	%
Nonspecific allowance	30,126			28,045			28,213			44,187			46,350		
Total	$225,524	100.00	%	$189,056	100.00	%	$185,396	100.00	%	$215,507	100.00	%	$253,481	100.00	%

[1] Represents ratio of loan category balance to total loans.

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Our loan monitoring process also identified loans that possess more than the normal amount of risk due to deterioration in the financial condition of the borrower or the value of the collateral. Because the borrowers are still performing in accordance with the original terms of the loan agreements, and no loss of principal or interest is anticipated, these loans were not included in nonperforming assets. Known information does, however, cause management concern as to the borrowers’ continued ability to comply with current repayment terms. The potential problem loans totaled $155 million at December 31, 2015. The current composition of potential problem loans by primary industry included energy - $130 million, services - $6.8 million, multifamily residential properties - $6.5 million and wholesale/retail - $6.4 million. Potential problem loans totaled $79 million at December 31, 2014.

Our performing loan totals include loans that management considers to be "other loans especially mentioned" based on regulatory guidelines. Other loans especially mentioned are in compliance with the original terms of the agreement, but may have a weakness that deserves management's close attention. Energy loans categorized as other loans especially mentioned totaled $326 million or 11% of outstanding energy loans at December 31, 2015 and $11 million or less than 1% of outstanding energy loans at December 31, 2014.

We updated our energy portfolio stress test at December 31, 2015 to determine how the energy portfolio will respond in a prolonged low-price environment. Stress test assumptions included a starting price of $1.80 per million BTUs for natural gas and $25 per barrel of oil, gradually escalating over five years to a maximum of $2.45 and $42, respectively. In this scenario, the energy portfolio exhibits a greater stress than the Company has experienced to date and losses are expected to exceed the Company's fifteen year historical loss rate on energy production loans of 8 basis points. The results of the stress test are factored into our expectation that the loan loss provision could range from $60 million to $80 million for 2016, which includes a significant increase in the loan loss provision for energy-related loans. The portion of the combined allowance for credit losses attributable to the energy portfolio totaled 2.89% of outstanding energy loans at December 31, 2015, compared to 1.28% of outstanding energy loans at December 31, 2014.

We have been advised that as banking regulators conduct 2016 shared national credit and targeted energy credit reviews, they will consider all of the borrowers' debts, including senior lien positions, junior lien positions and unsecured debt, in comparison to underlying collateral value whether or not we hold any of the borrower's junior lien or unsecured subordinated debt. This change in grading methodology may increase loans especially mentioned, potential problem loans and non-accruing loans in the first half of 2016. Because substantially all our energy loan portfolio is supported by senior lien positions that have lower loss exposure, the historical relationship between loan classification and loss exposure may become more difficult to evaluate.

Since December 31, energy prices have continued to decline. Closing spot prices for West Texas Intermediate crude oil fell from $37.04 per barrel at year end to a low of $26.21 per barrel on February 11, 2016. Our current loan loss provision forecast for 2016 considers energy price volatility. However, we will better understand the impact of lower prices on our customers during the spring semi-annual revaluation and results of the above mentioned reviews. The results of the revaluation and impact of grading methodology changes on our loan loss provision may exceed our current estimate.

Net Loans Charged Off

Loans are charged off against the allowance for loan losses when the loan balance or a portion of the loan balance is no longer covered by the paying capacity of the borrower based on an evaluation of available cash resources and collateral value. Internally risk graded loans are evaluated quarterly and charge-offs are taken in the quarter in which the loss is identified. Non-risk graded loans are generally charged off when payments are between 60 days and 180 days past due, depending on loan class. In addition, non-risk graded loans are generally charged-down to collateral value within 60 days of being notified of a borrower's bankruptcy filing, regardless of payment status.

BOK Financial had net recoveries of $2.9 million or (0.02)% of average loans for 2015 and $2.8 million or (0.02)% of average loans in 2014.

Net commercial loans charged off totaled $4.0 million. Net commercial real estate loan recoveries totaled $10.1 million. Net charge-offs on residential mortgage loans totaled $945 thousand for the year and net charge-offs of personal loans were $2.2 million.

Table 25 – Nonperforming Assets
(In thousands)

	December 31, 2015	2014	2013	2012	2011
Nonaccruing loans:					
Commercial	$76,424	$13,527	$16,760	$24,467	$68,811
Commercial real estate	9,001	18,557	40,850	60,626	99,193
Residential mortgage	61,240	48,121	42,320	46,608	29,767
Personal	463	566	1,219	2,709	3,515
Total nonaccruing loans	147,128	80,771	101,149	134,410	201,286
Accruing renegotiated loans:					
Guaranteed by U.S. government agencies	74,049	73,985	54,322	38,515	28,974
Other	—	—	—	—	3,919
Total accruing renegotiated loans	74,049	73,985	54,322	38,515	32,893
Total nonperforming loans	221,177	154,756	155,471	172,925	234,179
Real estate and other repossessed assets:					
Guaranteed by U.S. government agencies[1]	—	49,898	37,431	22,365	16,952
Other	30,731	51,963	54,841	81,426	105,801
Real estate and other repossessed assets	30,731	101,861	92,272	103,791	122,753
Total nonperforming assets	$251,908	$256,617	$247,743	$276,716	$356,932
Total nonperforming assets excluding those guaranteed by U.S. government agencies	$155,959	$129,022	$155,213	$215,347	$311,006
Nonaccruing loans by loan class:					
Commercial:					
Energy	$61,189	$1,416	$1,860	$2,460	$336
Services	10,290	5,201	4,922	12,090	16,968
Healthcare	1,072	1,380	1,586	3,166	5,486
Wholesale/retail	2,919	4,149	6,969	3,077	21,180
Manufacturing	331	450	592	2,007	23,051
Other	623	931	831	1,667	1,790
Total commercial	76,424	13,527	16,760	24,467	68,811
Commercial real estate:					
Retail	1,319	3,926	4,857	8,117	6,863
Multifamily	274	—	7	2,706	3,513
Office	651	3,420	6,391	6,829	11,457
Industrial	76	—	252	3,968	—
Residential construction and land development	4,409	5,299	17,377	26,131	61,874
Other commercial real estate	2,272	5,912	11,966	12,875	15,486
Total commercial real estate	9,001	18,557	40,850	60,626	99,193
Residential mortgage:					
Permanent mortgage	28,984	34,845	34,279	39,863	25,366
Permanent mortgages guaranteed by U.S. government agencies	21,900	3,712	777	489	—

Home equity	10,356	9,564	7,264	6,256	4,401
Total residential mortgage	61,240	48,121	42,320	46,608	29,767
Personal	463	566	1,219	2,709	3,515
Total nonaccruing loans	$147,128	$80,771	$101,149	$134,410	$201,286

Table 25 – Nonperforming Assets
(In thousands)

	December 31, 2015		2014		2013		2012		2011	
Nonaccruing loans as % of outstanding loan balance for class:										
Nonaccruing loans by loan class:										
Commercial:										
Energy	1.98	%	0.05	%	0.08	%	0.10	%	0.02	%
Services	0.37	%	0.22	%	0.22	%	0.56	%	0.96	%
Healthcare	0.06	%	0.09	%	0.12	%	0.29	%	0.56	%
Wholesale/retail	0.21	%	0.29	%	0.58	%	0.28	%	2.19	%
Manufacturing	0.06	%	0.08	%	0.15	%	0.58	%	6.85	%
Other	0.12	%	0.22	%	0.19	%	0.35	%	0.35	%
Total commercial	0.75	%	0.15	%	0.21	%	0.32	%	1.05	%
Commercial real estate:										
Retail	0.17	%	0.59	%	0.83	%	1.55	%	1.35	%
Multifamily	0.04	%	—	%	—	%	0.67	%	0.95	%
Office	0.10	%	0.82	%	1.55	%	1.60	%	2.82	%
Industrial	0.01	%	—	%	0.10	%	1.61	%	—	%
Residential construction and land development	2.75	%	3.69	%	8.42	%	10.32	%	18.09	%
Other commercial real estate	0.65	%	1.60	%	3.06	%	3.42	%	4.00	%
Total commercial real estate	0.28	%	0.68	%	1.69	%	2.72	%	4.33	%
Residential mortgage:										
Permanent mortgage	3.07	%	3.59	%	3.23	%	3.55	%	2.19	%
Permanent mortgages guaranteed by U.S. government agencies	11.12	%	1.80	%	0.43	%	0.30	%	—	%
Home equity	1.41	%	1.24	%	0.90	%	0.82	%	0.70	%
Total residential mortgage	3.26	%	2.47	%	2.06	%	2.28	%	1.51	%
Personal	0.08	%	0.13	%	0.32	%	0.68	%	0.78	%
Total nonaccruing loans	0.92	%	0.57	%	0.79	%	1.09	%	1.79	%
Allowance for loan losses to nonaccruing loans[2]	180.09	%	245.34	%	184.71	%	160.92	%	125.93	%
Accruing loans 90 days or more past due[2]	$1,207		$125		$1,415		$3,925		$2,496	
Foregone interest on nonaccruing loans[3]	7,432		8,170		9,815		5,361		11,726	

1 Approximately $50 million was reclassified from Real estate and other repossessed assets to Receivables on the balance sheet on January 1, 2015 with the adoption of Financial Accounting Standards Board Update No. 2014-14, Classification of Certain Government-Guaranteed Mortgage Loans Upon Foreclosure ("ASU 2014-14"). With the implementation of ASU 2014-14, upon foreclosure of loans for which the loan balance is expected to be recovered from the guarantee by a U.S. government agency, the loan balance is directly reclassified to other receivables without including such foreclosed assets in real estate and other repossessed assets.

2 Excludes residential mortgages guaranteed by agencies of the U.S. government.

3 Interest collected and recognized on nonaccruing loans was not significant in 2015 and previous years.

Nonperforming assets decreased $4.7 million during 2015 to $252 million or 1.58% of outstanding loans and repossessed assets at December 31, 2015. Nonaccruing loans totaled $147 million, accruing renegotiated residential mortgage loans totaled $74 million (all guaranteed by U.S. government agencies) and real estate and other repossessed assets totaled $31 million. All accruing renegotiated residential mortgage loans and $22 million of nonaccruing loans are guaranteed by U.S. government agencies. Permanent mortgage loans guaranteed by U.S. government agencies increased $18 million over the prior year as repurchased loans are reaching program limits on when further interest accruals must be discontinued. Excluding assets guaranteed by U.S. government agencies, nonperforming assets increased $27 million during the year to $156 million or 0.99% of outstanding non-guaranteed loans and repossessed assets. The increase was primarily due to an increase in nonaccruing energy loans, partially offset by a decrease in real estate and other repossessed assets. The Company generally retains nonperforming assets to maximize potential recovery, which may cause future nonperforming assets to decrease more slowly.

Loans are generally classified as nonaccruing when it becomes probable that we will not collect the full contractual principal and interest. As more fully discussed in Note 4 to the Consolidated Financial Statements, we may modify loans in a troubled debt restructuring. Modifications may include extension of payment terms and rate concessions. We generally do not forgive principal or accrued but unpaid interest. All loans modified in troubled debt restructurings, except residential mortgage loans guaranteed by U.S. government agencies, are classified as nonaccruing. We may renew matured nonaccruing loans. All nonaccruing loans, including those renewed or modified in troubled debt restructurings, are charged off when the loan balance is no longer covered by the paying capacity of the borrower based on a quarterly evaluation of available cash resources and collateral value. All nonaccruing loans generally remain on nonaccruing status until full collection of principal and interest in accordance with the original terms, including principal previously charged off, is probable. We generally do not voluntarily modify consumer loans to troubled borrowers. Consumer loans modified at the direction of bankruptcy court orders are identified as troubled debt restructurings and classified as nonaccruing.

As of December 31, 2015, renegotiated loans consist solely of accruing residential mortgage loans guaranteed by U.S. government agencies that have been modified in troubled debt restructurings. See Note 4 to the Consolidated Financial Statements for additional discussion of troubled debt restructurings. Generally, we modify residential mortgage loans primarily by reducing interest rates and extending the number of payments in accordance with U.S. government agency guidelines. No unpaid principal or interest is forgiven. Interest continues to accrue based on the modified terms of the loan. Modified loans guaranteed by U.S. government agencies under residential mortgage loan programs may be sold once they become eligible according to U.S. agency guidelines.

A rollforward of nonperforming assets for the year ended December 31, 2015 follows in Table 26.

Table 26 – Rollforward of Nonperforming Assets
(In thousands)

	Year Ended December 31, 2015			
	Nonaccruing Loans	Renegotiated Loans	Real Estate and Other Repossessed Assets	Total Nonperforming Assets
Balance, December 31, 2014	$80,771	$73,985	$101,861	$256,617
Additions	122,385	67,761	—	190,146
Net transfer to premises and equipment	—	—	(1,051)	(1,051)
Payments	(31,503)	(2,747)	—	(34,250)
Charge-offs	(15,171)	—	—	(15,171)
Net gains (losses) and write-downs	—	—	1,940	1,940
Foreclosure of nonaccruing loans	(13,643)	—	13,643	—
Foreclosure of loans guaranteed by U.S. government agencies	(4,601)	(8,263)	—	(12,864)
Proceeds from sales	—	(46,655)	(34,669)	(81,324)
Charitable contribution to BOKF Foundation	—	—	(796)	(796)
Transfer of foreclosed loans guaranteed by U.S. Government agencies to Receivables[1]	—	—	(49,898)	(49,898)
Net transfers to nonaccruing loans	10,489	(10,489)	—	—
Return to accrual status	(1,599)	—	—	(1,599)
Other, net	—	457	(299)	158
Balance, December 31, 2015	$147,128	$74,049	$30,731	$251,908

[1] Approximately $50 million was reclassified from Real estate and other repossessed assets to Receivables on the balance sheet on January 1, 2015 with the adoption of Financial Accounting Standards Board Update No. 2014-14,

Classification of Certain Government-Guaranteed Mortgage Loans Upon Foreclosure ("ASU 2014-14"). With the implementation of ASU 2014-14, upon foreclosure of loans for which the loan balance is expected to be recovered from the guarantee by a U.S. government agency, the loan balance is directly reclassified to other receivables without including such foreclosed assets in real estate and other repossessed assets.

We foreclose on loans guaranteed by U.S. government agencies in accordance with agency guidelines. Generally these loans are not eligible for modification programs or have failed to comply with modified loan terms. Principal is guaranteed by agencies of the U.S. government, subject to limitations and credit risk is minimal. These properties will be conveyed to the agencies once applicable criteria have been met.

Nonaccruing loans totaled $147 million or 0.92% of outstanding loans at December 31, 2015 compared to $81 million or 0.57% of outstanding loans at December 31, 2014. Nonaccruing loans increased $66 million from December 31, 2014. Newly identified nonaccruing loans totaled $122 million for 2015, partially offset by $32 million of payments, $15 million of charge-offs and $14 million of foreclosures.

Commercial

Nonaccruing commercial loans totaled $76 million or 0.75% of total commercial loans at December 31, 2015, compared to $14 million or 0.15% of total commercial loans at December 31, 2014. Nonaccruing commercial loans increased $63 million during 2015. Newly identified nonaccruing commercial loans totaled $79 million, offset by $8.7 million in payments, $6.7 million of charge-offs and $392 thousand of repossessions.

Nonaccruing commercial loans at December 31, 2015 were primarily composed of $61 million or 1.98% of total energy sector loans and $10 million or 0.37% of total services sector loans. Over half of nonaccruing energy loans was a single energy credit.

Commercial Real Estate

Nonaccruing commercial real estate loans were $9.0 million or 0.28% of outstanding commercial real estate loans at December 31, 2015, compared to $19 million or 0.68% of outstanding commercial real estate loans at December 31, 2014. The $10 million decrease was primarily due to $13 million of cash payments received, $4.1 million of foreclosures and $944 thousand of charge-offs, partially offset by $8.6 million of newly identified commercial real estate loans during the year.

Nonaccruing commercial real estate loans were composed of $4.4 million or 2.75% of total residential land development and construction loans, $2.3 million or 0.65% of total other commercial real estate loans and $1.3 million or 0.17% of loans secured by retail facilities.

Residential Mortgage and Personal

Nonaccruing residential mortgage loans totaled $61 million or 3.26% of outstanding residential mortgage loans at December 31, 2015, compared to $48 million or 2.47% of outstanding residential mortgage loans at December 31, 2014. Newly identified nonaccruing residential mortgage loans of $28 million were offset by $13 million of foreclosures, $9.5 million of cash payments and $2.2 million of loans charged off during the year. Nonaccruing residential mortgage loans primarily consisted of $29 million or 3.07% of non-guaranteed permanent residential mortgage loans and $22 million or 11.12% of permanent residential mortgage loans guaranteed by U.S. government agencies. Nonaccruing home equity loans totaled $10.4 million or 1.41% of total home equity loans.

Payments on accruing residential mortgage loans and personal loans may be delinquent. The composition of residential mortgage loans and personal loans past due but still accruing is included in the following Table 27. Substantially all non-guaranteed residential loans past due 90 days or more are nonaccruing. Residential mortgage loans 30 to 89 days past due decreased $2.3 million to $6.4 million at December 31, 2015. Personal loans past due 30 to 89 days increased $146 thousand over December 31, 2014.

Table 27 – Residential Mortgage and Personal Loans Past Due
(In thousands)

	December 31, 2015		December 31, 2014	
	90 Days or More	30 to 89 Days	90 Days or More	30 to 89 Days
Residential mortgage:				

Permanent mortgage[1]	$—	$3,290	$46	$5,970
Home equity	20	3,095	77	2,723
Total residential mortgage	$20	$6,385	123	$8,693
Personal	$8	$693	$2	$547

[1] Excludes past due residential mortgage loans guaranteed by agencies of the U.S. government.

Real Estate and Other Repossessed Assets

Real estate and other repossessed assets are assets acquired in partial or total forgiveness of loans. The assets are carried at the lower of cost as determined by fair value at date of foreclosure or current fair value, less estimated selling costs.

Real estate and other repossessed assets totaled $31 million at December 31, 2015, a $71 million decrease from December 31, 2014. The distribution of real estate and other repossessed assets distributed primarily by collateral location is included in Table 28 following.

Table 28 – Real Estate and Other Repossessed Assets by Collateral Location as of December 31, 2015
(In thousands)

	Oklahoma	Texas	Colorado	Arkansas	New Mexico	Arizona	Kansas/ Missouri	Other	Total
Developed commercial real estate properties	$64	$988	$3,456	$—	$756	$221	$3,024	$1,950	$10,459
1-4 family residential properties	4,726	2,352	—	1,180	2,394	3,308	695	120	14,775
Undeveloped land	265	1,520	203	—	—	792	—	—	2,780
Residential land development properties	162	—	594	—	—	1,570	2	—	2,328
Vehicles	4	56	—	—	5	—	—	—	65
Other	—	—	—	—	—	324	—	—	324
Total real estate and other repossessed assets	$5,221	$4,916	$4,253	$1,180	$3,155	$6,215	$3,721	$2,070	$30,731

Undeveloped land is primarily zoned for commercial development. Developed commercial real estate properties are primarily completed with no additional construction necessary for sale.

Liquidity and Capital

Subsidiary Bank

Deposits and borrowed funds are the primary sources of liquidity for the subsidiary bank. Based on the average balances for 2015, approximately 68% of our funding was provided by deposit accounts, 17% from borrowed funds, 1% from long-term subordinated debt and 11% from equity. Our funding sources, which primarily include deposits and borrowings from the Federal Home Loan Banks and other banks, provide adequate liquidity to meet our operating needs.

Deposit accounts represent our largest funding source. We compete for retail and commercial deposits by offering a broad range of products and services and focusing on customer convenience. Retail deposit growth is supported through our Perfect Banking sales and customer service program, free checking, online bill paying services, mobile banking services, an extensive network of branch locations and ATMs and a 24-hour Express Bank call center. Commercial deposit growth is supported by offering treasury management and lockbox services. We also acquire brokered deposits when the cost of funds is advantageous to other funding sources.

Table 29 - Average Deposits by Line of Business
(In thousands)

	Year Ended December 31,	
	2015	2014
Commercial Banking	$8,775,048	$8,887,809
Consumer Banking	6,668,520	6,520,835
Wealth Management	4,573,853	4,391,434
Subtotal	20,017,421	19,800,078
Funds Management and other	915,825	615,080
Total	$20,933,246	$20,415,158

Average deposits for 2015 totaled $20.9 billion and represented approximately 68% of total liabilities and capital compared with $20.4 billion and 73% of total liabilities and capital for 2014. Average deposits increased $518 million over the prior year. Demand deposits increased $361 million and interest-bearing transaction deposit accounts were up $182 million. Time deposits decreased $57 million.

Average Commercial Banking deposit balances decreased $113 million compared to the prior year, due primarily to a $177 million decrease in interest-bearing transaction deposits, partially offset by an $88 million increase in demand deposit balances. Average balances attributed to our commercial & industrial loan customers increased $495 million or 13%. Average balances attributed to our healthcare customers grew by $82 million or 15% over the prior year. Small business banking customer average balances increased $118 million or 10%. Average balances attributed to our energy customers decreased $98 million or 6%. Average balances held by treasury services customers decreased $768 million or 57% compared to the prior year. Commercial customers continue to maintain large cash reserves primarily due to low yields available on other high quality investment alternatives and to minimize deposit service charges through the earnings credit. The earnings credit is a non-cash method that enables commercial customers to offset deposit service charges based on account balances.

Average Consumer Banking deposit balances increased $148 million from 2014. Demand deposit balances grew by $166 million and interest-bearing transaction account balances increased $124 million. Higher costing time deposit balances decreased $178 million. Average Wealth Management deposits increased $182 million over the prior year. Time deposit balances grew by $178 million and demand deposit balances grew by $106 million during 2015, offset by a $100 million decrease in interest-bearing transaction accounts.

The general trend of increased deposits over the past several years reflects modest growth in the overall economy and low short-term interest rates. If economic activity were to improve significantly or if short-term interest rates were to increase further, deposits may decline as customers deploy funds into projects or shift demand deposits into money market instruments.

Table 30 - Maturity of Domestic CDs and Public Funds in Amounts of $100,000 or More
(In thousands)

	December 31,	
	2015	2014
Months to maturity:		
3 or less	$292,292	$225,410
Over 3 through 6	206,935	166,578
Over 6 through 12	268,894	375,032
Over 12	746,719	915,029
Total	$1,514,840	$1,682,049

Brokered deposits included in time deposits averaged $416 million for 2015 compared to $237 million for 2014. Brokered deposits included in time deposits totaled $358 million at December 31, 2015 and $334 million at December 31, 2014.

Average interest-bearing transaction accounts for 2015 included $577 million of brokered deposits compared to $298 million for 2014. Brokered deposits included in interest-bearing transaction accounts totaled $561 million at December 31, 2015 and $585 million at December 31, 2014.

The distribution of our period end deposit account balances among principal markets follows in Table 31.

Table 31 -- Period End Deposits by Principal Market Area
(In thousands)

	December 31, 2015	2014	2013	2012	2011
Bank of Oklahoma:					
Demand	$4,133,520	$3,828,819	$3,432,940	$4,207,263	$3,196,436
Interest-bearing:					
Transaction	5,971,819	6,117,886	6,318,045	6,023,384	5,966,528
Savings	226,733	206,357	191,880	163,512	126,682
Time	1,202,274	1,301,194	1,214,507	1,267,854	1,444,332
Total interest-bearing	7,400,826	7,625,437	7,724,432	7,454,750	7,537,542
Total Bank of Oklahoma	11,534,346	11,454,256	11,157,372	11,662,013	10,733,978
Bank of Texas:					
Demand	2,627,764	2,639,732	2,481,603	2,606,176	1,808,490
Interest-bearing:					
Transaction	2,132,099	2,065,723	1,966,580	2,129,084	1,940,819
Savings	77,902	72,037	64,632	58,429	45,872
Time	549,740	547,316	638,465	762,233	867,664
Total interest-bearing	2,759,741	2,685,076	2,669,677	2,949,746	2,854,355
Total Bank of Texas	5,387,505	5,324,808	5,151,280	5,555,922	4,662,845
Bank of Albuquerque:					
Demand	487,286	487,819	502,395	427,510	319,269
Interest-bearing:					
Transaction	563,723	519,544	529,140	511,758	491,068
Savings	43,672	37,471	33,944	31,926	27,487
Time	267,821	295,798	327,281	364,928	410,722
Total interest-bearing	875,216	852,813	890,365	908,612	929,277
Total Bank of Albuquerque	1,362,502	1,340,632	1,392,760	1,336,122	1,248,546
Bank of Arkansas:					
Demand	27,252	35,996	38,566	39,897	19,405
Interest-bearing:					
Transaction	202,857	158,115	144,018	101,868	131,703
Savings	1,747	1,936	1,986	2,239	1,727
Time	24,983	28,520	32,949	42,573	61,329
Total interest-bearing	229,587	188,571	178,953	146,680	194,759
Total Bank of Arkansas	256,839	224,567	217,519	186,577	214,164

Table 31 -- Period End Deposits by Principal Market Area
(In thousands)

	December 31,				
	2015	2014	2013	2012	2011
Colorado State Bank & Trust:					
Demand	497,318	445,755	409,942	336,252	292,556
Interest-bearing:					
Transaction	616,697	631,874	541,675	676,144	512,904
Savings	31,927	29,811	26,880	25,889	22,771
Time	296,224	353,998	407,088	472,305	523,969
Total interest-bearing	944,848	1,015,683	975,643	1,174,338	1,059,644
Total Colorado State Bank & Trust	1,442,166	1,461,438	1,385,585	1,510,590	1,352,200
Bank of Arizona:					
Demand	326,324	369,115	204,092	161,093	106,741
Interest-bearing:					
Transaction	358,556	347,214	364,736	360,276	104,961
Savings	2,893	2,545			