BOK FINANCIAL CORP ET AL
Form 10-Q
July 28, 2017

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

FORM 10-Q
(Mark One)
ý QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2017
OR
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____________ to ______________

Commission File 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	74192
(Address of Principal Executive Offices)	(Zip Code)

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ý Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company) Smaller reporting company ¨

Emerging growth company ¨

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 65,416,403 shares of common stock ($.00006 par value) as of June 30, 2017.

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Management's Discussion and Analysis of Financial Condition and Results of Operations
Performance Summary

BOK Financial Corporation ("the Company") reported net income of $88.1 million or $1.35 per diluted share for the second quarter of 2017, compared to $65.8 million or $1.00 per diluted share for the second quarter of 2016 and $88.4 million or $1.35 per diluted share for the first quarter of 2017.

Highlights of the second quarter of 2017 included:

- Net interest revenue totaled $205.2 million for the second quarter of 2017, up from $182.6 million in the second quarter of 2016 and $201.2 million in the first quarter of 2017. The increase in net interest revenue over the prior year was driven by both improving yields and growth in average earning assets. Net interest margin was 2.89 percent for the second quarter of 2017. Net interest margin was 2.63 percent for the second quarter of 2016 and 2.81 percent for the first quarter of 2017. Average earning assets were $29.2 billion for the second quarter of 2017 and $28.8 billion for the second quarter of 2016.
- Fees and commissions revenue totaled $177.5 million for the second quarter of 2017, a $2.7 million decrease compared to the second quarter of 2016. Growth in fiduciary and asset management revenue was offset by lower brokerage and trading revenue and mortgage banking revenue. Fees and commissions revenue increased $13.1 million over the first quarter of 2017. Growth in mortgage banking revenue, fiduciary and asset management revenue and transaction card revenue were partially offset by a decrease in brokerage and trading revenue.
- Other operating expense for the second quarter of 2017 totaled $250.9 million, largely unchanged compared to the second quarter of 2016. Personnel expense increased $4.5 million, primarily due to an increase in the probability that certain performance-based equity awards will vest. Non-personnel expense decreased $5.0 million. Deposit insurance expense decreased primarily due to $5.1 million in credits received during the second quarter of 2017 related to revision of certain inputs to the assessment calculation filed in previous periods. Operating expenses increased $6.2 million over the previous quarter. Personnel expense was up $7.3 million and non-personnel expense decreased $1.1 million.
- Income tax expense was $47.7 million or 34.9 percent of net income before taxes for the second quarter of 2017, compared to $30.5 million or 31.5 percent in the second quarter of 2016 and $38.1 million or 30.1 percent in the first quarter of 2017. Excluding the effect of a new accounting standard that requires the tax effect of vested equity compensation to be recorded in income tax expense, the effective tax rate would be 33.7 percent of net income before taxes for the second quarter of 2017 and 33.2 percent for the first quarter of 2017.
- No provision for credit losses was recorded in the second quarter of 2017 or the first quarter of 2017. A $20.0 million provision for credit losses was recorded in the second quarter of 2016. Gross charge-offs were $2.9 million in the second quarter of 2017, $8.8 million in the second quarter of 2016 and $2.2 million in the first quarter of 2017. Recoveries were $1.2 million in the second quarter of 2017, compared to $1.4 million in the second quarter of 2016 and $2.9 million in the first quarter of 2017.
- The combined allowance for credit losses totaled $256 million or 1.49 percent of outstanding loans at June 30, 2017, compared to $258 million or 1.52 percent of outstanding loans at March 31, 2017.
- Nonperforming assets that are not guaranteed by U.S. government agencies totaled $276 million or 1.62 percent of outstanding loans and repossessed assets at June 30, 2017 and $240 million or 1.43 percent of outstanding loans and repossessed assets at March 31, 2017. The increase in nonperforming assets was primarily due to an increase in nonaccruing healthcare and energy loans.
- Average loans were largely unchanged compared to the previous quarter. Period-end outstanding loan balances were $17.2 billion at June 30, 2017, an increase of $192 million over March 31, 2017.
- Average deposits decreased $277 million compared to the previous quarter. Growth in demand deposit balances was offset by a decrease in interest-bearing transaction account balances and time deposits. Period-end deposits were $22.3 billion at June 30, 2017, a $259 million decrease compared to March 31, 2017.

- The Company's common equity Tier 1 ratio was 11.76% at June 30, 2017. In addition, the Company's Tier 1 capital ratio was 11.76%, total capital ratio was 13.36% and leverage ratio was 9.27% at June 30, 2017. The Company's common equity Tier 1 ratio was 11.59% at March 31, 2017. In addition, the Company's Tier 1 capital ratio was 11.59%, total capital ratio was 13.25% and leverage ratio was 8.89% at March 31, 2017.
- The Company paid a regular quarterly cash dividend of $29 million or $0.44 per common share during the second quarter of 2017. On July 25, 2017, the board of directors approved a regular quarterly cash dividend of $0.44 per common share payable on or about August 25, 2017 to shareholders of record as of August 11, 2017.

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.

Net interest revenue totaled $205.2 million for the second quarter of 2017, up from $182.6 million in the second quarter of 2016 and $201.2 million in the first quarter of 2017. Net interest margin was 2.89 percent for the second quarter of 2017, 2.63 percent for the second quarter of 2016 and 2.81 percent for the first quarter of 2017.

Tax-equivalent net interest revenue increased $22.6 million over the second quarter of 2016. Table 1 shows the effect on net interest revenue from changes in average balances and interest rates for various types of earning assets and interest-bearing liabilities. Changes in interest rates and yields increased net interest revenue by $13.1 million. The benefit of an increase in short-term interest rates on the floating-rate earning assets was partially offset by higher borrowing costs. Tax-equivalent net interest revenue increased $9.4 million primarily due to the growth in average balances of loans and trading securities.

The tax-equivalent yield on earning assets was 3.30 percent for the second quarter of 2017, up 39 basis points over the second quarter of 2016, primarily due to increases in short-term interest rates resulting from three 25 basis point increases in the federal funds rate by the Federal Reserve since the second quarter of 2016. Loan yields increased 45 basis points to 4.03 percent. The yield on interest-bearing cash and cash equivalents increased 53 basis points. The available for sale securities portfolio yield was up 7 basis points to 2.11 percent. Funding costs were up 22 basis points over the second quarter of 2016. Growth in the cost of interest-bearing deposits was limited to 7 basis points by a lack of market pricing pressure. The cost of other borrowed funds increased 50 basis points. The cost of the subordinated debt was up 403 basis points as lower variable rate debt was replaced in the second quarter of 2016 by higher fixed rate debt. The benefit to net interest margin from earning assets funded by non-interest bearing liabilities was 22 basis points for the second quarter of 2017, up 9 basis points over the second quarter of 2016. Average non-interest bearing deposits comprised 29% of total liabilities and equity for the second quarter of 2017, up from 26% for the second quarter of 2016.

Average earning assets for the second quarter of 2017 increased $424 million or 1 percent over the second quarter of 2016, including $495 million related to the Mobank acquisition. Average loans, net of allowance for loan losses, increased $860 million due primarily to growth in commercial, consumer and commercial real estate loans and included $495 million related to the Mobank acquisition. The average balance of trading securities increased $218 million primarily due to the addition of a new group in the third quarter of 2016 that trades in U.S. agency residential mortgage-backed securities. The average balance of fair value option securities held as an economic hedge of our mortgage servicing rights increased $108 million. The average balance of available for sale securities decreased $506 million. The average balance of residential mortgage loans held for sale decreased $156 million and the investment securities portfolio balance decreased $63 million.

Average deposits increased $1.6 billion over the second quarter of 2016, including $547 million from the Mobank acquisition in the fourth quarter of 2016. Demand deposit balances grew by $1.2 billion, including $265 million from Mobank. Interest-bearing transaction account balances increased $497 million, including $282 million from Mobank. This growth was partially offset by a $93 million decrease in average time deposits. Savings account balances also grew over the prior year. Average borrowed funds decreased $695 million compared to the second quarter of 2016, primarily due to decreased borrowings from the Federal Home Loan Banks and lower average repurchase agreement balances. The average balance of subordinated debentures decreased $88 million.

Net interest margin increased 8 basis points over the first quarter of 2017. The yield on average earning assets increased 15 basis points. The loan portfolio yield increased by 15 basis points primarily due to increases in the 30 day and 90 day LIBOR. The yield on the available for sale securities portfolio increased 6 basis points. The yield on interest-bearing cash and cash equivalents increased 22 basis points. Funding costs were 0.63 percent, up 11 basis points over the prior quarter. The benefit to net interest margin from earning assets funded by non-interest bearing liabilities increased 4 basis points over the prior quarter.
Average earning assets decreased $359 million compared to the first quarter of 2017. The average balance of the available for sale securities portfolio decreased $183 million. The average balance of fair value option securities held as an economic hedge of our mortgage servicing rights increased $60 million. Average trading securities portfolio balances decreased $124 million and interest-bearing cash and cash equivalents balances decreased $80 million.
Average deposits decreased $277 million compared to the previous quarter. Interest-bearing transaction account balances decreased $480 million and time deposit balances decreased $55 million, partially offset by a $237 million increase in demand deposit balances. The average balance of borrowed funds decreased $254 million compared to the first quarter of 2017 primarily due to decreased borrowings from the Federal Home Loan Banks and lower average repurchase agreement balances.

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. Approximately 81% of our commercial and commercial real estate loan portfolios are either variable rate or fixed rate that will reprice within one year. These loans are funded primarily by deposit accounts that are either non-interest bearing, or that reprice more slowly than the loans. The result is a balance sheet that would be asset sensitive, which means that assets generally reprice more quickly than liabilities. One of the strategies that we use to manage toward a relative rate-neutral position is to 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 1 and in the interest rate sensitivity projections as shown in the Market Risk section of this report.

Table 1 -- Volume/Rate Analysis
(In thousands)

	Three Months Ended June 30, 2017 / 2016			Six Months Ended June 30, 2017 / 2016		
		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	$2,629	$(31)	$ 2,660	$4,167	$21	$ 4,146
Trading securities	2,742	3,098	(356)	7,384	8,346	(962)
Investment securities:						
Taxable securities	(138)	(101)	(37)	(300)	(212)	(88)
Tax-exempt securities	(121)	(322)	201	(212)	(604)	392
Total investment securities	(259)	(423)	164	(512)	(816)	304
Available for sale securities:						
Taxable securities	(425)	(2,078)	1,653	(2,430)	(3,284)	854
Tax-exempt securities	(137)	(285)	148	(285)	(492)	207
Total available for sale securities	(562)	(2,363)	1,801	(2,715)	(3,776)	1,061
Fair value option securities	1,477	689	788	1,268	562	706
Restricted equity securities	536	(424)	960	534	(115)	649
Residential mortgage loans held for sale	(1,122)	(1,434)	312	(1,986)	(2,014)	28
Loans	27,431	8,459	18,972	49,369	17,945	31,424
Total tax-equivalent interest revenue	32,872	7,571	25,301	57,509	20,153	37,356
Interest expense:						
Transaction deposits	3,177	241	2,936	5,074	607	4,467
Savings deposits	(7)	12	(19)	(13)	25	(38)
Time deposits	(545)	(264)	(281)	(1,624)	(584)	(1,040)
Funds purchased	63	(7)	70	51	(61)	112
Repurchase agreements	(4)	(21)	17	(61)	(35)	(26)
Other borrowings	6,513	(1,040)	7,553	10,439	(675)	11,114
Subordinated debentures	1,125	(774)	1,899	2,440	(1,507)	3,947
Total interest expense	10,322	(1,853)	12,175	16,306	(2,230)	18,536
Tax-equivalent net interest revenue	22,550	9,424	13,126	41,203	22,383	18,820
Change in tax-equivalent adjustment	(42)			1		
Net interest revenue	$22,592			$41,202		

[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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Other Operating Revenue

Other operating revenue was $182.3 million for the second quarter of 2017, a $3.3 million decrease compared to the second quarter of 2016 and a $12.0 million increase over the first quarter of 2017. Fees and commissions revenue decreased $2.7 million compared to the second quarter of 2016 and increased $13.1 million over the prior quarter. The change in the fair value of mortgage servicing rights, net of economic hedges, decreased other operating revenue by $1.7 million in the second quarter of 2017, decreased other operating revenue by $1.2 million in the second quarter of 2016 and increased other operating revenue $266 thousand in the first quarter of 2017.

Table 2 – Other Operating Revenue
(In thousands)

	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Increase (Decrease)	% Increase (Decrease)	Three Months Ended Mar. 31, 2017	Increase (Decrease)	% Increase (Decrease)
Brokerage and trading revenue	$31,764	$39,530	$(7,766)	(20)%	$33,623	$(1,859)	(6)%
Transaction card revenue	35,296	34,950	346	1%	32,127	3,169	10%
Fiduciary and asset management revenue	41,808	34,813	6,995	20%	38,631	3,177	8%
Deposit service charges and fees	23,354	22,618	736	3%	23,030	324	1%
Mortgage banking revenue	30,276	34,884	(4,608)	(13)%	25,191	5,085	20%
Other revenue	14,984	13,352	1,632	12%	11,752	3,232	28%
Total fees and commissions revenue	177,482	180,147	(2,665)	(1)%	164,354	13,128	8%
Other gains, net	6,108	1,307	4,801	N/A	3,627	2,481	N/A
Gain (loss) on derivatives, net	3,241	10,766	(7,525)	N/A	(450)	3,691	N/A
Gain (loss) on fair value option securities, net	1,984	4,279	(2,295)	N/A	(1,140)	3,124	N/A
Change in fair value of mortgage servicing rights	(6,943)	(16,283)	9,340	N/A	1,856	(8,799)	N/A
Gain on available for sale securities, net	380	5,326	(4,946)	N/A	2,049	(1,669)	N/A
Total other operating revenue	$182,252	$185,542	$(3,290)	(2)%	$170,296	$11,956	7%

Certain percentage increases (decreases) in non-fees and commissions revenue are not meaningful for comparison purposes based on the nature of the item.

Fees and commissions revenue

Diversified sources of fees and commissions revenue are a significant part of our business strategy and represented 46 percent of total revenue for the second quarter of 2017, excluding provision for credit losses and gains and losses on other assets, securities and derivatives and the change in the fair value of mortgage servicing rights. We believe that a variety of fee revenue sources provides 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 trading, customer hedging, retail brokerage and investment banking, decreased $7.8 million or 20 percent compared to the second quarter of 2016.

Trading revenue includes 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 and related derivative instruments. Trading revenue was $10.1 million for the second quarter of 2017, a $2.2 million or 18 percent decrease compared to the second quarter of 2016. Lower volumes of U.S. agency residential mortgage-backed and municipal securities sold to our institutional customers due to anticipation of future interest increase, was offset by the addition of a new group in the third quarter of 2016 that trades in U.S. government agency residential mortgage-backed securities and related to-be-announced derivatives. The addition of this group added $1.4 million of net interest revenue and $2.1 million of trading revenue in the second quarter. This new group increased our trading securities portfolio by $359 million and receivable for unsettled trades by $111 million at June 30, 2017.

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 $11.6 million for the second quarter of 2017, a $1.9 million or 14 percent decrease compared to the second quarter of 2016 primarily attributed to energy and mortgage banking customers.

Revenue earned from retail brokerage transactions decreased $740 thousand or 11 percent compared to the second quarter of 2016 to $6.0 million. Retail brokerage revenue includes fees and commissions earned on sales of fixed income securities, annuities, mutual funds and other financial instruments to retail customers. Revenue is primarily based on the volume of customer transactions and applicable commission rate for each product type. Trading volume decreased in the second quarter of 2017, primarily due to the impact of the implementation of the new Department of Labor ("DOL") fiduciary rule. New regulation issued by the DOL amended the definition of investment advice under the Employee Retirement Income Security Act ("ERISA"). The new rule is designed to provide better protection to plans, participants, beneficiaries and individual retirement account ("IRA") owners against conflicts of interest, imprudence and disloyalty.

Investment banking revenue, which includes fees earned upon completion of underwriting and financial advisory services and loan syndication fees, totaled $4.0 million for the second quarter of 2017, a $2.9 million or 42 percent decrease compared to the second quarter of 2016. Investment banking revenue is primarily related to the timing and volume of completed transactions.

Brokerage and trading revenue decreased $1.9 million compared to the first quarter of 2017, primarily due to a $1.0 million decrease in trading revenue and an $862 thousand decrease in retail brokerage fees. Customer hedging revenue was unchanged compared to the prior quarter. Increased hedging activity from our mortgage banking customers was offset by a decreased volume of energy contracts.

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. Excluding the impact of a customer early termination fee received in the second quarter of 2016, transaction card revenue for the second quarter of 2017 increased $1.5 million or 5 percent over the second quarter of 2016. Revenues from the processing of transactions on behalf of the members of our TransFund electronic funds transfer ("EFT") network totaled $18.1 million, up $1.0 million or 6% over the prior year. Merchant services fees totaled $12.1 million, a $373 thousand or 3 percent increase from increased transaction activity. Revenue from interchange fees paid by merchants for transactions processed from debit cards issued by the Company totaled $5.1 million, an increase of $133 thousand or 3 percent over the second quarter of 2016.
Transaction card revenue increased $3.2 million over the prior quarter, primarily due to a seasonal increase in transaction volumes on our TransFund EFT network and a full quarter's impact of expansion into the Arizona market.

Revenue from processing transactions on behalf of merchants and check card revenue also increased over the prior quarter.

Fiduciary and asset management revenue is earned through managing or holding of assets for customers and executing transactions or providing related services. Approximately 80 percent of fiduciary and asset management revenue is primarily based on the fair value of assets. Rates applied to asset values vary based on the nature of the relationship. Fiduciary relationships and managed asset relationships generally have higher fee rates than non-fiduciary and/or managed relationships.

Fiduciary and asset management revenue grew by $7.0 million or 20 percent over the second quarter of 2016, primarily due to growth in assets under management, improved pricing discipline and decreased fee waivers. We 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 Bank is custodian and Cavanal Hill Distributors, Inc. is distributor for the Cavanal Hill Funds. Products of the Cavanal Hill Funds are offered to customers, employee benefit plans, trusts and the general public in the ordinary course of business. Prior to the recent increases in short-term market interest rates as a result of the Federal Reserve's federal funds rate increases, we voluntarily waived $1.8 million of administration fees on the Cavanal Hill money market funds in order to maintain positive yields on these funds in the second quarter of 2016. We waived $445 thousand of fees in the first quarter of 2017. No fees were waived in the second quarter of 2017.

Fiduciary and asset management revenue increased $3.2 million over the first quarter of 2017, primarily due to an annual assessment of tax preparation fees, growth in assets under management and decreased fee waivers.

A distribution of assets under management or administration and related fiduciary and asset management revenue follows:

Table 3 -- Assets Under Management or Administration

	Three Months Ended June 30,					
	2017			2016		
	Balance	Revenue[1]	Margin[2]	Balance	Revenue[1]	Margin[2]
Managed fiduciary assets:						
Personal	$7,581,555	$ 21,698	1.14 %	$6,696,329	$ 19,561	1.17 %
Institutional	12,265,037	5,475	0.18 %	11,423,563	4,498	0.16 %
Total managed fiduciary assets	19,846,592	27,173	0.55 %	18,119,892	24,059	0.53 %
Non-managed assets:						
Fiduciary	25,242,561	14,049	0.22 %	22,376,691	10,287	0.18 %
Non-fiduciary	16,579,586	586	0.01 %	16,863,508	467	0.01 %
Safekeeping and brokerage assets under administration	16,143,023	—	— %	15,641,425	—	— %
Total non-managed assets	57,965,170	14,635	0.10 %	54,881,624	10,754	0.08 %
Total assets under management or administration	$77,811,762	$ 41,808	0.21 %	$73,001,516	$ 34,813	0.19 %

1 Fiduciary and asset management revenue includes asset-based and other fees associated with the assets.

2 Annualized revenue divided by period-end balance.

A summary of changes in assets under management or administration for the three months ended June 30, 2017 and 2016 follows:

Table 4 -- Changes in Assets Under Management or Administration

	Three Months Ended June 30,	
	2017	2016
Beginning balance	$77,418,956	$71,869,013
Net inflows (outflows)	(918,076)	377,244
Net change in fair value	1,310,882	755,259

Ending balance	$77,811,762	$73,001,516

Deposit service charges and fees were $23.4 million for the second quarter of 2017, an increase of $736 thousand or 3 percent over the second quarter of 2016. Commercial account service charge revenue totaled $11.8 million, up $705 thousand or 6 percent. Overdraft fees were $9.8 million, largely unchanged compared to the second quarter of 2016. Service charges on deposit accounts with a standard monthly fee were $1.7 million, an increase of $109 thousand or 7 percent. Deposit service charges and fees increased $324 thousand over the prior quarter primarily due to an increase in commercial account service charge revenue and a seasonal increase in overdraft fee volumes.

Mortgage banking revenue decreased $4.6 million or 13 percent compared to the second quarter of 2016. Mortgage production revenue decreased $5.2 million. Mortgage loan production volumes decreased $998 million, including a $581 million decrease related to the Company's strategic decision to exit the correspondent lending channel during the third quarter of 2016. Production volumes in the Home Direct online and retail channel both decreased compared to the prior year as average primary mortgage interest rates were up 39 basis points over the second quarter of 2016. Gains on sale margins increased 56 basis points over the prior year. The margin increase was primarily due to exiting the correspondent lending channel, the lowest margin of our three sales channels, partially offset by a decrease in margins from our Home Direct online origination channel. Mortgage servicing revenue was up $638 thousand or 4 percent over the second quarter of 2016. The outstanding principal balance of mortgage loans serviced for others totaled $22.1 billion, an increase of $917 million or 4 percent.
Mortgage banking revenue increased $5.1 million over the first quarter of 2017. Mortgage production revenue increased $5.3 million. Production volume increased $109 million in response to lower average primary mortgage interest rates and normal seasonality. Gains on sale margin improved due to increased retail margins and improved hedging performance. Revenue from mortgage loan servicing decreased $212 thousand compared to the prior quarter.

Table 5 – Mortgage Banking Revenue
(In thousands)

	Three Months Ended June 30,		Increase (Decrease)	% Increase (Decrease)	Three Months Ended Mar. 31, 2017	Increase (Decrease)	% Increase (Decrease)
	2017	2016					
Mortgage production revenue	$13,840	$19,086	$(5,246)	(27)%	$8,543	$5,297	62 %
Mortgage loans funded for sale	$902,978	$1,818,844			$711,019		
Add: Current period end outstanding commitments	362,088	965,631			381,732		
Less: Prior period end outstanding commitments	381,732	902,986			318,359		
Total mortgage production volume	$883,334	$1,881,489	$(998,155)	(53)%	$774,392	$108,942	14 %
Mortgage loan refinances to mortgage loans funded for sale	33 %	44 %	(11) bps		44 %	(11) bps	
Gains on sale margin	1.57 %	1.01 %	56 bps		1.10 %	47 bps	
Primary mortgage interest rates:							

Average	3.98 %	3.59 %	39 bps		4.17 %	(19) bps		
Period end	3.88 %	3.48 %	40 bps		4.14 %	(26) bps		
Mortgage servicing revenue	$16,436	$15,798	$638	4 %	$16,648	$(212)		(1)%
Average outstanding principal balance of mortgage loans serviced for others	22,055,127	20,736,525	1,318,602	6 %	22,006,295	48,832		— %
Average mortgage servicing revenue rates	0.30 %	0.31 %	(1) bp		0.31 %	(1) bp		

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

Primary rates disclosed in Table 5 above represent rates generally available to borrowers on 30 year conforming mortgage loans.

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Net gains on other assets, securities and derivatives

Other net gains totaled $6.1 million in the second quarter of 2017, due to the sale of a merchant banking investment. Other net gains totaled $3.6 million in the first quarter of 2017 related to holdings of two consolidated private equity funds and the sale of certain merchant banking investments. The sales of merchant banking investments included a consolidated entity that reduced goodwill by $2.7 million, identifiable intangible assets by $4.6 million and other assets by $5.6 million.

As discussed in the Market Risk section following, the fair value of our mortgage servicing rights ("MSRs") changes in response to changes in primary mortgage loan rates and other assumptions. We attempt to mitigate the earnings volatility caused by changes in the fair value of MSRs by designating certain financial instruments as an economic hedge. Changes in the fair value of these instruments are generally expected to partially offset changes in the fair value of MSRs.
The net economic benefit of the changes in fair value of mortgage servicing rights and related economic hedges was $247 thousand in the second quarter of 2017, including a $6.9 million decrease in the fair value of the mortgage servicing rights, a $5.2 million increase in the fair value of securities and derivative contracts held as an economic hedge and $2.0 million of related net interest revenue.

The net economic benefit of changes in the fair value of mortgage servicing rights and related economic hedges was $110 thousand for the second quarter of 2016. The fair value of mortgage servicing rights decreased $16.3 million.The fair value of securities and interest rate derivative contracts held as an economic hedge increased $15.0 million. Net interest earned on securities held as an economic hedge was $1.3 million.

The net economic benefit of changes in the fair value of mortgage servicing rights and related economic hedges was $1.5 million for the first quarter of 2017. The fair value of mortgage servicing rights increased by $1.9 million. The fair value of securities and interest rate derivative contracts held as an economic hedge decreased by $1.6 million.

Table 6 - Gain (Loss) on Mortgage Servicing Rights
(In thousands)

	Three Months Ended		
	June 30, 2017	Mar. 31, 2017	June 30, 2016
Gain (loss) on mortgage hedge derivative contracts, net	$3,241	$(450)	$10,766
Gain (loss) on fair value option securities, net	1,984	(1,140)	4,279
Gain (loss) on economic hedge of mortgage servicing rights, net	5,225	(1,590)	15,045
Gain (loss) on change in fair value of mortgage servicing rights	(6,943)	1,856	(16,283)
Loss on changes in fair value of mortgage servicing rights, net of economic hedges included in other operating revenue	(1,718)	266	(1,238)
Net interest revenue on fair value option securities[1]	1,965	1,271	1,348
Total economic benefit (cost) of changes in the fair value of mortgage servicing rights, net of economic hedges	$247	$1,537	$110

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Other Operating Expense

Other operating expense for the second quarter of 2017 totaled $250.9 million, largely unchanged compared to the second quarter of 2016. Personnel expense increased $4.5 million or 3 percent. Non-personnel expense decreased $5.0 million or 4 percent compared to the prior year.

Other operating expense increased $6.2 million over previous quarter. Personnel expense was up $7.3 million, primarily due to changes in assumptions for the vesting of certain performance-based equity awards. Non-personnel expense decreased $1.1 million. Deposit insurance expense decreased primarily due to $5.1 million in credits received during the second quarter of 2017 related to the revision of certain inputs to the assessment calculation filed in previous periods. Data processing and communication expense increased $1.4 million and net losses and operating expenses of repossessed assets increased $1.3 million.

The discussion following excludes the impact of these items.

Table 7 – Other Operating Expense
(In thousands)

	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Increase (Decrease)	% Increase (Decrease)	Three Months Ended Mar. 31, 2017	Increase (Decrease)	% Increase (Decrease)
Regular compensation	$83,630	$81,730	$ 1,900	2 %	$83,228	$ 402	— %
Incentive compensation:							
Cash-based	29,954	32,595	(2,641)	(8)%	28,836	1,118	4 %
Share-based	7,380	3,701	3,679	99 %	1,603	5,777	360 %
Deferred compensation	1,000	211	789	N/A	792	208	N/A
Total incentive compensation	38,334	36,507	1,827	5 %	31,231	7,103	23 %
Employee benefits	21,780	20,976	804	4 %	21,966	(186)	(1)%
Total personnel expense	143,744	139,213	4,531	3 %	136,425	7,319	5 %
Business promotion	7,738	6,703	1,035	15 %	6,717	1,021	15 %
Professional fees and services	12,419	14,158	(1,739)	(12)%	11,417	1,002	9 %
Net occupancy and equipment	21,125	19,677	1,448	7 %	21,624	(499)	(2)%
Insurance	689	7,129	(6,440)	(90)%	6,404	(5,715)	(89)%
Data processing and communications	36,330	32,802	3,528	11 %	34,902	1,428	4 %
Printing, postage and supplies	4,140	3,889	251	6 %	3,851	289	8 %
Net losses (gains) and operating expenses of repossessed assets	2,267	1,588	679	43 %	1,009	1,258	125 %
Amortization of intangible assets	1,803	2,624	(821)	(31)%	1,802	1	— %
Mortgage banking costs	12,072	15,746	(3,674)	(23)%	13,003	(931)	(7)%
Other expense	8,558	7,856	702	9 %	7,557	1,001	13 %
Total other operating expense	$250,885	$251,385	$ (500)	— %	$244,711	$ 6,174	3 %
Average number of employees (full-time equivalent)	4,910	4,893	17	— %	4,910	—	— %

Certain percentage increases (decreases) are not meaningful for comparison purposes.

Personnel expense

Regular compensation, which consists of salaries and wages, overtime pay and temporary personnel costs, increased 1.9 million or 2 percent over the second quarter of 2016. The average number of employees was relatively unchanged compared to the prior year. Recent additions from the Mobank acquisition and in mortgage and technology were offset by the impact of staff reductions in the fourth quarter of 2016. In addition, standard annual merit increases in regular compensation were effective for the majority of our staff on March 1.

Incentive compensation increased $1.8 million or 5 percent over the second quarter of 2016, primarily due to increased share-based compensation expense, partially offset by lower cash-based incentive compensation expense.

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. Cash-based incentive compensation expense decreased $2.6 million or 8 percent compared to the second quarter of 2016.

Share-based compensation expense represents expense for equity awards based on grant-date fair value. Non-vested shares generally cliff vest in 3 years and are subject to a two year holding period after vesting. The number of shares that will ultimately vest is determined by BOKF's change in earnings per share relative to a defined group of peer banks. In addition, compensation costs related to certain shares is variable based on changes in the the fair value of BOK Financial common shares. Share-based compensation expense increased $3.7 million or 99% over the prior year, primarily due to changes in the vesting assumptions for performance-based awards that were granted in January 2015 and a $21.43 per share increase in the fair value of BOK Financial common shares.

Employee benefits expense increased $804 thousand or 4 percent over the the second quarter of 2016, primarily due to an increase in employee medical costs.
Personnel expense increased $7.3 million over the first quarter of 2017. Regular compensation expense was largely unchanged compared to the prior quarter. Incentive compensation expense increased $7.1 million, primarily due to a $5.8 million increase in share-based compensation expense and a $1.1 million increase in cash-based incentive compensation expense. A $2.6 million increase in employee healthcare costs was offset by a $2.2 million seasonal decrease in payroll tax expense.

Non-personnel operating expense

Non-personnel operating expense decreased $5.0 million or 4% compared to the second quarter of 2016.

Deposit insurance expense decreased $6.4 million. The company received $5.1 million in credits during the second quarter of 2017 related to the revision of certain inputs to the assessment calculation filed for years 2013 through 2016. In conjunction with ongoing cost reduction efforts, management performed a comprehensive review of inputs into the deposit insurance assessment calculation. We were able to support eligibility for the custodial bank adjustment, which allows for the deduction of certain qualifying low-risk assets from the deposit insurance assessment base for depository institutions with greater than $50 billion in trust assets. The remaining decrease was primarily due to the benefit of decreased criticized and classified assets levels related to the stabilization of energy prices, partially offset by a new surcharge for banks with more than $10 billion in assets that became effective in the third quarter of 2016.

Mortgage banking expense decreased $3.7 million, primarily due to improvement in the estimated loss rates on servicing certain defaulted residential mortgage loans serviced for U.S. government agencies and lower prepayments as average mortgage interest rates trended upward over the prior year. Professional fees and servicing expense was $1.7 million lower, primarily due to costs incurred in the second quarter of 2016 related to the Mobank acquisition and lower legal fees. Data processing and communications expense increased $3.5 million. Occupancy and equipment expense increased $1.4 million. Increases in these expense categories were primarily due to information technology infrastructure and cybersecurity project costs and increased data processing transaction activity. Business promotion expense was up $1.0 million primarily related to the timing of advertising spending.

Non-personnel expense decreased $1.1 million compared to the first quarter of 2017. Deposit insurance expense decreased $5.7 million. Data processing and communication expense increased $1.4 million primarily due to increased transaction activity. Net losses and operating expenses of repossessed assets increased $1.3 million primarily due to increased operating expenses related to repossessed oil and gas properties. This increased expense was offset by revenue from these properties included in other revenues.

Income Taxes

The Company's income tax expense was $47.7 million or 34.9 percent of net income before taxes for the second quarter of 2017 compared to $30.5 million or 31.5 percent of net income before taxes for the second quarter of 2016 and $38.1 million or 30.1 percent of net income before taxes for the first quarter of 2017.

The Company implemented a new accounting standard in the first quarter of 2017 that includes the tax effect of equity compensation in income tax expense that previously was included in stockholders' equity. The accounting standard was adopted prospectively without restatement of prior periods. Excluding this change, tax expense would have been 33.7 percent of net income before taxes for the second quarter of 2017 and 33.2 percent of net income before taxes for the first quarter of 2017.

The Company's effective tax rate is affected by recurring items such as amortization related to its investments in affordable housing investments net of affordable housing tax credits and other tax benefits, bank-owned life insurance and tax-exempt income. The effective tax rate is also affected by items that may occur in any given period but are not consistent from period to period. Accordingly, the comparability of the effective tax rate from period to period may be impacted.

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. The reserve for uncertain tax positions was $17 million at June 30, 2017, $17 million at March 31, 2017 and $13 million at June 30, 2016.

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 business customers served through our consumer branch network and all mortgage banking activities. Wealth Management provides fiduciary services, private banking 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 allocation of certain indirect 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 repricing and cash flow characteristics. Market rates are generally based on the applicable LIBOR or interest rate swap rates, adjusted for prepayment and liquidity 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 that approximate wholesale market rates for funds with similar repricing and cash flow 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 repricing 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-term 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 other 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, net income attributable to our lines of business increased $23.7 million or 35 percent over the second quarter of 2016. Net interest revenue grew by $31.4 million over the prior year. Other operating revenue decreased $1.3 million while operating expenses decreased $1.4 million and net charge-offs were down $5.9 million.

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

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Commercial Banking	$68,299	$52,836	$132,215	$89,890
Consumer Banking	7,422	4,231	12,166	4,342
Wealth Management	15,824	10,780	30,108	17,758
Subtotal	91,545	67,847	174,489	111,990
Funds Management and other	(3,398)	(2,046)	2,014	(3,625)
Total	$88,147	$65,801	$176,503	$108,365

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Commercial Banking

Commercial Banking contributed $68.3 million to consolidated net income in the second quarter of 2017, an increase of $15.5 million or 29 percent over the second quarter of 2016. The increase in Commercial Banking's contribution was largely due to net interest revenue.

Table 9 -- Commercial Banking
(Dollars in thousands)

	Three Months Ended June 30, 2017	2016	Increase (Decrease)	Six Months Ended June 30, 2017	2016	Increase (Decrease)
Net interest revenue from external sources	$144,164	$118,480	$25,684	$278,868	$235,116	$43,752
Net interest expense from internal sources	(20,347)	(14,575)	(5,772)	(37,140)	(29,208)	(7,932)
Total net interest revenue	123,817	103,905	19,912	241,728	205,908	35,820
Net loans charged off (recovered)	1,228	6,852	(5,624)	(234)	28,423	(28,657)
Net interest revenue after net loans charged off (recovered)	122,589	97,053	25,536	241,962	177,485	64,477
Fees and commissions revenue	49,792	51,028	(1,236)	94,265	96,504	(2,239)
Other gains, net	5,986	469	5,517	7,783	101	7,682
Other operating revenue	55,778	51,497	4,281	102,048	96,605	5,443
Personnel expense	28,005	27,520	485	55,033	54,147	886
Non-personnel expense	31,123	25,074	6,049	56,532	54,516	2,016
Other operating expense	59,128	52,594	6,534	111,565	108,663	2,902
Net direct contribution	119,239	95,956	23,283	232,445	165,427	67,018
Gain on financial instruments, net	3	—	3	41	—	41
Gain (loss) on repossessed assets, net	1,403	(598)	2,001	1,398	(680)	2,078
Corporate expense allocations	8,862	8,883	(21)	17,493	17,627	(134)
Income before taxes	111,783	86,475	25,308	216,391	147,120	69,271
Federal and state income tax	43,484	33,639	9,845	84,176	57,230	26,946
Net income	$68,299	$52,836	$15,463	$132,215	$89,890	$42,325
Average assets	$17,596,273	$16,973,663	$622,610	$17,517,960	$16,971,339	$546,621
Average loans	14,177,635	13,571,602	606,033	14,097,588	13,444,470	653,118
Average deposits	8,652,811	8,403,408	249,403	8,642,326	8,430,579	211,747
Average invested capital	1,239,492	1,167,840	71,652	1,226,041	1,160,485	65,556

Net interest revenue increased $19.9 million or 19 percent over the prior year. Growth in net interest revenue was primarily due to a $606 million or 4 percent increase in average loan balances and increased yields on commercial loans due to rising short-term interest rates. Average deposit balances increased $249 million or 3 percent. Yields on deposits sold to the funds management unit also went up due to the increase in short-term interest rates from the Federal Reserve increase in the federal funds rate.

Fees and commissions revenue decreased $1.2 million or 2 percent compared to the second quarter of 2016, primarily due to a $1.4 million decline in customer energy derivatives trading and a $1.3 million decline in loan syndication fees. This decline was partially offset by increases in deposit service fees and transaction card revenue from our TransFund electronic fund transfer network and other revenue from the operation of repossessed oil and gas properties.

Operating expenses increased $6.5 million or 12 percent compared to the second quarter of 2016. Personnel expense increased $485 thousand or 2 percent. Non-personnel expense increased $6.0 million or 24 percent. Net repossession expense increased $2.7 million related mainly to the repossession of oil and gas properties. Deposit insurance expense increased $1.7 million due to increased granularity in the allocation to the segments.

The average outstanding balance of loans attributed to Commercial Banking grew by $606 million or 4 percent over the second quarter of 2016 to $14.2 billion. 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.

Average deposits attributed to Commercial Banking were $8.7 billion for the second quarter of 2017, an increase of $249 million or 3 percent compared to the second quarter of 2016. See Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital for further discussion of change.

Consumer Banking

Consumer Banking provides retail banking services 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 and through Home Direct Mortgage, an online origination channel.

Consumer Banking contributed $7.4 million to consolidated net income for the second quarter of 2017, up $3.2 million over the second quarter of 2016. Growth in net interest revenue of $4.1 million was offset by a decrease in other operating revenue of $5.3 million while non-personnel expense decreased by $6.4 million.

Table 10 -- Consumer Banking
(Dollars in thousands)

	Three Months Ended June 30,		Increase (Decrease)	Six Months Ended June 30,		Increase (Decrease)
	2017	2016		2017	2016	
Net interest revenue from external sources	$23,503	$22,349	$ 1,154	$44,632	$43,799	$ 833
Net interest revenue from internal sources	11,837	8,876	2,961	22,789	18,229	4,560
Total net interest revenue	35,340	31,225	4,115	67,421	62,028	5,393
Net loans charged off	926	1,318	(392)	2,198	3,020	(822)
Net interest revenue after net loans charged off	34,414	29,907	4,507	65,223	59,008	6,215
Fees and commissions revenue	52,081	57,170	(5,089)	99,472	111,341	(11,869)
Other gains (losses), net	21	270	(249)	(64)	128	(192)
Other operating revenue	52,102	57,440	(5,338)	99,408	111,469	(12,061)
Personnel expense	25,545	26,228	(683)	50,944	51,072	(128)
Non-personnel expense	30,164	36,578	(6,414)	58,298	67,452	(9,154)
Total other operating expense	55,709	62,806	(7,097)	109,242	118,524	(9,282)
Net direct contribution	30,807	24,541	6,266	55,389	51,953	3,436
Gain on financial instruments, net	5,224	15,045	(9,821)	3,557	31,626	(28,069)
Change in fair value of mortgage servicing rights	(6,943)	(16,283)	9,340	(5,087)	(44,271)	39,184
Gain (loss) on repossessed assets, net	98	252	(154)	(39)	406	(445)
Corporate expense allocations	17,039	16,630	409	33,908	32,608	1,300
Income before taxes	12,147	6,925	5,222	19,912	7,106	12,806
Federal and state income tax	4,725	2,694	2,031	7,746	2,764	4,982
Net income	$7,422	$4,231	$ 3,191	$12,166	$4,342	$ 7,824
Average assets	$8,845,398	$8,774,881	$ 70,517	$8,747,524	$8,731,085	$ 16,439
Average loans	1,945,981	1,888,692	57,289	1,936,916	1,886,298	50,618
Average deposits	6,662,838	6,634,362	28,476	6,622,367	6,605,127	17,240
Average invested capital	282,932	266,561	16,371	280,454	262,762	17,692

Net interest revenue from Consumer Banking activities grew by $4.1 million or 13 percent over the the second quarter of 2016 primarily due to increased rates received on deposit balances sold to the Funds Management unit. Average loan balances grew by $57 million or 3 percent and average deposits were largely unchanged from prior year.

Fees and commissions revenue decreased $5.1 million or 9 percent compared to the second quarter of 2016, primarily due to a $4.6 million decrease in mortgage banking revenue. Mortgage loan production volumes decreased $998 million. Revenue from interchange fees paid by merchants for transactions processed from debit cards issued by the Company and deposit service charges and fees were relatively unchanged compared to the prior year.

Operating expenses decreased $7.1 million or 11 percent compared to the second quarter of 2016. Personnel expenses decreased $683 thousand or 3 percent. Non-personnel expense decreased $6.4 million or 18 percent compared to the prior year. Mortgage banking costs were down $3.7 million primarily due to improvement in the estimated loss rates on outstanding claims on servicing certain defaulted residential mortgage loans guaranteed by U.S. government agencies as well as lower prepayments of loans serviced for others. Other expense decreased $1.3 million primarily due to a legal settlement in the second quarter of 2016. Professional fees and services were down $1.4 million.

Changes in the fair value of our mortgage servicing rights, net of economic hedge, resulted in a $1.1 million decrease in Consumer Banking net income in the second quarter of 2017 compared to a $756 thousand decrease in Consumer Banking net income in the second quarter of 2016.

Corporate expense allocations increased $409 thousand or 3% over the second quarter of 2016.

Average consumer deposits were largely unchanged compared to the second quarter of 2016. Higher-costing time deposit balances decreased $135 million or 12 percent, offset by a $95 million or 6 percent increase in demand deposit balances, a $37 million or 9 percent increase in savings account balances and a $32 million or 1 percent increase in interest-bearing transaction accounts.

Wealth Management

Wealth Management contributed $15.8 million to consolidated net income in the second quarter of 2017, up $5.0 million or 47 percent over the second quarter of 2016 largely due to growth in net interest revenue.

Table 11 -- Wealth Management
(Dollars in thousands)

	Three Months Ended June 30, 2017	2016	Increase (Decrease)	Six Months Ended June 30, 2017	2016	Increase (Decrease)
Net interest revenue from external sources	$10,474	$6,271	$4,203	$21,960	$12,349	$9,611
Net interest revenue from internal sources	10,325	7,193	3,132	19,181	14,857	4,324
Total net interest revenue	20,799	13,464	7,335	41,141	27,206	13,935
Net loans charged off (recovered)	(93)	(239)	146	(53)	(390)	337
Net interest revenue after net loans charged off (recovered)	20,892	13,703	7,189	41,194	27,596	13,598
Fees and commissions revenue	75,553	75,467	86	149,474	144,187	5,287
Other gains, net	16	305	(289)	253	331	(78)
Other operating revenue	75,569	75,772	(203)	149,727	144,518	5,209
Personnel expense	45,477	48,147	(2,670)	90,264	93,266	(3,002)
Non-personnel expense	15,138	13,267	1,871	30,761	28,832	1,929
Other operating expense	60,615	61,414	(799)	121,025	122,098	(1,073)
Net direct contribution	35,846	28,061	7,785	69,896	50,016	19,880
Corporate expense allocations	9,947	10,417	(470)	20,619	20,952	(333)
Income before taxes	25,899	17,644	8,255	49,277	29,064	20,213
Federal and state income tax	10,075	6,864	3,211	19,169	11,306	7,863
Net income	$15,824	$10,780	$5,044	$30,108	$17,758	$12,350
Average assets	$6,763,093	$5,765,390	$997,703	$6,960,872	$5,665,218	$1,295,654
Average loans	1,312,857	1,098,178	214,679	1,289,846	1,094,252	195,594
Average deposits	5,531,091	4,521,031	1,010,060	5,556,680	4,608,522	948,158
Average invested capital	268,322	240,693	27,629	258,698	236,798	21,900

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Net interest revenue for the second quarter of 2017 increased $7.3 million or 55 percent over the second quarter of 2016, primarily due to an increase in the size of the U.S. agency mortgage-backed securities portfolio related to a new trading group that began operations during the third quarter of 2016 and growth in deposit balances sold to the Funds Management unit. Average deposit balances grew by $1.0 billion or 22 percent over the second quarter of 2016. Non-interest bearing demand deposits grew by $285 million or 26 percent, interest-bearing transaction account balances increased $677 million or 25 percent and time deposit balances grew by $44 million or 6 percent. Average loan balances increased $215 million or 20 percent over the prior year.

Fees and commissions revenue was relatively unchanged compared to the second quarter of 2016. Brokerage and trading revenue decreased by $6.0 million or 18 percent primarily due to lower volumes of U.S. agency residential mortgage-backed and municipal securities sold to our institutional customers. Fiduciary and asset management revenue increased $7.0 million or 20 percent over the prior year primarily due to growth in assets under management, improved pricing discipline and decreased fee waivers.

Fees and commissions revenue above includes fees earned from state and municipal bond and corporate debt underwritings and financial advisory services, primarily in the Oklahoma and Texas markets. In the second quarter of 2017, the Wealth Management division participated in 74 state and municipal bond underwritings that totaled $1.4 billion. As a participant, the Wealth Management division was responsible for facilitating the sale of approximately $397 million of these underwritings. The Wealth Management division also participated in 6 corporate debt underwritings that totaled $2.3 billion. Our interest in these underwritings was $47 million. In the second quarter of 2016, the Wealth Management division participated in 136 state and municipal bond underwritings that totaled approximately $4.2 billion. Our interest in these underwritings totaled approximately $803 million. The Wealth Management division also participated in two corporate debt underwritings that totaled $350 million. Our interest in these underwritings was $44 million.

Operating expense decreased $799 thousand or 1 percent compared to the second quarter of 2016. Personnel expenses decreased $2.7 million primarily due to decreased incentive compensation expense. Non-personnel expense increased $1.9 million primarily due to a $1.3 million increase in data processing and communications expense.

Corporate expense allocations decreased $470 thousand or 5 percent from the prior year.

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 June 30, 2017, December 31, 2016 and June 30, 2016.

At June 30, 2017, the carrying value of investment (held-to-maturity) securities was $490 million and the fair value was $516 million. Investment securities consist primarily of 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 $100 million of the $199 million portfolio of Texas school construction bonds is 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 $8.3 billion at June 30, 2017, a $118 million decrease compared to

March 31, 2017. At June 30, 2017, the available for sale securities portfolio consisted primarily of U.S. government agency residential mortgage-backed securities with an amortized cost of $5.4 billion and U.S. government agency commercial mortgage-backed securities with an amortized cost of $2.8 billion. Both residential and commercial 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. Commercial mortgage-backed securities have prepayment penalties similar to commercial loans.

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 residential mortgage-backed securities portfolio held in investment and available for sale securities at June 30, 2017 is 3.2 years. Management estimates the duration extends to 3.9 years assuming an immediate 200 basis point upward shock. The estimated duration contracts to 2.8 years assuming a 50 basis point decline in the current low rate environment.

We also hold amortized cost of $87 million in residential mortgage-backed securities privately issued by publicly-owned financial institutions, a decrease of $6.7 million from March 31, 2017. The decrease was due to cash payments received during the quarter. The fair value of our portfolio of privately issued residential mortgage-backed securities totaled $103 million at June 30, 2017.

The aggregate gross amount of unrealized losses on available for sale securities totaled $50 million at June 30, 2017, compared to $68 million at March 31, 2017. 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. No other-than-temporary impairment charges were recognized in earnings during the second quarter of 2017.

BOK Financial is required to hold stock as members of the Federal Reserve system and the Federal Home Loan Banks ("FHLB"). These restricted equity securities are carried at cost as these securities do not have a readily determined fair value because the ownership of these shares is restricted and they lack a market. Federal Reserve Bank stock totaled $37 million and holdings of FHLB stock totaled $274 million at June 30, 2017. Holdings of FHLB stock increased $27 million compared to March 31, 2017. We are required to hold stock in the FHLB in proportion to our borrowings with the FHLB.

Bank-Owned Life Insurance

We have approximately $313 million of bank-owned life insurance at June 30, 2017. This investment is expected to provide a long-term source of earnings to support existing employee benefit programs. Approximately $285 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 June 30, 2017, the fair value of investments held in separate accounts was approximately $290 million. As the underlying fair value of the investments held in a separate account at June 30, 2017 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 $28 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 $17 billion at June 30, 2017, an increase of $192 million over March 31, 2017. The outstanding balance of commercial loans increased by $311 million, partially offset by a $182 million decrease in commercial real estate loan balances. Residential mortgage loans decreased $7.1 million and personal loans grew by $70 million.

Table 12 -- Loans
(In thousands)

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30,2016	June 30, 2016
Commercial:					
Energy	$2,847,240	$2,537,112	$2,497,868	$2,520,804	$2,818,656
Services	2,958,827	3,013,375	3,108,990	2,936,599	2,830,864
Healthcare	2,221,518	2,265,604	2,201,916	2,085,046	2,051,146
Wholesale/retail	1,543,695	1,506,243	1,576,818	1,602,030	1,532,957
Manufacturing	546,137	543,430	514,975	499,486	595,403
Other commercial and industrial	520,538	461,346	490,257	476,198	527,411
Total commercial	10,637,955	10,327,110	10,390,824	10,120,163	10,356,437
Commercial real estate:					
Retail	722,805	745,046	761,888	801,377	795,419
Multifamily	952,380	922,991	903,272	873,773	787,200
Office	862,973	860,889	798,888	752,705	769,112
Industrial	693,635	871,463	871,749	838,021	645,586
Residential construction and land development	141,592	135,994	135,533	159,946	157,576
Other commercial real estate	315,207	334,680	337,716	367,776	427,073
Total commercial real estate	3,688,592	3,871,063	3,809,046	3,793,598	3,581,966
Residential mortgage:					
Permanent mortgage	989,040	977,743	1,006,820	969,558	969,007
Permanent mortgages guaranteed by U.S. government agencies	191,729	204,181	199,387	190,309	192,732
Home equity	758,429	764,350	743,625	712,926	719,184
Total residential mortgage	1,939,198	1,946,274	1,949,832	1,872,793	1,880,923
Personal	917,900	847,459	839,958	678,232	587,423
Total	$17,183,645	$16,991,906	$16,989,660	$16,464,786	$16,406,749

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 ongoing 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 ongoing 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.

Commercial loans totaled $10.6 billion or 62 percent of the loan portfolio at June 30, 2017, an increase of $311 million over March 31, 2017 primarily due to growth in energy loan balances. Other commercial and industrial loans increased by $59 million and wholesale/retail sector loan balances increased by $37 million. This growth was offset by a $55 million decrease in service sector loan balances and a $44 million decrease in healthcare sector loan balances.

Table 13 presents the commercial sector of our loan portfolio distributed primarily by collateral location. Loans for which collateral location is less relevant, such as unsecured loans and reserve-based energy loans, are distributed by the borrower's primary operating location.

Table 13 -- Commercial Loans by Collateral Location
(In thousands)

	Oklahoma	Texas	New Mexico	Arkansas	Colorado	Arizona	Kansas/Missouri	Other	Total
Energy	$537,606	$1,464,660	$14,847	$4,178	$347,932	$9,110	$77,788	$391,119	$2,847,240
Services	650,748	873,279	195,368	5,184	306,628	209,729	332,001	385,890	2,958,827
Healthcare	277,652	383,698	138,205	96,924	119,288	127,803	272,382	805,566	2,221,518
Wholesale/retail	385,275	519,826	45,333	36,136	61,464	64,504	87,736	343,421	1,543,695
Manufacturing	102,594	186,172	1,492	13,583	39,541	31,760	106,832	64,163	546,137
Other commercial and industrial	97,919	132,119	2,438	58,396	26,947	28,780	80,232	93,707	520,538
Total commercial loans	$2,051,794	$3,559,754	$397,683	$214,401	$901,800	$471,686	$956,971	$2,083,866	$10,637,955

The majority of the collateral securing our commercial loan portfolio is located within our geographical footprint with 33 percent concentrated in the Texas market and 19 percent concentrated in the Oklahoma market. At June 30, 2017, the Other category is primarily composed of California - $303 million or 3 percent of the commercial loan portfolio, Louisiana - $194 million or 2 percent of the commercial loan portfolio, Florida - $159 million or 1 percent of the commercial loan portfolio, Pennsylvania - $115 million or 1 percent of the commercial loan portfolio and Tennessee - $108 million or 1 percent of the commercial loan portfolio. All other states individually represent one percent or less 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.

Outstanding energy loans totaled $2.8 billion or 17 percent of total loans at June 30, 2017. Unfunded energy loan commitments of $2.7 billion at June 30, 2017 were largely unchanged compared to March 31, 2017. Approximately $2.4 billion of energy loans were to oil and gas producers, up $362 million over March 31, 2017. 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 deep-water offshore exposure. Approximately 58 percent of the committed production loans are secured by properties primarily producing oil and 42 percent of the committed production loans are secured by properties primarily producing natural gas. Loans to midstream oil and gas companies totaled $277 million at June 30, 2017, a decrease of $39 million compared to March 31, 2017. Loans to borrowers that provide services to the energy industry totaled $178 million at June 30, 2017, largely unchanged compared to the prior quarter. Loans to other energy borrowers, including those engaged in wholesale or retail energy sales, totaled $38 million, a $15 million decrease over the prior quarter.

The services sector of the loan portfolio totaled $3.0 billion or 17 percent of total loans and consists of a large number of loans to a variety of businesses, including governmental, finance and insurance, educational services, loans to entities providing services for real estate and construction and professional services. Service sector loans decreased by $55 million compared to March 31, 2017. Loans to governmental entities totaled $562 million at June 30, 2017. Approximately $1.5 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.

The healthcare sector of the loan portfolio totaled $2.2 billion or 13% of total loans and consists primarily of loans for the development and operation of senior housing and care facilities, including independent living, assisted living and skilled nursing. Healthcare also includes loans to hospitals and other medical service providers.

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 June 30, 2017, the outstanding principal balance of these loans totaled $4.0 billion. Substantially all of these loans are to borrowers with local market relationships. We serve as the agent lender in approximately 18 percent 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 generally within our geographical footprint, with larger concentrations in Texas and Oklahoma which represent 32 percent and 12 percent of the total commercial real estate portfolio at June 30, 2017, respectively. 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 $3.7 billion or 21 percent of the loan portfolio at June 30, 2017. The outstanding balance of commercial real estate loans decreased $182 million during the second quarter of 2017. Loans secured by industrial properties decreased $178 million. Retail sector loans decreased $22 million. Multifamily residential loans increased $29 million. The commercial real estate loan balance as a percentage of our total loan portfolio has ranged from 18 percent to 23 percent over the past five years.

The commercial real estate sector of our loan portfolio distributed by collateral location follows in Table 14.

Table 14 -- Commercial Real Estate Loans by Collateral Location
(In thousands)

	Oklahoma	Texas	New Mexico	Arkansas	Colorado	Arizona	Kansas/Missouri	Other	Total
Retail	$73,978	$272,460	$107,535	$6,526	$30,853	$27,747	$ 25,354	$178,352	$722,805
Multifamily	110,567	428,929	13,801	25,191	64,959	56,347	113,529	139,057	952,380
Office	96,167	226,147	77,153	2,119	64,825	72,175	58,330	266,057	862,973
Industrial	81,871	192,427	25,791	—	16,233	11,753	48,457	317,103	693,635
Residential construction and land development	25,500	36,465	18,330	1,850	15,500	9,536	17,006	17,405	141,592
Other commercial real estate	53,010	40,603	22,784	4,282	14,721	38,051	30,168	111,588	315,207

Total commercial real estate loans	$441,093	$1,197,031	$265,394	$39,968	$207,091	$215,609	$ 292,844	$1,029,562	$3,688,592

The Other category is primarily composed of California and Utah which represent $146 million or 4 percent and $120 million or 3 percent of the commercial real estate portfolio, respectively. All other states represent less than 3% individually.

While recent changes nationally in consumer purchasing trends from brick-and-mortar stores to online has created concern with regards to retail lending, our credit quality remains very good. The portfolio is highly diversified with no material exposure to a single borrower or tenant.

Based on Moody's U.S. Retail Industry Classifications, approximately 60 percent of $723 million of outstanding retail commercial real estate loans have services-based tenants which are considered less susceptible to online competition. Additionally, 61 percent of the $653 million of outstanding retail loans included in our commercial wholesale/retail sector are service-based.

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. Loans may be individually underwritten or credit scored based on size and other criteria. Credit scoring is assessed based on significant credit characteristics including credit history, residential and employment stability.

Residential mortgage loans totaled $1.9 billion, largely unchanged compared to March 31, 2017. In general, we sell the majority of our conforming fixed rate loan originations 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 96 percent of our residential mortgage loan portfolio is located within our geographical footprint.

The majority of our permanent mortgage loan portfolio is 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 exceeds 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 percent. Loan-to-value ratios (“LTV”) are tiered from 60 percent to 100 percent, 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 June 30, 2017, $192 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 the Company may repurchase 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 on the Consolidated Balance Sheet. Permanent residential mortgage loans guaranteed by U.S. government agencies decreased $12 million compared to March 31, 2017.

Home equity loans totaled $758 million at June 30, 2017, a $5.9 million decrease compared to March 31, 2017. Our home equity loan 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 50 percent. The maximum loan amount available for our home equity loan products is generally $400 thousand. Revolving loans have a 10 year revolving period followed by a 15 year term of amortizing repayment. Interest-only home equity loans have a 5 year revolving period followed by a 15 year term of amortizing repayments and 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 June 30, 2017 by lien position and amortizing status follows in Table 15.

Table 15 -- Home Equity Loans
(In thousands)

	Revolving	Amortizing	Total
First lien	$ 70,650	$ 421,861	$ 492,511
Junior lien	135,771	130,147	265,918
Total home equity	$ 206,421	$ 552,008	$ 758,429

Personal loans totaled $918 million, a $70 million increase over the prior quarter primarily due to growth in loans to wealth management customers for investment in businesses that will be repaid from personal income.

The distribution of residential mortgage and personal loans at June 30, 2017 is as follows in Table 16. Residential mortgage loans are distributed by collateral location. Personal loans are generally distributed by borrower location.

Table 16 -- 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	$181,030	$413,293	$40,810	$13,864	$162,013	$93,997	$ 49,766	$34,267	$989,040
Permanent mortgages guaranteed by U.S. government agencies	54,187	25,912	46,426	5,975	5,968	1,881	14,555	36,825	191,729
Home equity	394,081	136,667	97,977	5,141	38,029	8,236	75,642	2,656	758,429
Total residential mortgage	$629,298	$575,872	$185,213	$24,980	$206,010	$104,114	$ 139,963	$73,748	$1,939,198
Personal	$305,856	$385,087	$11,615	$11,993	$58,918	$54,434	$ 76,967	$13,030	$917,900

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 17 -- Loans Managed by Primary Geographical Market
(In thousands)

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30,2016	June 30, 2016
Bank of Oklahoma:					
Commercial	$3,369,967	$3,189,183	$3,370,259	$3,545,924	$3,698,215
Commercial real estate	667,932	691,332	684,381	795,806	781,458
Residential mortgage	1,398,021	1,404,054	1,407,197	1,401,166	1,415,766
Personal	318,016	310,708	303,823	271,420	246,229
Total Bank of Oklahoma	5,753,936	5,595,277	5,765,660	6,014,316	6,141,668
Bank of Texas:					
Commercial	4,339,634	4,148,316	4,022,455	3,903,218	3,901,632
Commercial real estate	1,360,164	1,452,988	1,415,011	1,400,709	1,311,408
Residential mortgage	232,074	231,647	233,981	229,345	222,548
Personal	354,222	312,092	306,748	278,167	233,304
Total Bank of Texas	6,286,094	6,145,043	5,978,195	5,811,439	5,668,892
Bank of Albuquerque:					
Commercial	369,370	407,403	399,256	398,147	398,427
Commercial real estate	324,405	307,927	284,603	299,785	322,956
Residential mortgage	103,849	106,432	108,058	110,478	114,226
Personal	12,439	11,305	11,483	11,333	10,569
Total Bank of Albuquerque	810,063	833,067	803,400	819,743	846,178
Bank of Arkansas:					
Commercial	85,020	88,010	86,577	83,544	81,227
Commercial real estate	73,943	74,469	73,616	72,649	69,235
Residential mortgage	6,395	6,829	7,015	6,936	6,874
Personal	11,993	6,279	6,524	6,757	7,025
Total Bank of Arkansas	177,351	175,587	173,732	169,886	164,361
Colorado State Bank & Trust:					
Commercial	1,065,780	998,216	1,018,208	1,013,314	1,076,620
Commercial real estate	255,379	266,218	265,264	254,078	237,569
Residential mortgage	63,346	62,313	59,631	59,838	59,425
Personal	56,187	49,523	50,372	42,901	35,064
Total Colorado State Bank & Trust	1,440,692	1,376,270	1,393,475	1,370,131	1,408,678
Bank of Arizona:					
Commercial	617,759	643,222	686,253	680,447	670,814
Commercial real estate	705,858	737,088	747,409	726,542	639,112
Residential mortgage	37,034	36,737	36,265	39,206	38,998
Personal	55,528	51,386	52,553	31,205	24,248

Total Bank of Arizona	1,416,179	1,468,433	1,522,480	1,477,400	1,373,172
Mobank:					
Commercial	790,425	852,760	807,816	495,569	529,502
Commercial real estate	300,911	341,041	338,762	244,029	220,228
Residential mortgage	98,479	98,262	97,685	25,824	23,086
Personal	109,515	106,166	108,455	36,449	30,984
Total Mobank	1,299,330	1,398,229	1,352,718	801,871	803,800
Total BOK Financial loans	$17,183,645	$16,991,906	$16,989,660	$16,464,786	$16,406,749

Loan Commitments

We enter into certain off-balance sheet arrangements in the normal course of business. These arrangements included unfunded loan commitments, which totaled $9.6 billion and standby letters of credit, which totaled $615 million at June 30, 2017. 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 $317 thousand of the outstanding standby letters of credit were issued on behalf of customers whose loans are nonperforming at June 30, 2017.

Table 18 – Off-Balance Sheet Credit Commitments
(In thousands)

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30,2016	June 30, 2016
Loan commitments	$9,632,911	$9,403,641	$9,404,665	$8,697,322	$8,508,606
Standby letters of credit	614,852	595,746	585,472	499,990	491,002
Mortgage loans sold with recourse	133,896	134,631	139,486	139,306	145,403

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. 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. Substantially all of these loans are to borrowers in our primary markets including $82 million to borrowers in Oklahoma, $14 million to borrowers in Arkansas and $13 million to borrowers in New Mexico. An accrual related to this off-balance sheet risk is included in Other liabilities in the consolidated balances sheets and totaled $3.9 million at June 30, 2017 and $4.0 million at March 31, 2017.

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 6 to the Consolidated Financial Statements. For the period from 2010 through the second quarter of 2017 combined, approximately 17 percent 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 $1.6 million at June 30, 2017 and $2.6 million at March 31, 2017.

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 to minimize market risk due to 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 scenarios 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 counterparties 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 supported the contract or the customer or the counterparty's ability to provide margin collateral was impaired. Credit losses on customer derivatives reduce brokerage and trading revenue in the Consolidated Statements of Earnings.

Derivative contracts are carried at fair value. At June 30, 2017, the net fair values of derivative contracts, before consideration of cash margin, reported as assets under these programs totaled $265 million compared to $304 million at March 31, 2017. At June 30, 2017, the fair value of our derivative contracts included $162 million for foreign exchange contracts, $36 million for energy contracts, $30 million for interest rate swaps and $29 million of to-be-announced residential mortgage-backed securities. The aggregate net fair value of derivative contracts, before consideration of cash margin, held under these programs reported as liabilities totaled $257 million at June 30, 2017 and $296 million at March 31, 2017.

At June 30, 2017, total derivative assets were reduced by $24 million of cash collateral received from counterparties and total derivative liabilities were reduced by $21 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 June 30, 2017 follows in Table 19.

Table 19 -- Fair Value of Derivative Contracts
(In thousands)

Banks and other financial institutions	$111,723
Customers	95,002
Exchanges and clearing organizations	33,379
Fair value of customer risk management program asset derivative contracts, net	$240,104

At June 30, 2017, our largest derivative exposure was to an exchange for energy derivative contracts which totaled $14 million.

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 $24.22 per barrel of oil would increase the fair value of derivative assets by $9.1 million. An increase in prices equivalent to $67.53 per barrel of oil would increase the fair value of derivative assets by $208 million as current prices move further away from the fixed prices embedded in our existing contracts. Liquidity requirements of this program may also be affected by our credit rating. At June 30, 2017 a decrease in our credit rating to below investment grade did not have a significant impact on our obligation to post cash margin on existing contracts. 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 June 30, 2017, changes in interest rates would not materially impact regulatory capital or liquidity needed to support this portion of our customer derivative program.

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Summary of Loan Loss Experience

We maintain an allowance for loan losses and an accrual for off-balance sheet credit risk. At June 30, 2017, the combined allowance for loan losses and off-balance sheet credit losses totaled $256 million or 1.49 percent of outstanding loans and 109 percent of nonaccruing loans, excluding loans guaranteed by U.S. government agencies. The allowance for loan losses was $250 million and the accrual for off-balance sheet credit losses was $6.4 million. At March 31, 2017, the combined allowance for credit losses was $258 million or 1.52 percent of outstanding loans and 131 percent of nonaccruing loans, excluding loans guaranteed by U.S. government agencies. The allowance for loan losses was $249 million and the accrual for off-balance sheet credit losses was $9.4 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 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. Based on an evaluation of all credit factors, including changes in nonaccruing and potential problem loans, overall loan growth and net charge-offs, the Company determined that no provision for credit losses was necessary in the second quarter of 2017. No provision for credit losses was necessary in the first quarter of 2017 based on continued improvements in credit metric trends largely driven by energy price stability. A $20 million provision for credit losses was recorded in the second quarter of 2016 due primarily to the effects of falling energy prices.

Table 20 -- Summary of Loan Loss Experience
(In thousands)

	Three Months Ended				
	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
Allowance for loan losses:					
Beginning balance	$248,710	$246,159	$245,103	$243,259	$233,156
Loans charged off:					
Commercial	(1,703)	(424)	(81)	(6,266)	(7,355)
Commercial real estate	(76)	—	—	—	—
Residential mortgage	(40)	(236)	(208)	(285)	(345)
Personal	(1,053)	(1,493)	(1,362)	(1,550)	(1,145)
Total	(2,872)	(2,153)	(1,651)	(8,101)	(8,845)
Recoveries of loans previously charged off:					
Commercial	283	1,182	839	177	223
Commercial real estate	208	735	395	521	282
Residential mortgage	169	228	986	650	200
Personal	554	755	593	690	681
Total	1,214	2,900	2,813	2,038	1,386
Net loans recovered (charged off)	(1,658)	747	1,162	(6,063)	(7,459)
Provision for loan losses	3,009	1,804	(106)	7,907	17,562
Ending balance	$250,061	$248,710	$246,159	$245,103	$243,259
Accrual for off-balance sheet credit losses:					
Beginning balance	$9,440	$11,244	$11,138	$9,045	$6,607
Provision for off-balance sheet credit losses	(3,009)	(1,804)	106	2,093	2,438
Ending balance	$6,431	$9,440	$11,244	$11,138	$9,045
Total combined provision for credit losses	$—	$—	$—	$10,000	$20,000
Allowance for loan losses to loans outstanding at period-end	1.46%	1.46%	1.45%	1.49%	1.48%
Net charge-offs (recoveries) (annualized) to average loans	0.04%	(0.02)%	(0.03)%	0.15%	0.18%
Total provision for credit losses (annualized) to average loans	—%	—%	—%	0.24%	0.49%
Recoveries to gross charge-offs	42.27%	134.70%	170.38%	25.16%	15.67%
Accrual for off-balance sheet credit losses to off-balance sheet credit commitments	0.06%	0.09%	0.11%	0.12%	0.10%
Combined allowance for credit losses to loans outstanding at period-end	1.49%	1.52%	1.52%	1.56%	1.54%

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 agreement. This includes all nonaccruing loans, all loans modified in troubled debt restructurings and all government guaranteed loans repurchased from GNMA pools. A specific allowance is required when the outstanding principal balance of the loan is not supported by either the discounted cash flows expected to be received from the borrower or the fair value of collateral for collateral dependent loans. At June 30, 2017, impaired loans totaled $428 million, including $73 million with specific allowances of $9.7 million and $355 million with no specific allowances. At March 31, 2017, impaired loans totaled $402 million, including $52 million of impaired loans with specific allowances of $3.5 million and $350 million with no specific allowances.

Risk grading guidelines in the Office of the Comptroller of the Currency ("OCC") Oil and Gas Lending Handbook updated at the beginning of 2016, heavily weight the ability to repay total borrower debt, regardless of collateral position. This change in grading methodology has increased loans especially mentioned, potential problem loans and nonaccrual loans. Because substantially all of our energy portfolio is supported by senior lien positions that, in general, have substantially lower loss exposure, the historical relationship between loan classification and loss exposure may be more difficult to correlate. The most recently completed energy portfolio redetermination supported that $57 million of impaired energy loans required no allowance for credit losses based on the adequacy of collateral. In addition, $76 million of impaired energy loans are current on all payments due.

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 risk 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 $213 million at June 30, 2017, a decrease of $4.9 million compared to March 31, 2017. The general allowance attributed to the commercial loan segment decreased $6.1 million, partially offset by an $859 thousand increase in the general allowance attributed to the personal loan segment.

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 $27 million at June 30, 2017, unchanged compared to March 31, 2017. The nonspecific allowance includes consideration of the indirect impact of the prolonged low energy price environment 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 portfolio segment is included in Note 4 to the Consolidated Financial Statements.

Our loan monitoring process also identified certain accruing substandard 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' ability to comply with current repayment terms. These potential problem loans totaled $327 million at June 30, 2017 and wereprimarily composed of $226 million or 8 percent of energy loans, $33 million or 1 percent of healthcare sector loans, $17 million or 1 percent of service sector loans, $16 million or 3 percent of manufacturing sector loans and $10 million or 1 percent of wholesale/retail sector loans. Potential problem loans totaled $413 million at March 31, 2017.

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. Other loans especially mentioned totaled $199 million at June 30, 2017 and were composed primarily of $120 million or 4 percent of outstanding energy loans, $34 million or 2 percent of outstanding healthcare loans, $16 million or 1 percent of outstanding wholesale/retail sector loans and $12 million or less than 1 percent of outstanding services loans. Other loans especially mentioned totaled $233 million at March 31, 2017.

We updated our semi-annual energy loan portfolio stress test at June 30, 2017 to estimate how the energy portfolio may respond in a prolonged low-price environment. Stress test assumptions include a starting price of $2.00 per million BTUs for natural gas and $35.87 per barrel of oil, gradually escalating over twelve to fifteen years to a maximum of $3.00 and $55.00, respectively. The results of the stress test are factored into our expectation that the loan loss provision could range from $0 to $10 million for 2017. This expectation is based upon current observed conditions. The portion of the combined allowance for credit losses attributable to the energy portfolio totaled 2.84 percent of outstanding energy loans at June 30, 2017, compared to 3.37 percent of outstanding energy loans at March 31, 2017.

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 charge-offs of $1.7 million in the second quarter of 2017, compared to net recoveries of $747 thousand in the first quarter of 2017 and net loans charged off of $7.5 million in the second quarter of 2016. The ratio of net loans charged off to average loans on an annualized basis was 0.04 percent for the second quarter of 2017, compared with (0.02) percent for the first quarter of 2017 and 0.18 percent for the second quarter of 2016.

Net charge-offs of commercial loans were $1.4 million in the second quarter of 2017, primarily due to a single healthcare borrower. Commercial loans had a net recovery of $758 thousand in the first quarter of 2017. Net commercial real estate loan recoveries were $132 thousand in the second quarter of 2017, compared to net recoveries of $735 thousand in the first quarter of 2017. Net charge-offs of residential mortgage loans were $129 thousand and net charge-offs of personal loans were $499 thousand for the second quarter. Personal loan net charge-offs include deposit account overdraft losses.

Nonperforming Assets

Table 21 -- Nonperforming Assets
(In thousands)

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30,2016	June 30, 2016
Nonaccruing loans:					
Commercial	$197,157	$156,825	$178,953	$176,464	$181,989
Commercial real estate	3,775	4,475	5,521	7,350	7,780
Residential mortgage	44,235	46,081	46,220	52,452	57,061
Personal	272	235	290	686	354
Total nonaccruing loans	245,439	207,616	230,984	236,952	247,184
Accruing renegotiated loans guaranteed by U.S. government agencies	80,624	83,577	81,370	80,306	78,806
Real estate and other repossessed assets	39,436	42,726	44,287	31,941	24,054
Total nonperforming assets	$365,499	$333,919	$356,641	$349,199	$350,044
Total nonperforming assets excluding those guaranteed by U.S. government agencies	$275,823	$240,234	$263,425	$253,461	$251,497
Nonaccruing loans by loan portfolio segment and class:					
Commercial:					
Energy	$123,992	$110,425	$132,499	$142,966	$168,145
Services	7,754	7,713	8,173	8,477	9,388
Wholesale / retail	10,620	11,090	11,407	2,453	2,772
Manufacturing	9,656	5,907	4,931	274	293
Healthcare	24,505	909	825	855	875
Other commercial and industrial	20,630	20,781	21,118	21,439	516
Total commercial	197,157	156,825	178,953	176,464	181,989
Commercial real estate:					
Residential construction and land development	2,051	2,616	3,433	3,739	4,261
Retail	301	314	326	1,249	1,265
Office	396	413	426	882	606
Multifamily	10	24	38	51	65
Industrial	—	76	76	76	76
Other commercial real estate	1,017	1,032	1,222	1,353	1,507
Total commercial real estate	3,775	4,475	5,521	7,350	7,780
Residential mortgage:					
Permanent mortgage	23,415	24,188	22,855	25,956	27,228
Permanent mortgage guaranteed by U.S. government agencies	9,052	10,108	11,846	15,432	19,741
Home equity	11,768	11,785	11,519	11,064	10,092
Total residential mortgage	44,235	46,081	46,220	52,452	57,061
Personal	272	235	290	686	354
Total nonaccruing loans	$245,439	$207,616	$230,984	$236,952	$247,184

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30,2016	June 30, 2016
Nonaccruing loans as % of outstanding balance for class:					
Commercial:					
Energy	4.35 %	4.35 %	5.30 %	5.67 %	5.97 %
Services	0.26 %	0.26 %	0.26 %	0.29 %	0.33 %
Wholesale / retail	0.69 %	0.74 %	0.72 %	0.15 %	0.18 %
Manufacturing	1.77 %	1.09 %	0.96 %	0.05 %	0.05 %
Healthcare	1.10 %	0.04 %	0.04 %	0.04 %	0.04 %
Other commercial and industrial	3.96 %	4.50 %	4.31 %	4.50 %	0.10 %
Total commercial	1.85 %	1.52 %	1.72 %	1.74 %	1.76 %
Commercial real estate:					
Residential construction and land development	1.45 %	1.92 %	2.53 %	2.34 %	2.70 %
Retail	0.04 %	0.04 %	0.04 %	0.16 %	0.16 %
Office	0.05 %	0.05 %	0.05 %	0.12 %	0.08 %
Multifamily	— %	— %	— %	0.01 %	0.01 %
Industrial	— %	0.01 %	0.01 %	0.01 %	0.01 %
Other commercial real estate	0.32 %	0.31 %	0.36 %	0.37 %	0.35 %
Total commercial real estate	0.10 %	0.12 %	0.14 %	0.19 %	0.22 %
Residential mortgage:					
Permanent mortgage	2.37 %	2.47 %	2.27 %	2.68 %	2.81 %
Permanent mortgage guaranteed by U.S. government agencies	4.72 %	4.95 %	5.94 %	8.11 %	10.24 %
Home equity	1.55 %	1.54 %	1.55 %	1.55 %	1.40 %
Total residential mortgage	2.28 %	2.37 %	2.37 %	2.80 %	3.03 %
Personal	0.03 %	0.03 %	0.03 %	0.10 %	0.06 %
Total nonaccruing loans	1.43 %	1.22 %	1.36 %	1.44 %	1.51 %
Ratios:					
Allowance for loan losses to nonaccruing loans[1]	105.78 %	125.92 %	112.53 %	110.65 %	106.95 %
Accruing loans 90 days or more past due[1]	$1,414	$95	$5	$3,839	$2,899

[1] Excludes residential mortgages guaranteed by agencies of the U.S. Government.

Nonperforming assets totaled $365 million or 2.12 percent of outstanding loans and repossessed assets at June 30, 2017. Nonaccruing loans totaled $245 million, accruing renegotiated residential mortgage loans totaled $81 million and real estate and other repossessed assets totaled $39 million. All accruing renegotiated residential mortgage loans and $9.1 million of nonaccruing loans are guaranteed by U.S. government agencies. Excluding assets guaranteed by U.S. government agencies, nonperforming assets increased $36 million over the second quarter primarily due to an increase in nonaccruing healthcare and energy loans. 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 troubled debt restructurings. 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 for residential mortgage loans guaranteed by U.S. government agencies, are classified as nonaccruing. We may also 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 nonaccrual 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 personal loans to troubled borrowers. Personal loans modified at the direction of bankruptcy court orders are identified as troubled debt restructurings and classified as nonaccruing.

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. Generally, 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. government agency guidelines.

A rollforward of nonperforming assets for the three and six months ended June 30, 2017 follows in Table 22.

Table 22 -- Rollforward of Nonperforming Assets
(In thousands)

	Three Months Ended June 30, 2017			
	Nonaccruing Loans	Renegotiated Loans	Real Estate and Other Repossessed Assets	Total Nonperforming Assets
Balance, March 31, 2017	$207,616	$ 83,577	$ 42,726	$ 333,919
Additions	58,768	15,032	—	73,800
Transfers from premises and equipment	—	—	452	452
Payments	(15,230)	(833)	—	(16,063)
Charge-offs	(2,872)	—	—	(2,872)
Net gains, losses and write-downs	—	—	1,694	1,694
Foreclosure of nonperforming loans	(688)	—	688	—
Foreclosure of loans guaranteed by U.S. government agencies	(1,580)	(2,752)	—	(4,332)
Proceeds from sales	—	(14,662)	(5,829)	(20,491)
Net transfers to nonaccruing loans	—	—	—	—
Return to accrual status	(618)	—	—	(618)
Other, net	43	262	(295)	10
Balance, June 30, 2017	$245,439	$ 80,624	$ 39,436	$ 365,499

	Six Months Ended June 30, 2017			
	Nonaccruing Loans	Renegotiated Loans	Real Estate and Other Repossessed Assets	Total Nonperforming Assets
Balance, Dec. 31, 2016	$230,984	$ 81,370	$ 44,287	$ 356,641
Additions	81,732	26,354	—	108,086
Transfers from premises and equipment	—	—	452	452
Payments	(50,162)	(1,786)	—	(51,948)
Charge-offs	(5,025)	—	—	(5,025)
Net gains, losses and write-downs	—	—	1,604	1,604
Foreclosure of nonperforming loans	(1,597)	—	1,597	—
Foreclosure of loans guaranteed by U.S. government agencies	(3,980)	(4,290)	—	(8,270)
Proceeds from sales	—	(21,406)	(7,702)	(29,108)
Return to accrual status	(6,556)	—	—	(6,556)
Other, net	43	382	(802)	(377)
Balance, June 30, 2017	$245,439	$ 80,624	$ 39,436	$ 365,499

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.

Commercial

Nonaccruing commercial loans totaled $197 million or 1.85 percent of total commercial loans at June 30, 2017 and $157 million or 1.52 percent of commercial loans at March 31, 2017. There were $54 million in newly identified nonaccruing commercial loans during the quarter, offset by $12 million in payments and $1.7 million of charge-offs. Newly identified nonaccruing commercial loans were primarily healthcare and energy loans.

Nonaccruing commercial loans at June 30, 2017 were primarily composed of $124 million or 4.35 percent of total energy loans, $25 million or 1.10 percent of total healthcare sector loans, $21 million or 3.96 percent of total other commercial and industrial sector loans and $11 million or 0.69 percent of wholesale/retail sector loans.

Commercial Real Estate

Nonaccruing commercial real estate loans totaled $3.8 million or 0.10 percent of outstanding commercial real estate loans at June 30, 2017, down from $4.5 million or 0.12 percent of outstanding commercial real estate loans at March 31, 2017. Newly identified nonaccruing commercial real estate loans of $195 thousand were offset by $819 thousand of cash payments received and $76 thousand in charge-offs. There were no foreclosures of nonaccruing commercial real estate loans during the second quarter.

Nonaccruing commercial real estate loans were primarily composed of $2.1 million or 1.45 percent of residential construction and land development loans.

Residential Mortgage and Personal

Nonaccruing residential mortgage loans totaled $44 million or 2.28 percent of outstanding residential mortgage loans at June 30, 2017, a $1.8 million decrease compared to March 31, 2017. Newly identified nonaccruing residential mortgage loans totaling $3.3 million were offset by $2.3 million of foreclosures, $2.2 million of payments and $40 thousand of loans charged off during the quarter.

Nonaccruing residential mortgage loans primarily consist of non-guaranteed permanent residential mortgage loans, which totaled $23 million or 2.37 percent of outstanding non-guaranteed permanent residential mortgage loans at June 30, 2017. Nonaccruing home equity loans totaled $12 million or 1.55 percent of total home equity loans.

Payments of 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 23. Substantially all non-guaranteed residential loans past due 90 days or more are nonaccruing. Residential mortgage loans 30 to 59 days past due decreased $3.2 million in the second quarter to $3.6 million at June 30, 2017. Residential mortgage loans 60 to 89 days past due increased by $1.1 million. Personal loans past due 30 to 59 days increased by $57 thousand and personal loans 60 to 89 days increased $184 thousand.

Table 23 -- Residential Mortgage and Personal Loans Past Due
(In thousands)

	June 30, 2017			March 31, 2017		
	90 Days or More	60 to 89 Days	30 to 59 Days	90 Days or More	60 to 89 Days	30 to 59 Days
Residential mortgage:						
Permanent mortgage[1]	$132	$1,026	$2,024	$—	$—	$5,364
Home equity	—	362	1,564	9	266	1,376
Total residential mortgage	$132	$1,388	$3,588	9	$266	$6,740
Personal	$—	$289	$487	$37	$105	$430

[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 the date of foreclosure or current fair value, less estimated selling costs.

Real estate and other repossessed assets totaled $39 million at June 30, 2017, a decrease of $3.3 million compared to March 31, 2017. The distribution of real estate and other repossessed assets attributed by geographical market is included in Table 24 following.

Table 24 -- Real Estate and Other Repossessed Assets by Collateral Location
(In thousands)

	Oklahoma	Texas	Colorado	Arkansas	New Mexico	Arizona	Kansas/ Missouri	Other	Total
1-4 family residential properties	$ 3,065	$305	$ —	$ 493	$1,450	$692	$ 131	$357	$6,493
Developed commercial real estate properties	71	—	2,147	—	446	198	1,296	—	4,158
Undeveloped land	1,152	1,215	—	—	—	135	1,197	—	3,699
Residential land development properties	67	—	210	—	—	343	2	—	622
Oil and gas properties	—	24,433					—	—	24,433
Other	8	23	—	—	—	—	—	—	31
Total real estate and other repossessed assets	$ 4,363	$25,976	$ 2,357	$ 493	$1,896	$1,368	$ 2,626	$357	$39,436

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 BOKF, NA, the wholly owned subsidiary bank of BOK Financial. Based on the average balances for the second quarter of 2017, approximately 68 percent of our funding was provided by deposit accounts, 19 percent from borrowed funds, less than 1 percent is from long-term subordinated debt and 11 percent 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 personal and small business checking, online bill paying services, mobile banking services, an extensive network of branch locations and ATMs and our 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.

Average deposits for the second quarter of 2017 totaled $22.1 billion, a $277 million decrease compared to the first quarter of 2017. Interest-bearing transaction account balances decreased $480 million and time deposit balances decreased $55 million. Demand deposit balances grew by $237 million during the second quarter of 2017.

Table 25 - Average Deposits by Line of Business
(In thousands)

	Three Months Ended				
	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016
Commercial Banking	$8,652,811	$8,631,724	$8,543,532	$8,317,341	$8,403,408
Consumer Banking	6,662,838	6,581,446	6,659,380	6,660,514	6,634,362
Wealth Management	5,531,091	5,582,554	5,333,095	4,913,409	4,521,031
Subtotal	20,846,740	20,795,724	20,536,007	19,891,264	19,558,801
Funds Management and other	1,245,591	1,573,698	1,167,409	873,750	908,931
Total	$22,092,331	$22,369,422	$21,703,416	$20,765,014	$20,467,732

Average Commercial Banking deposit balances were largely unchanged compared to the first quarter of 2017. Average demand deposit balances increased $202 million, offset by a $182 million decrease in the average balances of interest-bearing transaction accounts. Average deposit balances attributed to commercial and industrial customers grew by $113 million, offset by $53 million decrease in balances attributed to energy customers and a $36 million decrease in average balances attributed to healthcare customers. Commercial customers continue to retain large cash reserves primarily due to a combination of factors including uncertainty about the economic environment and potential for growth, lack of preferable liquid alternatives and a desire 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. Commercial deposit balances may decrease once the economic outlook improves and customers deploy cash or short-term market interest rates rise and related earnings credit rates rise, reducing the amount of deposits required to offset service charges.

Average Consumer Banking deposit balances increased by $81 million. Demand deposit balances grew by $75 million, partially offset by a $35 million decrease in time deposit balances. Interest-bearing transaction and savings account balanaces also grew over the prior quarter.

Average Wealth Management deposits decreased $51 million compared to the first quarter of 2017. A $142 million decrease in interest-bearing transaction account balances was partially offset by a $90 million increase in demand deposit balances.

Average deposits attributed to Funds Management and Other decreased $328 million.

Average time deposits for the second quarter of 2017 included $590 million of brokered deposits, an increase of $12 million over the first quarter of 2017. Average interest-bearing transaction accounts for the second quarter included $1.3 billion of brokered deposits, a decrease of $14 million compared to the first quarter of 2017.

The distribution of our period end deposit account balances among principal markets follows in Table 26.

Table 26 -- Period End Deposits by Principal Market Area
(In thousands)

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016
Bank of Oklahoma:					
Demand	$4,353,421	$4,320,666	$3,993,170	$4,158,273	$4,020,181
Interest-bearing:					
Transaction	5,998,787	6,114,288	6,345,536	5,701,983	5,741,302
Savings	263,664	265,014	241,696	242,959	247,984
Time	1,170,014	1,189,144	1,118,355	1,091,464	1,167,271
Total interest-bearing	7,432,465	7,568,446	7,705,587	7,036,406	7,156,557
Total Bank of Oklahoma	11,785,886	11,889,112	11,698,757	11,194,679	11,176,738
Bank of Texas:					
Demand	3,121,890	3,091,258	3,137,009	2,734,981	2,677,253
Interest-bearing:					
Transaction	2,272,185	2,317,576	2,388,812	2,240,040	2,035,634
Savings	91,491	89,640	83,101	84,642	83,862
Time	502,128	511,037	535,642	528,380	516,231
Total interest-bearing	2,865,804	2,918,253	3,007,555	2,853,062	2,635,727
Total Bank of Texas	5,987,694	6,009,511	6,144,564	5,588,043	5,312,980
Bank of Albuquerque:					
Demand	612,117	593,117	627,979	584,681	530,853
Interest-bearing:					
Transaction	558,523	623,677	590,571	555,326	573,690
Savings	54,136	53,683	49,963	54,480	49,200
Time	229,616	233,506	238,408	244,706	250,068
Total interest-bearing	842,275	910,866	878,942	854,512	872,958
Total Bank of Albuquerque	1,454,392	1,503,983	1,506,921	1,439,193	1,403,811
Bank of Arkansas:					
Demand	40,511	42,622	26,389	32,203	30,607
Interest-bearing:					
Transaction	129,848	106,804	105,232	313,480	278,335
Savings	2,135	2,304	2,192	2,051	1,853
Time	14,876	15,067	16,696	17,534	18,911
Total interest-bearing	146,859	124,175	124,120	333,065	299,099
Total Bank of Arkansas	187,370	166,797	150,509	365,268	329,706
Colorado State Bank & Trust:					
Demand	577,617	601,778	576,000	517,063	528,124
Interest-bearing:					
Transaction	626,343	610,510	616,679	623,055	625,240
Savings	35,651	37,801	32,866	31,613	31,509
Time	228,458	234,740	242,782	247,667	254,164
Total interest-bearing	890,452	883,051	892,327	902,335	910,913
Total Colorado State Bank & Trust	1,468,069	1,484,829	1,468,327	1,419,398	1,439,037

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016
Bank of Arizona:					
Demand	366,866	342,854	366,755	418,718	396,837
Interest-bearing:					
Transaction	154,457	180,254	305,099	303,750	302,297
Savings	3,638	3,858	2,973	2,959	3,198
Time	19,911	26,112	27,765	27,935	28,681
Total interest-bearing	178,006	210,224	335,837	334,644	334,176
Total Bank of Arizona	544,872	553,078	702,592	753,362	731,013
Mobank:					
Demand	496,473	514,278	508,418	235,445	240,755
Interest-bearing:					
Transaction	346,996	406,105	513,176	86,526	112,371
Savings	13,603	13,424	12,679	1,645	1,656
Time	31,119	34,242	42,152	11,945	11,735
Total interest-bearing	391,718	453,771	568,007	100,116	125,762
Total Mobank	888,191	968,049	1,076,425	335,561	366,517
Total BOK Financial deposits	$22,316,474	$22,575,359	$22,748,095	$21,095,504	$20,759,802

In addition to deposits, liquidity is provided primarily by federal funds purchased, securities repurchase agreements and Federal Home Loan Bank borrowings. Federal funds purchased consist primarily of unsecured, overnight funds acquired from other financial institutions. Funds are primarily purchased from bankers' banks and Federal Home Loan banks from across the country. The largest single source of wholesale federal funds purchased totaled $22 million at June 30, 2017. Securities repurchase agreements generally mature within 90 days and are secured by certain available for sale securities. Federal Home Loan Bank borrowings are generally short term and are secured by a blanket pledge of eligible collateral (generally unencumbered U.S. Treasury and agency mortgage-backed securities, 1-4 family residential mortgage loans, multifamily and other qualifying commercial real estate loans). Amounts borrowed from the Federal Home Loan Bank of Topeka averaged $5.5 billion during the quarter, compared to $5.7 billion in the first quarter of 2017.

At June 30, 2017, the estimated unused credit available to BOKF, NA from collateralized sources was approximately $6.1 billion.

A summary of other borrowings for BOK Financial on a consolidated basis follows in Table 27.

Table 27 -- Borrowed Funds
(In thousands)

	Jun 30, 2017	Three Months Ended June 30, 2017 Average Balance During the Quarter	Rate	Maximum Outstanding At Any Month End During the Quarter	Mar 31, 2017	Three Months Ended March 31, 2017 Average Balance During the Quarter	Rate	Maximum Outstanding At Any Month End During the Quarter
Parent Company and Other Non-Bank Subsidiaries:								
Trust preferred debt	$—	$6,084	3.49 %	$ 7,217	$7,217	$7,217	3.32 %	$ 7,217
Other	878	867	11.06%	$ 881	847	913	10.83%	871
Total other borrowings	878	6,951	5.14 %		8,064	8,130	5.64 %	
Subordinated debentures	144,658	144,654	5.55 %	$ 144,658	144,649	144,644	5.68 %	144,649
Total parent company and other non-bank subsidiaries	145,536	151,605	5.53 %		152,713	152,774	5.68 %	
BOKF, NA:								
Funds purchased	67,990	63,263	0.61 %	67,990	47,629	55,508	0.47 %	50,154
Repurchase agreements	396,333	427,353	0.06 %	489,814	508,352	523,561	0.02 %	536,094
Other borrowings:								
Federal Home Loan Bank advances	5,200,000	5,532,967	1.07 %	5,600,000	5,200,000	5,691,111	0.80 %	5,700,000
GNMA repurchase liability	16,056	16,734	4.65 %	17,693	15,532	23,392	4.61 %	24,139
Other	15,409	15,379	2.40 %	15,409	15,351	15,322	2.41 %	15,351
Total other borrowings	5,231,465	5,565,080	1.09 %		5,230,883	5,729,825	0.82 %	
Total BOKF, NA	5,695,788	6,055,696	1.01 %		5,786,864	6,308,894	0.75 %	
Total Other Borrowed Funds	$5,841,324	$6,207,301	1.12 %		$5,939,577	$6,461,668	0.87 %	

BOKF, NA also has a liability related to the repurchase of certain delinquent residential mortgage loans previously sold in GNMA mortgage pools. Interest is payable monthly at rates contractually due to investors.

Parent Company

At June 30, 2017, cash and interest-bearing cash and cash equivalents held by the parent company totaled $187 million. The primary sources of liquidity for BOK Financial are cash on hand and dividends from BOKF, NA. Dividends from the bank are limited by various banking regulations to net profits, as defined, for the year plus retained profits for the two preceding years. Dividends are further restricted by minimum capital requirements. At June 30, 2017, based upon the most restrictive limitations as well as management's internal capital policy, the bank could declare up to $283 million of dividends without regulatory approval. Dividend constraints may be alleviated through increases in retained earnings, capital issuances or changes in risk weighted assets. Future losses or increases in required regulatory capital at the bank could affect its ability to pay dividends to the parent company.

Our equity capital at June 30, 2017 was $3.4 billion, an increase of $79 million over March 31, 2017. Net income less cash dividends paid increased equity $59 million during the second quarter of 2017. Accumulated other comprehensive income increased $13 million primarily related to the impact on changes in interest rates on the net unrealized gain (loss) of the available for sale securities portfolio. Capital is managed to maximize long-term value to the shareholders. Factors considered in managing capital include projections of future earnings, asset growth and acquisition strategies, and regulatory and debt covenant requirements. Capital management may include subordinated debt or perpetual preferred stock issuance, share repurchase and stock and cash dividends.

On October 27, 2015, the board of directors authorized the Company to purchase up to five million common shares, subject to market conditions, securities law and other regulatory compliance limitations. As of June 30, 2017, a cumulative total of 2,879,243 shares have been repurchased under this authorization. No shares were repurchased in the second quarter of 2017.

BOK Financial and BOKF, NA are subject to various capital requirements administered by federal agencies. Failure to meet minimum capital requirements can result in certain mandatory and possibly additional discretionary actions by regulators that could have a material impact on operations. These capital requirements include quantitative measures of assets, liabilities and off-balance sheet items. The capital standards are also subject to qualitative judgments by the regulators.
Effective January 1, 2015 for BOK Financial, regulatory capital rules establish a 7 percent threshold for the common equity Tier 1 ratio consisting of a minimum level plus capital conservation buffer. The Company has 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.

A summary of minimum capital requirements, including capital conservation buffer follows in Table 28. 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.

The capital ratios for BOK Financial on a consolidated basis are presented in Table 28.

Table 28 -- Capital Ratios

	Minimum Capital Requirement	Capital Conservation Buffer	Minimum Capital Requirement Including Capital Conservation Buffer	June 30, 2017	Mar. 31, 2017	June 30, 2016
Risk-based capital:						
Common equity Tier 1	4.50 %	2.50 %	7.00 %	11.76 %	11.59 %	11.86 %
Tier 1 capital	6.00 %	2.50 %	8.50 %	11.76 %	11.59 %	11.86 %
Total capital	8.00 %	2.50 %	10.50 %	13.36 %	13.25 %	13.51 %
Tier 1 Leverage	4.00 %	N/A	4.00 %	9.27 %	8.89 %	9.06 %
Average total equity to average assets				10.53 %	10.10 %	10.46 %
Tangible common equity ratio				9.24 %	8.88 %	9.33 %

Capital resources of financial institutions are also regularly measured by the tangible common shareholders' equity ratio. Tangible common shareholders' equity is shareholders' equity as defined by generally accepted accounting principles in the United States of America ("GAAP") less intangible assets and equity which does not benefit common shareholders. Equity that does not benefit common shareholders includes preferred equity. This non-GAAP measure is a valuable indicator of a financial institution's capital strength since it eliminates intangible assets from shareholders' equity and retains the effect of unrealized losses on securities and other components of accumulated other comprehensive income in shareholders' equity.

Table 29 provides a reconciliation of the non-GAAP measures with financial measures defined by GAAP.

Table 29 -- Non-GAAP Measure
(Dollars in thousands)

	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016
Tangible common equity ratio:					
Total shareholders' equity	$3,422,469	$3,341,744	$3,274,854	$3,398,311	$3,368,833
Less: Goodwill and intangible assets, net	487,452	488,294	495,830	424,716	426,111
Tangible common equity	2,935,017	2,853,450	2,779,024	2,973,595	2,942,722
Total assets	32,263,532	32,628,932	32,772,281	32,779,231	31,970,450
Less: Goodwill and intangible assets, net	487,452	488,294	495,830	424,716	426,111
Tangible assets	$31,776,080	$32,140,638	$32,276,451	$32,354,515	$31,544,339
Tangible common equity ratio	9.24 %	8.88 %	8.61 %	9.19 %	9.33 %

Off-Balance Sheet Arrangements

See Note 7 to the Consolidated Financial Statements for a discussion of the Company’s significant off-balance sheet commitments.

Market Risk

Market risk is a broad term for the risk of economic loss due to adverse changes in the fair value of a financial instrument. These changes may be the result of various factors, including interest rates, foreign exchange rates, commodity prices or equity prices. Financial instruments that are subject to market risk can be classified either as held for trading or held for purposes other than trading. Market risk excludes changes in fair value due to credit of the individual issuers of financial instruments.

BOK Financial is subject to market risk primarily through the effect of changes in interest rates on both its assets held for purposes other than trading and trading assets. The effects of other changes, such as foreign exchange rates, commodity prices or equity prices do not pose significant market risk to BOK Financial. BOK Financial has no material investments in assets that are affected by changes in foreign exchange rates or equity prices. Energy and agricultural product derivative contracts, which are affected by changes in commodity prices, are matched against offsetting contracts as previously discussed.

The Asset/Liability Committee is responsible for managing market risk in accordance with policy limits established by the Board of Directors. The Committee monitors projected variation in net interest revenue, net income and economic value of equity due to specified changes in interest rates. These limits also set maximum levels for short-term borrowings, short-term assets, public funds and brokered deposits and establish minimum levels for unpledged assets, among other things. Further, the Board approved market risk limits for fixed income trading, mortgage pipeline and mortgage servicing assets inclusive of economic hedge benefits. Exposure is measured daily and compliance is reviewed monthly. Deviations from the Board approved limits, which periodically occur throughout the reporting period, may require management to develop and execute plans to reduce exposure. These plans are subject to escalation to and approval by the Board.

The simulations used to manage market risk are based on numerous assumptions regarding the effects of changes in interest rates on the timing and extent of repricing characteristics, future cash flows and customer behavior. These assumptions are inherently uncertain and, as a result, models cannot precisely estimate or precisely predict the impact of higher or lower interest rates. Actual results will differ from simulated results due to timing, magnitude and frequency of interest rate changes, market conditions and management strategies, among other factors.

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Interest Rate Risk – Other than Trading

As previously noted in the Net Interest Revenue section of this report, management has implemented strategies to manage the Company's balance sheet to have relatively limited exposure to changes in interest rates over a twelve-month period. The effectiveness of these strategies in managing the overall interest rate risk is evaluated through the use of an asset/liability model. BOK Financial performs a sensitivity analysis to identify more dynamic interest rate risk exposures, including embedded option positions, on net interest revenue. A simulation model is used to estimate the effect of changes in interest rates on our performance across multiple interest rate scenarios. Our current internal policy limit for net interest revenue variation due to a 200 basis point parallel change in market interest rates over twelve months is a maximum decline of 5%. The results of a 200 basis point decrease in interest rates in the current low-rate environment are not meaningful. Until such time as it becomes meaningful, we will instead report the effect of a 50 basis point decrease in interest rates.

The Company's primary interest rate exposures include the Federal Funds rate, which affects short-term borrowings, and the prime lending rate and LIBOR, which are the basis for much of the variable rate loan pricing. Additionally, residential mortgage rates directly affect the prepayment speeds for residential mortgage-backed securities and mortgage servicing rights. Derivative financial instruments and other financial instruments used for purposes other than trading are included in this simulation. In addition, the impact on the level and composition of demand deposit accounts and other core deposit balances resulting from a significant increase in short-term market interest rates and the overall interest rate environment is likely to be material. The simulation incorporates assumptions regarding the effects of such changes based on a combination of historical analysis and expected behavior. The impact of planned growth and new business activities is factored into the simulation model.

Table 30 -- Interest Rate Sensitivity
(Dollars in thousands)

	200 bp Increase		50 bp Decrease	
	June 30,		June 30,	
	2017	2016	2017	2016
Anticipated impact over the next twelve months on net interest revenue	$(104)	$(483)	$(17,632)	$(24,425)
	(0.01)%	(0.06)%	(2.07)%	(3.18)%

BOK Financial is also subjected to market risk through changes in the fair value of mortgage servicing rights. Changes in the fair value of mortgage servicing rights are highly dependent on changes in primary mortgage rates offered to borrowers, intermediate-term interest rates that affect the value of custodial funds, and assumptions about servicing revenues, servicing costs and discount rates. 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.

We maintain a portfolio of financial instruments, which may include debt securities issued by U.S. government or its agencies and interest rate derivative contracts held as an economic hedge of the changes in the fair value of our mortgage servicing rights. Composition of this portfolio will change based on our assessment of market risk. Changes in the fair value of residential mortgage-backed securities are highly dependent on changes in secondary mortgage rates required by investors, and interest rate derivative contracts are highly dependent on changes in other market interest rates. 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 forward-looking spread between the primary and secondary rates can cause significant earnings volatility.

Management performs a stress test to measure market risk due to changes in interest rates inherent in its MSR portfolio and hedges. The stress test shocks applicable interest rates up and down 50 basis points and calculates an estimated change in fair value, net of economic hedging activity, that may result. The Board has approved a $20 million market risk limit for mortgage servicing rights, net of economic hedges.

Table 31 -- MSR Asset and Hedge Sensitivity Analysis
(Dollars in thousands)

	June 30, 2017		2016	
	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp
MSR Asset	$25,977	$(31,851)	$31,043	$(53,564)
MSR Hedge	(31,507)	32,312	(28,934)	31,098
Net Exposure	(5,530)	461	2,109	(22,466)

Trading Activities

The Company bears market risk by originating residential mortgages held for sale (RMHFS). RMHFS are generally outstanding for 60 to 90 days which represents the typical period from commitment to originate a loan to sale of the closed loan to an investor. Primary mortgage interest rate changes during this period affect the value of RMHFS commitments and loans. We use forward sale contracts to mitigate market risk on all closed mortgage loans held for sale and on an estimate of mortgage loan commitments that are expected to result in closed loans.

A variety of methods are used to monitor market risk of mortgage origination activities. These methods include daily marking of all positions to market value, independent verification of inventory pricing, and revenue sensitivity limits.

Management performs a stress test to measure market risk due to changes in interest rates inherent in the mortgage production pipeline. The stress test shocks applicable interest rates up and down 50 basis points and calculates an estimated change in fair value, net of economic hedging activity that may result. The Board has approved a $7 million market risk limit for the mortgage production pipeline, net of forward sale contracts.

Table 32 -- Mortgage Pipeline Sensitivity Analysis
(Dollars in thousands)

	Three Months Ended June 30, 2017		2016		Six Months Ended June 30, 2017		2016	
	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp
Average[1]	$(3)	$(1,439)	$(3,835)	$(740)	$117	$(1,316)	$(3,916)	$(591)
Low[2]	1,030	(679)	(288)	724	1,030	(398)	(288)	1,815
High[3]	(810)	(2,377)	(6,858)	(2,656)	(810)	(2,377)	(6,858)	(2,953)
Period End	(263)	(1,025)	(1,328)	(1,423)	(263)	(1,025)	(1,328)	(1,423)

1 Average represents the simple average of each daily value observed during the reporting period.

2 Low represents least risk of loss in fair value measured as the smallest negative value or the largest positive value observed daily during the reporting period.

3 High represents the greatest risk of loss in fair value measured as the largest negative value or the smallest positive value observed daily during the reporting period.

BOK Financial enters into trading activities both as an intermediary for customers and for its own account. As an intermediary, we take positions in securities, generally residential mortgage-backed securities, government agency securities and municipal bonds. These securities are purchased for resale to customers, which include individuals, corporations, foundations and financial institutions. On a limited basis, we may also take trading positions in U.S. Treasury securities, residential mortgage-backed securities, and municipal bonds to enhance returns on securities portfolios. Both of these activities involve interest rate, liquidity and price risk. BOK Financial has an insignificant exposure to foreign exchange risk and does not take positions in commodity derivatives.

A variety of methods are used to monitor the interest rate risk of trading activities. These methods include daily marking of all positions to market value, independent verification of inventory pricing, and position limits for each trading activity. Economic hedges in either the futures or cash markets may be used to reduce the risk associated with some trading programs.

Management performs a stress test to measure market risk from changes in interest rates on its trading portfolio. The stress test shocks applicable interest rates up and down 50 basis points and calculates an estimated change in fair value, net of economic hedging activity that may result. The Board has approved an $8 million market risk limit for the trading portfolio, net of economic hedges.

Table 33 -- BOKFS Trading Sensitivity Analysis
(Dollars in thousands)

	Three Months Ended June 30,				Six Months Ended June 30,			
	2017		2016		2017		2016	
	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp	Up 50 bp	Down 50 bp
Average[1]	$(1,359)	$1,592	$(3,389)	$3,118	$(1,991)	$2,241	$(2,984)	$2,721
Low[2]	(219)	3,833	(2,208)	2,009	86	5,210	146	5,274
High[3]	(2,916)	91	(4,211)	2,092	(4,386)	2	(5,607)	(107)
Period End	(1,842)	1,727	(3,055)	3,001	(1,842)	1,727	(3,055)	3,001

1 Average represents the simple average of each daily value observed during the reporting period.

2 Low represents least risk of loss in fair value measured as the smallest negative value or the largest positive value observed daily during the reporting period.

3 High represents the greatest risk of loss in fair value measured as the largest negative value or the smallest positive value observed daily during the reporting period.

Controls and Procedures

As required by Rule 13a-15(b), BOK Financial’s management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of the end of the period covered by their report, of the effectiveness of the Company’s disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of the end of the period covered by this report. As required by Rule 13a-15(d), BOK Financial’s management, including the Chief Executive Officer and Chief Financial Officer, also conducted an evaluation of the Company’s internal controls over financial reporting to determine whether any changes occurred during the quarter covered by this report that have materially affected, or are reasonably likely to materially affect, the Company’s internal controls over financial reporting. Based on that evaluation, there has been no such change during the quarter covered by this report.

Forward-Looking Statements

This report contains forward-looking statements that are based on management’s beliefs, assumptions, current expectations, estimates, and projections about BOK Financial, the financial services industry and the economy in general. Words such as “anticipates,” “believes,” “estimates,” “expects,” “forecasts,” “plans,” “projects,” “will,” “intends,” var such words and similar expressions are intended to identify such forward-looking statements. Management judgments relating to and discussion of the provision and allowance for credit losses, allowance for uncertain tax positions, accruals for loss contingencies and valuation of mortgage servicing rights involve judgments as to expected events and are inherently forward-looking statements. Assessments that BOK Financial’s acquisitions and other growth endeavors will be profitable are necessary statements of belief as to the outcome of future events, based in part on information provided by others that BOK Financial has not independently verified. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict with regard to timing, extent, likelihood and degree of occurrence. Therefore, actual results and outcomes may materially differ from what is expressed, implied, or forecasted in such forward-looking statements. Internal and external factors that might cause such a difference include, but are not limited to changes in commodity prices, interest rates and interest rate relationships, demand for products and services, the degree of competition by traditional and nontraditional competitors, changes in banking regulations, tax laws, prices, levies and assessments, the impact of technological advances, and trends in customer behavior as well as their ability to repay loans. BOK Financial and its affiliates undertake no obligation to update, amend or clarify forward-looking statements, whether as a result of new information, future events, or otherwise.

Consolidated Statements of Earnings (Unaudited)

(In thousands, except share and per share data)	Three Months Ended June 30,		Six Months Ended June 30,	
Interest revenue	2017	2016	2017	2016
Loans	$168,952	$141,560	$329,847	$280,672
Residential mortgage loans held for sale	2,386	3,508	4,222	6,208
Trading securities	3,339	616	8,522	1,140
Investment securities	4,005	4,217	8,176	8,604
Available for sale securities	43,363	43,872	86,735	89,339
Fair value option securities	3,539	2,062	5,919	4,651
Restricted equity securities	4,399	3,863	8,708	8,174
Interest-bearing cash and cash equivalents	5,198	2,569	9,442	5,275
Total interest revenue	235,181	202,267	461,571	404,063
Interest expense				
Deposits	12,622	9,997	23,976	20,539
Borrowed funds	15,352	8,780	27,181	16,752
Subordinated debentures	2,003	878	4,028	1,588
Total interest expense	29,977	19,655	55,185	38,879
Net interest revenue	205,204	182,612	406,386	365,184
Provision for credit losses	—	20,000	—	55,000
Net interest revenue after provision for credit losses	205,204	162,612	406,386	310,184
Other operating revenue				
Brokerage and trading revenue	31,764	39,530	65,387	71,871
Transaction card revenue	35,296	34,950	67,423	67,304
Fiduciary and asset management revenue	41,808	34,813	80,439	66,869
Deposit service charges and fees	23,354	22,618	46,384	45,160
Mortgage banking revenue	30,276	34,884	55,467	66,984
Other revenue	14,984	13,352	26,736	25,256
Total fees and commissions	177,482	180,147	341,836	343,444
Other gains, net	6,108	1,307	9,735	2,867
Gain (loss) on derivatives, net	3,241	10,766	2,791	17,904
Gain (loss) on fair value option securities, net	1,984	4,279	844	13,722
Change in fair value of mortgage servicing rights	(6,943)	(16,283)	(5,087)	(44,271)
Gain on available for sale securities, net	380	5,326	2,429	9,290
Total other operating revenue	182,252	185,542	352,548	342,956
Other operating expense				
Personnel	143,744	139,213	280,169	272,775
Business promotion	7,738	6,703	14,455	12,399
Professional fees and services	12,419	14,158	23,836	25,917
Net occupancy and equipment	21,125	19,677	42,749	38,443
Insurance	689	7,129	7,093	14,394
Data processing and communications	36,330	32,802	71,232	64,819
Printing, postage and supplies	4,140	3,889	7,991	7,796
Net losses (gains) and operating expenses of repossessed assets	2,267	1,588	3,276	2,658
Amortization of intangible assets	1,803	2,624	3,605	3,783
Mortgage banking costs	12,072	15,746	25,075	28,076
Other expense	8,558	7,856	16,115	22,895
Total other operating expense	250,885	251,385	495,596	493,955

Net income before taxes	136,571	96,769	263,338	159,185
Federal and state income taxes	47,705	30,497	85,808	51,925
Net income	88,866	66,272	177,530	107,260
Net income (loss) attributable to non-controlling interests	719	471	1,027	(1,105)
Net income attributable to BOK Financial Corporation shareholders	$88,147	$65,801	$176,503	$108,365
Earnings per share:				
Basic	$1.35	$1.00	$2.70	$1.64
Diluted	$1.35	$1.00	$2.69	$1.64
Average shares used in computation:				
Basic	64,729,752	65,245,887	64,722,744	65,271,214
Diluted	64,793,134	65,302,926	64,788,322	65,317,177
Dividends declared per share	$0.44	$0.43	$0.88	$0.86

See accompanying notes to consolidated financial statements.

Consolidated Statements of Comprehensive Income (Unaudited)
(In thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net income	$88,866	$66,272	$177,530	$107,260
Other comprehensive income before income taxes:				
Net change in unrealized gain (loss)	21,958	45,475	33,369	166,566
Reclassification adjustments included in earnings:				
Interest revenue, Investment securities, Taxable securities	—	(43)	—	(112)
Gain on available for sale securities, net	(380)	(5,326)	(2,429)	(9,290)
Other comprehensive income before income taxes	21,578	40,106	30,940	157,164
Federal and state income taxes	8,393	15,583	12,009	61,119
Other comprehensive income, net of income taxes	13,185	24,523	18,931	96,045
Comprehensive income	102,051	90,795	196,461	203,305
Comprehensive income (loss) attributable to non-controlling interests	719	471	1,027	(1,105)
Comprehensive income attributable to BOK Financial Corp. shareholders	$101,332	$90,324	$195,434	$204,410

See accompanying notes to consolidated financial statements.

Consolidated Balance Sheets
(In thousands, except share data)

	Jun 30, 2017 (Unaudited)	Dec 31, 2016 (Footnote 1)	Jun 30, 2016 (Unaudited)
Assets			
Cash and due from banks	$561,587	$620,846	$498,713
Interest-bearing cash and cash equivalents	2,078,831	1,916,651	1,907,838
Trading securities	441,414	337,628	211,622
Investment securities (fair value: June 30, 2017 – $515,675; December 31, 2016 – $565,493 ; June 30, 2016 – $599,062)	490,426	546,145	560,711
Available for sale securities	8,341,041	8,676,829	8,830,689
Fair value option securities	445,169	77,046	263,265
Restricted equity securities	311,033	307,240	319,639
Residential mortgage loans held for sale	287,259	301,897	430,728
Loans	17,183,645	16,989,660	16,406,749
Allowance for loan losses	(250,061)	(246,159)	(243,259)
Loans, net of allowance	16,933,584	16,743,501	16,163,490
Premises and equipment, net	321,038	325,849	315,199
Receivables	295,042	772,952	173,638
Goodwill	446,697	448,899	382,739
Intangible assets, net	40,755	46,931	43,372
Mortgage servicing rights	245,239	247,073	190,747
Real estate and other repossessed assets, net of allowance (June 30, 2017 – $8,576; December 31, 2016 – $9,562; June 30, 2016 – $9,448)	39,436	44,287	24,054
Derivative contracts, net	280,289	689,872	883,673
Cash surrender value of bank-owned life insurance	312,774	308,430	307,860
Receivable on unsettled securities sales	33,177	7,188	142,820
Other assets	358,741	353,017	319,653
Total assets	$32,263,532	$32,772,281	$31,970,450
Liabilities and Equity			
Liabilities:			
Noninterest-bearing demand deposits	$9,568,895	$9,235,720	$8,424,609
Interest-bearing deposits:			
Transaction	10,087,139	10,865,105	9,668,869
Savings	464,318	425,470	419,262
Time	2,196,122	2,221,800	2,247,061
Total deposits	22,316,474	22,748,095	20,759,801
Funds purchased	67,990	57,929	56,780
Repurchase agreements	396,333	668,661	472,683
Other borrowings	5,232,343	4,846,072	5,830,736
Subordinated debentures	144,658	144,640	371,812
Accrued interest, taxes and expense	133,198	146,704	197,742
Derivative contracts, net	285,819	664,531	719,159
Due on unsettled securities purchases	32,636	6,508	11,757
Other liabilities	204,536	182,784	147,242
Total liabilities	28,813,987	29,465,924	28,567,712
Shareholders' equity:			
	4	4	4

Common stock ($.00006 par value; 2,500,000,000 shares authorized; shares issued and outstanding: June 30, 2017 – 75,089,152; December 31, 2016 – 74,993,407; June 30, 2016 – 74,817,155)			
Capital surplus	1,017,495	1,006,535	990,106
Retained earnings	2,942,447	2,823,334	2,755,766
Treasury stock (shares at cost: June 30, 2017 – 9,672,749; December 31, 2016 – 9,655,975; June 30, 2016 – 8,950,838)	(545,441)	(544,052)	(494,675)
Accumulated other comprehensive income (loss)	7,964	(10,967)	117,632
Total shareholders’ equity	3,422,469	3,274,854	3,368,833
Non-controlling interests	27,076	31,503	33,905
Total equity	3,449,545	3,306,357	3,402,738
Total liabilities and equity	$32,263,532	$32,772,281	$31,970,450

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Equity (Unaudited)
(In thousands)

	Common Stock		Capital Surplus	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity	Non-Controlling Interests	Total Equity
	Shares	Amount			Shares	Amount				
Balance, Dec. 31, 2015	74,530	$4	$982,009	$2,704,121	8,636	$(477,165)	$21,587	$3,230,556	$37,083	$3,267,639
Net income (loss)	—	—	—	108,365	—	—	—	108,365	(1,105)	107,260
Other comprehensive income	—	—	—	—	—	—	96,045	96,045	—	96,045
Repurchase of common stock	—	—	—	—	305	(17,770)	—	(17,770)	—	(17,770)
Share-based compensation plans:										
Stock options exercised	39	—	2,016	—	—	—	—	2,016	—	2,016
Non-vested shares awarded, net	248	—	—	—	—	—	—	—	—	—
Vesting of non-vested shares	—	—	—	—	10	260	—	260	—	260
Tax effect from equity compensation, net	—	—	351	—	—	—	—	351	—	351
Share-based compensation	—	—	5,730	—	—	—	—	5,730	—	5,730
Cash dividends on common stock	—	—	—	(56,720)	—	—	—	(56,720)	—	(56,720)
Capital calls and distributions, net	—	—	—	—	—	—	—	—	(2,073)	(2,073)
Balance, June 30, 2016	74,817	$4	$990,106	$2,755,766	8,951	$(494,675)	$117,632	$3,368,833	$33,905	$3,402,738
Balance, Dec. 31, 2016	74,993	$4	$1,006,535	$2,823,334	9,656	$(544,052)	$(10,967)	$3,274,854	$31,503	$3,306,357
Net income (loss)	—	—	—	176,503	—	—	—	176,503	1,027	177,530

Other comprehensive income	—	—	—	—	—	—	18,931	18,931	—	18,931
Share-based compensation plans:										
Stock options exercised	41	—	1,977	—	—	—	—	1,977	—	1,977
Non-vested shares awarded, net	55	—	—	—	—	—	—	—	—	—
Vesting of non-vested shares	—	—	—	—	17	(1,389)	—	(1,389)	—	(1,389)
Share-based compensation	—	—	8,983	—	—	—	—	8,983	—	8,983
Cash dividends on common stock	—	—	—	(57,390)	—	—	—	(57,390)	—	(57,390)
Capital calls and distributions, net	—	—	—	—	—	—	—	—	(5,454)	(5,454)
Balance, June 30, 2017	75,089	$4	$1,017,495	$2,942,447	9,673	$(545,441)	$7,964	$3,422,469	$27,076	$3,449,545

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows (Unaudited)
(in thousands)

	Six Months Ended June 30, 2017	2016
Cash Flows From Operating Activities:		
Net income	$177,530	$107,260
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	—	55,000
Change in fair value of mortgage servicing rights due to market changes	5,087	44,271
Change in the fair value of mortgage servicing rights due to loan runoff	16,261	17,942
Net unrealized gains from derivative contracts	(5,928)	(15,459)
Share-based compensation	8,983	5,730
Depreciation and amortization	25,864	23,532
Net amortization of securities discounts and premiums	15,377	21,814
Net realized gains on financial instruments and other net gains	(4,351)	(9,787)
Net gain on mortgage loans held for sale	(25,229)	(37,151)
Mortgage loans originated for sale	(1,613,997)	(3,062,859)
Proceeds from sale of mortgage loans held for sale	1,651,018	2,981,973
Capitalized mortgage servicing rights	(19,514)	(34,355)
Change in trading and fair value option securities	(472,682)	90,484
Change in receivables	479,774	(9,698)
Change in other assets	(17,548)	(4,740)
Change in accrued interest, taxes and expense	(19,703)	20,299
Change in other liabilities	27,420	(8,854)
Net cash provided by operating activities	228,362	185,402
Cash Flows From Investing Activities:		
Proceeds from maturities or redemptions of investment securities	71,654	52,463
Proceeds from maturities or redemptions of available for sale securities	899,096	721,432
Purchases of investment securities	(18,802)	(18,599)
Purchases of available for sale securities	(1,242,070)	(1,155,261)
Proceeds from sales of available for sale securities	700,412	795,140
Change in amount receivable on unsettled securities transactions	(25,989)	(102,627)
Loans originated, net of principal collected	(159,924)	(481,085)
Net payments on derivative asset contracts	420,996	(204,041)
Acquisitions, net of cash acquired	—	(7,700)
Proceeds from disposition of assets	127,699	78,629
Purchases of assets	(106,362)	(107,241)
Net cash provided by investing activities	666,710	(428,890)
Cash Flows From Financing Activities:		
Net change in demand deposits, transaction deposits and savings accounts	(405,943)	(169,354)
Net change in time deposits	(25,678)	(159,003)
Net change in other borrowed funds	64,833	259,359
Issuance of subordinated debentures	—	145,390
Net proceeds on derivative liability contracts	(422,016)	196,225
Net change in derivative margin accounts	27,327	(188,823)
Change in amount due on unsettled security transactions	26,128	(5,140)
Issuance of common and treasury stock, net	588	2,276
Repurchase of common stock	—	(17,770)

Dividends paid	(57,390)	(56,720)
Net cash provided by (used in) financing activities	(792,151)	6,440
Net increase (decrease) in cash and cash equivalents	102,921	(237,048)
Cash and cash equivalents at beginning of period	2,537,497	2,643,599
Cash and cash equivalents at end of period	$2,640,418	$2,406,551
Supplemental Cash Flow Information:		
Cash paid for interest	$54,881	$40,213
Cash paid for taxes	$60,654	$14,671
Net loans and bank premises transferred to repossessed real estate and other assets	$2,049	$5,372
Residential mortgage loans guaranteed by U.S. government agencies that became eligible for repurchase during the period	$59,171	$49,325
Conveyance of other real estate owned guaranteed by U.S. government agencies	$22,602	$29,512

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements (Unaudited)

(1) Significant Accounting Policies

Basis of Presentation

The accompanying unaudited consolidated financial statements of BOK Financial Corporation (“BOK Financial” or “the Company”) have been prepared in accordance with accounting principles for interim financial information generally accepted in the United States and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included.

The unaudited consolidated financial statements include accounts of BOK Financial and its subsidiaries, principally BOKF, NA (“the Bank”), BOK Financial Securities, Inc., The Milestone Group, Inc. and Cavanal Hill Investment Management Inc. Operating divisions of the Bank include Bank of Albuquerque, Bank of Arizona, Bank of Arkansas, Bank of Oklahoma, Bank of Texas, Colorado State Bank and Trust, Mobank, BOK Financial Mortgage and the TransFund electronic funds network.

Certain reclassifications have been made to conform to the current period presentation.

The financial information should be read in conjunction with BOK Financial’s 2016 Form 10-K filed with the Securities and Exchange Commission, which contains audited financial statements. Amounts presented as of December 31, 2016 have been derived from the audited financial statements included in BOK Financial’s 2016 Form 10-K but do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. Operating results for the six-month period ended June 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017.

Newly Adopted and Pending Accounting Policies

Financial Accounting Standards Board (“FASB”)

FASB Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers ("ASU 2014-09")

On May 28, 2014, the FASB issued ASU 2014-09 to clarify the principles for recognizing revenue by providing a more robust framework that will give greater consistency and comparability in revenue recognition practices. In the new framework, an entity recognizes revenue in an amount that reflects the consideration to which the entity expects to be entitled in exchange for goods or services. The new model requires the identification of performance obligations included in contracts with customers, a determination of the transaction price and an allocation of the price to those performance obligations. The entity recognizes revenue when performance obligations are satisfied. ASU 2014-09 is effective for the Company for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Net interest revenue from financial assets and liabilities is explicitly excluded from the scope of ASU 2014-09. Management expects that most fees and commissions revenue will not be affected. The Company continues to evaluate the impact of ASU 2014-09 on Fiduciary and Asset Management Revenue and Transaction Card Revenue, which represents 19% of gross revenue and 43% of fees and commissions revenue for the first half of 2017. Timing of revenue recognition and gross versus net presentation may be affected. Management will adopt the standard in the first quarter of 2018 with a cumulative effect adjustment to opening retained earnings if such adjustment is significant.

FASB Accounting Standards Update No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net) ("ASU 2016-08")

On March 17, 2016, the FASB Issued ASU 2016-08 to amend the principal versus agent implementation guidance in ASU 2014-09. The ASU clarifies that an entity should evaluate whether it is the principal or the agent for each specified good or service promised in a contract with a customer. ASU 2016-08 is effective for the Company for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The Company is evaluating the impact the adoption of ASU 2016-08 will have on the Company's financial statements along with ASU 2014-09.

FASB Accounting Standards Update No. 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities ("ASU 2016-01")

On January 5, 2016, the FASB issued ASU 2016-01 over the recognition and measurement of financial assets and liabilities. The update requires equity investments, in general, to be measured at fair value with changes in fair value recognized in earnings. It also eliminates the requirement to disclose the methods and significant assumptions used to estimate the fair value for financial instruments measured at amortized cost, requires entities to use the exit price notion when measuring fair value, requires an entity to present separately in other comprehensive income the portion of the total change in fair value of a liability resulting from a change in the instrument-specific credit risk when the fair value option has been elected, requires separate presentation of financial assets and liabilities by measurement category and form on the balance sheet or accompanying notes, clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets, and simplifies the impairment assessment of equity investments without readily determinable fair values. The ASU is effective for the Company for interim and annual periods beginning after December 15, 2017. Upon adoption, unrealized gains and losses from equity securities will be reclassified from other comprehensive income to retained earnings. At June 30, 2017, the Company had $3.2 million of unrealized gains included in accumulated other comprehensive income.

FASB Accounting Standards Update No. 2016-02, Leases (Topic 842) ("ASU 2016-02")

On February 25, 2016, the FASB issued ASU 2016-02 to increase transparency and comparability by recognizing lease assets and liabilities on the balance sheet and disclosing key information about leasing arrangements. Lessees will be required to recognize an obligation for future lease payments measured on a discounted basis and a right-of-use asset. The ASU is effective for the Company for interim and annual periods beginning after December 15, 2018 and requires transition through a modified retrospective approach for leases existing at or entered into after January 1, 2017. The Company is evaluating the impact the adoption of ASU 2016-02 will have on the Company's financial statements.

FASB Accounting Standards Update No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09")

On March 30, 2016, the FASB issued ASU 2016-09 to simplify multiple aspects of accounting for employee share-based payment transactions including accounting income taxes, forfeitures, and statutory tax withholding requirements. The ASU became effective for annual reporting periods beginning after December 15, 2016, including interim periods within those annual reporting periods. Implementation of ASU 2016-09 decreased tax expense $2.3 million in the first six months of 2017.

FASB Accounting Standards Update No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Assets Measured at Amortized Cost ("ASU 2016-13")

On June 16, 2016, the FASB issued ASU 2016-13 in order to provide more timely recording of credit losses on loans and other financial instruments. The ASU adds an impairment model (known as the current expected credit loss ("CECL") model) that is based on expected credit losses rather than incurred credit losses. It requires measurement of all expected credit losses for financial assets carried at amortized cost, including loans and investment securities, based on historical experience, current conditions, and reasonable and supportable forecasts. ASU 2016-13 also changes the recognition of other-than-temporary impairment of available for sale securities to an allowance methodology from a direct write-down methodology. ASU 2016-13 will be effective for the Company for annual reporting periods beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for annual reporting periods beginning after December 15, 2018. ASU 2016-13 will be applied through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company is evaluating the impact the adoption of ASU 2016-13 will have on the Company's financial statements.

FASB Accounting Standards Update No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15")

On August 26, 2016, the FASB issued ASU 2016-15, which amends guidance in ASC 230 on the classification of certain cash receipts and payments in the statement of cash flows. The amendments address eight cash flow issues. ASU 2016-15 is effective for the Company for interim and annual reporting periods beginning after December 15, 2017. Entities generally must apply the guidance retrospectively to all periods presented. Adoption of ASU 2016-15 is not expected to have a material impact on the Company's financial statements.

(2) Securities
Trading Securities

The fair value and net unrealized gain (loss) included in trading securities is as follows (in thousands):

	June 30, 2017		December 31, 2016		June 30, 2016	
	Fair Value	Net Unrealized Gain (Loss)	Fair Value	Net Unrealized Gain (Loss)	Fair Value	Net Unrealized Gain (Loss)
U.S. government agency debentures	$20,954	$ (9)	$6,234	$ (4)	$18,909	$ (8)
U.S. government agency residential mortgage-backed securities	365,171	(1,032)	310,067	635	122,306	363
Municipal and other tax-exempt securities	45,444	230	14,427	50	52,721	262
Other trading securities	9,845	(175)	6,900	57	17,686	169
Total trading securities	$441,414	$ (986)	$337,628	$ 738	$211,622	$ 786

Investment Securities

The amortized cost and fair values of investment securities are as follows (in thousands):

	June 30, 2017			
	Amortized Cost	Fair Value	Gross Unrealized[1] Gain	Gross Unrealized[1] Loss
Municipal and other tax-exempt	$267,375	$270,531	$3,384	$(228)
U.S. government agency residential mortgage-backed securities – Other	18,035	18,642	668	(61)
Other debt securities	205,016	226,502	22,040	(554)
Total investment securities	$490,426	$515,675	$26,092	$(843)

[1] Gross unrealized gains and losses are not recognized in Accumulated Other Comprehensive Income "AOCI" in the Consolidated Balance Sheets.

	December 31, 2016			
	Amortized Cost	Fair Value	Gross Unrealized[1] Gain	Gross Unrealized[1] Loss
Municipal and other tax-exempt	$320,364	$321,225	$2,272	$(1,411)
U.S. government agency residential mortgage-backed securities – Other	20,777	21,473	767	(71)
Other debt securities	205,004	222,795	18,115	(324)
Total investment securities	$546,145	$565,493	$21,154	$(1,806)

[1] Gross unrealized gains and losses are not recognized in AOCI in the Consolidated Balance Sheets.

	June 30, 2016			
	Amortized Cost	Fair Value	Gross Unrealized[1] Gain	Gross Unrealized[1] Loss
Municipal and other tax-exempt	$334,551	$340,700	$6,234	$(85)
U.S. government agency residential mortgage-backed securities – Other	23,750	25,233	1,483	—
Other debt securities	202,410	233,129	30,723	(4)
Total investment securities	$560,711	$599,062	$38,440	$(89)

[1] Gross unrealized gains and losses are not recognized in AOCI in the Consolidated Balance Sheets.

The amortized cost and fair values of investment securities at June 30, 2017, by contractual maturity, are as shown in the following table (dollars in thousands):

	Less than One Year	One to Five Years	Six to Ten Years	Over Ten Years	Total	Weighted Average Maturity[2]
Municipal and other tax-exempt:						
Amortized cost	$90,415	$122,560	$10,739	$43,661	$267,375	3.48
Fair value	90,436	122,914	11,220	45,961	270,531	
Nominal yield[1]	1.66 %	2.12 %	4.88 %	5.05 %	2.55 %	
Other debt securities:						
Amortized cost	14,286	45,638	130,279	14,813	205,016	6.59
Fair value	14,482	48,973	148,415	14,632	226,502	
Nominal yield	3.84 %	4.95 %	5.75 %	4.46 %	5.35 %	
Total fixed maturity securities:						
Amortized cost	$104,701	$168,198	$141,018	$58,474	$472,391	4.83
Fair value	104,918	171,887	159,635	60,593	497,033	
Nominal yield	1.95 %	2.89 %	5.69 %	4.90 %	3.77 %	
Residential mortgage-backed securities:						
Amortized cost					$18,035	[3]
Fair value					18,642	
Nominal yield[4]					2.76 %	
Total investment securities:						
Amortized cost					$490,426	
Fair value					515,675	
Nominal yield					3.73 %	

1 Calculated on a taxable equivalent basis using a 39 percent effective tax rate.

2 Expected maturities may differ from contractual maturities, because borrowers may have the right to call or prepay obligations with or without penalty.

3 The average expected lives of residential mortgage-backed securities were 4.7 years based upon current prepayment assumptions.

4 The nominal yield on residential mortgage-backed securities is based upon prepayment assumptions at the purchase date. Actual yields earned may differ significantly based upon actual prepayments. See Quarterly Financial Summary - Unaudited for current yields on the investment securities portfolio.

Available for Sale Securities

The amortized cost and fair value of available for sale securities are as follows (in thousands):

	June 30, 2017				
	Amortized Cost	Fair Value	Gross Unrealized[1] Gain	Gross Unrealized[1] Loss	OTTI[2]
U.S. Treasury	$1,000	$998	$—	$(2)	$ —
Municipal and other tax-exempt	32,885	32,765	293	(413)	—
Residential mortgage-backed securities:					
U. S. government agencies:					
FNMA	3,005,920	3,008,531	24,213	(21,602)	—
FHLMC	1,412,376	1,412,472	7,785	(7,689)	—
GNMA	938,086	936,365	3,641	(5,362)	—
Other	25,000	25,009	52	(43)	—
Total U.S. government agencies	5,381,382	5,382,377	35,691	(34,696)	—
Private issue:					
Alt-A loans	38,334	46,903	8,569	—	—
Jumbo-A loans	48,322	56,480	8,158	—	—
Total private issue	86,656	103,383	16,727	—	—
Total residential mortgage-backed securities	5,468,038	5,485,760	52,418	(34,696)	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,788,543	2,782,070	7,804	(14,277)	—
Other debt securities	4,400	4,152	—	(248)	—
Perpetual preferred stock	12,562	16,568	4,006	—	—
Equity securities and mutual funds	17,572	18,728	1,219	(63)	—
Total available for sale securities	$8,325,000	$8,341,041	$65,740	$(49,699)	$ —

[1] Gross unrealized gain/loss recognized in AOCI in the consolidated balance sheet.

[2] Amounts represent unrealized loss that remains in AOCI after an other-than-temporary credit loss has been recognized in income.

	December 31, 2016				
	Amortized	Fair	Gross Unrealized[1]		
	Cost	Value	Gain	Loss	OTTI[2]
U.S. Treasury	$1,000	$999	$—	$(1)	$—
Municipal and other tax-exempt	41,050	40,993	343	(400)	—
Residential mortgage-backed securities:					
U. S. government agencies:					
FNMA	3,062,525	3,055,676	25,066	(31,915)	—
FHLMC	1,534,451	1,531,116	8,475	(11,810)	—
GNMA	878,375	873,594	2,259	(7,040)	—
Total U.S. government agencies	5,475,351	5,460,386	35,800	(50,765)	—
Private issue:					
Alt-A loans	44,245	51,512	7,485	—	(218)
Jumbo-A loans	56,947	64,023	7,092	(16)	—
Total private issue	101,192	115,535	14,577	(16)	(218)
Total residential mortgage-backed securities	5,576,543	5,575,921	50,377	(50,781)	(218)
Commercial mortgage-backed securities guaranteed by U.S. government agencies	3,035,750	3,017,933	5,472	(23,289)	—
Other debt securities	4,400	4,152	—	(248)	—
Perpetual preferred stock	15,561	18,474	2,913	—	—
Equity securities and mutual funds	17,424	18,357	1,060	(127)	—
Total available for sale securities	$8,691,728	$8,676,829	$60,165	$(74,846)	$(218)

[1] Gross unrealized gain/loss recognized in AOCI in the consolidated balance sheet.

[2] Amounts represent unrealized loss that remains in AOCI after an other-than-temporary credit loss has been recognized in income.

	June 30, 2016				
	Amortized	Fair	Gross Unrealized[1]		
	Cost	Value	Gain	Loss	OTTI[2]
U.S. Treasury	$1,000	$1,004	$4	$—	$—
Municipal and other tax-exempt	50,170	50,262	805	(713)	—
Residential mortgage-backed securities:					
U. S. government agencies:					
FNMA	2,908,698	2,988,974	80,549	(273)	—
FHLMC	1,746,661	1,785,332	38,869	(198)	—
GNMA	921,928	925,962	4,646	(612)	—
Total U.S. government agencies	5,577,287	5,700,268	124,064	(1,083)	—
Private issue:					
Alt-A loans	49,522	54,536	5,461	—	(447)
Jumbo-A loans	65,787	71,777	6,355	(36)	(329)
Total private issue	115,309	126,313	11,816	(36)	(776)
Total residential mortgage-backed securities	5,692,596	5,826,581	135,880	(1,119)	(776)
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,854,306	2,911,946	57,762	(122)	—
Other debt securities	4,400	4,151	—	(249)	—
Perpetual preferred stock	15,562	17,931	2,369	—	—
Equity securities and mutual funds	17,270	18,814	1,558	(14)	—
Total available for sale securities	$8,635,304	$8,830,689	$198,378	$(2,217)	$(776)

[1] Gross unrealized gain/loss recognized in AOCI in the consolidated balance sheet.

[2] Amounts represent unrealized loss that remains in AOCI after an other-than-temporary credit loss has been recognized in income.

The amortized cost and fair values of available for sale securities at June 30, 2017, by contractual maturity, are as shown in the following table (dollars in thousands):

	Less than One Year	One to Five Years	Six to Ten Years	Over Ten Years	Total	Weighted Average Maturity[5]
U.S. Treasuries:						
Amortized cost	$1,000	$—	$—	$—	$1,000	0.55
Fair value	998	—	—	—	998	
Nominal yield	0.87 %	— %	— %	— %	0.87 %	
Municipal and other tax-exempt:						
Amortized cost	$8,981	$6,380	$1,028	$16,496	$32,885	8.87
Fair value	9,021	6,497	1,081	16,166	32,765	
Nominal yield[1]	4.24 %	3.91 %	6.72 %	2.28 %[6]	3.27 %	
Commercial mortgage-backed securities:						
Amortized cost	$58,263	$880,459	$1,571,735	$278,086	$2,788,543	6.98
Fair value	58,147	879,286	1,568,732	275,905	2,782,070	
Nominal yield	1.20 %	1.83 %	1.84 %	1.88 %	1.82 %	
Other debt securities:						
Amortized cost	$—	$—	$—	$4,400	$4,400	30.16
Fair value	—	—	—	4,152	4,152	
Nominal yield	— %	— %	— %	1.71 %[6]	1.71 %	
Total fixed maturity securities:						
Amortized cost	$68,244	$886,839	$1,572,763	$298,982	$2,826,828	7.03
Fair value	68,166	885,783	1,569,813	296,223	2,819,985	
Nominal yield	1.60 %	1.85 %	1.85 %	1.90 %	1.83 %	
Residential mortgage-backed securities:						
Amortized cost					$5,468,038	[2]
Fair value					5,485,760	
Nominal yield[4]					1.94 %	
Equity securities and mutual funds:						
Amortized cost					$30,134	[3]
Fair value					35,296	
Nominal yield					— %	
Total available-for-sale securities:						
Amortized cost					$8,325,000	
Fair value					8,341,041	
Nominal yield					1.90 %	

1 Calculated on a taxable equivalent basis using a 39 percent effective tax rate.

2 The average expected lives of mortgage-backed securities were 3.9 years years based upon current prepayment assumptions.

3 Primarily common stock and preferred stock of corporate issuers with no stated maturity.

4 The nominal yield on mortgage-backed securities is based upon prepayment assumptions at the purchase date. Actual yields earned may differ significantly based upon actual prepayments. See Quarterly Financial Summary — Unaudited following for current yields on available for sale securities portfolio.

5 Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without penalty.

6 Nominal yield on municipal and other tax-exempt securities and other debt securities with contractual maturity dates over ten years are based on variable rates which generally are reset within 35 days.

Sales of available for sale securities resulted in gains and losses as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Proceeds	$460,402	$325,758	$700,412	$795,140
Gross realized gains	2,763	5,326	4,855	9,290
Gross realized losses	(2,383)	—	(2,426)	—
Related federal and state income tax expense	148	2,072	945	3,614

A summary of investment and available for sale securities that have been pledged as collateral for repurchase agreements, public trust funds on deposit and for other purposes, as required by law was as follows (in thousands):

	June 30, 2017	Dec. 31, 2016	June 30, 2016
Investment:			
Amortized cost	$251,684	$322,208	$287,166
Fair value	255,097	323,808	293,625
Available for sale:			
Amortized cost	6,327,666	7,353,116	7,502,361
Fair value	6,317,623	7,327,470	7,657,916

The secured parties do not have the right to sell or repledge these securities.

Temporarily Impaired Securities as of June 30, 2017
(in thousands):

	Number of Securities	Less Than 12 Months		12 Months or Longer		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Investment:							
Municipal and other tax-exempt	82	$111,078	$ 149	$3,000	$ 79	$114,078	$ 228
U.S. government agency residential mortgage-backed securities – Other	1	3,810	61	—	—	3,810	61
Other debt securities	22	8,384	554	—	—	8,384	554
Total investment securities	105	$123,272	$ 764	$3,000	$ 79	$126,272	$ 843

	Number of Securities	Less Than 12 Months		12 Months or Longer		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Available for sale:							
U.S. Treasury	1	$997	$ 2	$—	$ —	$997	$ 2
Municipal and other tax-exempt	13	$1,957	$ 1	$4,655	$ 412	$6,612	$ 413
Residential mortgage-backed securities:							
U. S. government agencies:							
FNMA	75	1,381,687	20,288	87,371	1,314	1,469,058	21,602
FHLMC	42	731,853	7,213	16,388	476	748,241	7,689
GNMA	21	291,806	3,766	76,605	1,596	368,411	5,362
Other	1	19,957	43	—	—	19,957	43
Total U.S. government agencies	139	2,425,303	31,310	180,364	3,386	2,605,667	34,696
Private issue:							
Alt-A loans	—	—	—	—	—	—	—
Jumbo-A loans	—	—	—	—	—	—	—
Total private issue	—	—	—	—	—	—	—
Total residential mortgage-backed securities	139	2,425,303	31,310	180,364	3,386	2,605,667	34,696
Commercial mortgage-backed securities guaranteed by U.S. government agencies	121	1,388,406	12,690	78,828	1,587	1,467,234	14,277
Other debt securities	2	—	—	4,152	248	4,152	248
Perpetual preferred stocks	—	—	—	—	—	—	—
Equity securities and mutual funds	91	1,668	22	887	41	2,555	63
Total available for sale securities	367	$3,818,331	$ 44,025	$268,886	$ 5,674	$4,087,217	$ 49,699

Temporarily Impaired Securities as of December 31, 2016
(In thousands)

	Number of Securities	Less Than 12 Months		12 Months or Longer		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Investment:							
Municipal and other tax-exempt	151	$219,892	$ 1,316	$4,333	$ 95	$224,225	$ 1,411
U.S. government agency residential mortgage-backed securities – Other	1	4,358	71	—	—	4,358	71
Other debt securities	41	11,820	322	855	2	12,675	324
Total investment securities	193	$236,070	$ 1,709	$5,188	$ 97	$241,258	$ 1,806

	Number of Securities	Less Than 12 Months		12 Months or Longer		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Available for sale:							
U.S. Treasury	1	$999	$ 1	$—	$ —	$999	$ 1
Municipal and other tax-exempt	24	$15,666	$ 22	$4,689	$ 378	$20,355	$ 400
Residential mortgage-backed securities:							
U. S. government agencies:							
FNMA	91	1,787,644	30,238	72,105	1,677	1,859,749	31,915
FHLMC	58	964,017	11,210	18,307	600	982,324	11,810
GNMA	31	548,637	6,145	25,796	895	574,433	7,040
Total U.S. government agencies	180	3,300,298	47,593	116,208	3,172	3,416,506	50,765
Private issue[1]:							
Alt-A loans	5	7,931	174	7,410	44	15,341	218
Jumbo-A loans	1	—	—	6,098	16	6,098	16
Total private issue	6	7,931	174	13,508	60	21,439	234
Total residential mortgage-backed securities	186	3,308,229	47,767	129,716	3,232	3,437,945	50,999
Commercial mortgage-backed securities guaranteed by U.S. government agencies	171	1,904,584	22,987	38,875	302	1,943,459	23,289
Other debt securities	2	—	—	4,152	248	4,152	248
Perpetual preferred stocks	—	—	—	—	—	—	—
Equity securities and mutual funds	104	2,127	41	817	86	2,944	127
Total available for sale securities	488	$5,231,605	$ 70,818	$178,249	$ 4,246	$5,409,854	$ 75,064

[1] Includes securities for which an unrealized loss remains in AOCI after an other-than-temporary credit loss has been recognized in income.

Temporarily Impaired Securities as of June 30, 2016
(In thousands)

	Number of Securities	Less Than 12 Months		12 Months or Longer		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Investment:							
Municipal and other tax-exempt	19	$11,915	$ 20	$4,378	$ 65	$16,293	$ 85
U.S. government agency residential mortgage-backed securities – Other	—	—	—	—	—	—	—
Other debt securities	1	—	—	858	4	858	4
Total investment securities	20	$11,915	$ 20	$5,236	$ 69	$17,151	$ 89

	Number of Securities	Less Than 12 Months		12 Months or Longer		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Available for sale:							
U.S. Treasury	—	$—	$ —	$—	$ —	$—	$ —
Municipal and other tax-exempt[1]	17	$375	$ —	$10,289	$ 713	$10,664	$ 713
Residential mortgage-backed securities:							
U. S. government agencies:							
FNMA	4	97,910	267	15,401	6	113,311	273
FHLMC	1	—	—	22,338	198	22,338	198
GNMA	11	349,631	612	—	—	349,631	612
Total U.S. government agencies	16	447,541	879	37,739	204	485,280	1,083
Private issue[1]:							
Alt-A loans	5	8,513	241	8,291	206	16,804	447
Jumbo-A loans	9	7,076	36	7,877	329	14,953	365
Total private issue	14	15,589	277	16,168	535	31,757	812
Total residential mortgage-backed securities	30	463,130	1,156	53,907	739	517,037	1,895
Commercial mortgage-backed securities guaranteed by U.S. government agencies	11	103,955	37	65,857	85	169,812	122
Other debt securities	2	—	—	4,151	249	4,151	249
Perpetual preferred stocks	—	—	—	—	—	—	—
Equity securities and mutual funds	30	—	—	889	14	889	14
Total available for sale securities	90	$567,460	$ 1,193	$135,093	$ 1,800	$702,553	$ 2,993

1 Includes securities for which an unrealized loss remains in AOCI after an other-than-temporary credit loss has been recognized in income.

For debt securities, management determines whether it intends to sell or if it is more-likely-than-not that it will be required to sell impaired securities. This determination considers current and forecasted liquidity requirements, regulatory and capital requirements and securities portfolio management. Based on this evaluation as of June 30, 2017, the Company does not intend to sell any impaired available for sale securities before fair value recovers to the current amortized cost and it is more-likely-than-not that the Company will not be required to sell impaired securities before fair value recovers, which may be maturity.

Fair Value Option Securities

Fair value option securities represent securities which the Company has elected to carry at fair value and are separately identified on the Consolidated Balance Sheets. Changes in the fair value are recognized in earnings as they occur. Certain U.S. Treasury securities, residential mortgage-backed securities issued by U.S. government agencies and derivative contracts are held as an economic hedge of the mortgage servicing rights.

The fair value and net unrealized gain (loss) included in fair value option securities is as follows (in thousands):

	June 30, 2017		Dec. 31, 2016		June 30, 2016	
	Fair Value	Net Unrealized Gain (Loss)	Fair Value	Net Unrealized Gain (Loss)	Fair Value	Net Unrealized Gain (Loss)
U.S. Treasury	$—	$ —	$—	$ —	$25,306	$ (43)
U.S. government agency residential mortgage-backed securities	445,169	1,247	77,046	(1,777)	237,959	4,476
Total	$445,169	$ 1,247	$77,046	$ (1,777)	$263,265	$ 4,433

Restricted Equity Securities

Restricted equity securities primarily include stock we are required to hold as members of the Federal Reserve system and the Federal Home Loan Banks. 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. A summary of restricted equity securities follows (in thousands):

	June 30, 2017	Dec. 31, 2016	June 30, 2016
Federal Reserve stock	$36,676	$36,498	$36,283
Federal Home Loan Bank stock	274,113	270,541	283,155
Other	244	201	201
Total	$311,033	$307,240	$319,639

(3) Derivatives

Derivative instruments may be used by the Company as part of its internal risk management programs or may be offered to customers. All derivative instruments are carried at fair value and changes in fair value are reported in earnings as they occur. Credit risk is also considered in determining fair value.

When bilateral netting agreements or similar arrangements exist between the Company and its counterparties that create a single legal claim or obligation to pay or receive the net amount in settlement of the individual derivative contracts, the Company reports derivative assets and liabilities on a net by derivative contract type by counterparty basis.

Derivative contracts may require the Company to provide or receive cash margin as collateral for derivative assets and liabilities. Derivative assets and liabilities are reported net of cash margin when certain conditions are met. In addition, derivative contracts executed with customers under Customer Risk Management Programs may be secured by non-cash collateral in conjunction with a credit agreement with that customer. Access to collateral in the event of default is reasonably assured.

None of these derivative contracts have been designated as hedging instruments for accounting purposes.

Customer Risk Management Programs

BOK Financial offers programs to permit its customers to manage various risks, including fluctuations in energy, cattle and other agricultural products, interest rates and foreign exchange rates with derivative contracts. Customers may also manage interest rate risk through interest rate swaps used by borrowers to modify interest rate terms of their loans or to-be-announced securities used by mortgage banking customers to hedge their loan production. Derivative contracts are executed between the customers and BOK Financial. Offsetting contracts are executed between BOK Financial and other selected counterparties to minimize the risk of changes in commodity prices, interest rates or foreign exchange rates. The counterparty contracts are identical to customer contracts, except for a fixed pricing spread or fee paid to BOK Financial as profit and compensation for administrative costs and credit risk which is recognized over the life of the contracts and included in other operating revenue – brokerage and trading revenue in the Consolidated Statements of Earnings.

Internal Risk Management Programs

BOK Financial may use derivative contracts in managing its interest rate sensitivity, as part of its economic hedge of the change in the fair value of mortgage servicing rights and as an economic hedge of trading securities. As of June 30, 2017, derivative contracts under the internal risk management programs were primarily used as part of the economic hedges of the change in the fair value of the mortgage servicing rights and trading securities.

As discussed in Note 6, certain derivative contracts not designated as hedging instruments related to mortgage loan commitments and forward sales contracts are included in Residential mortgage loans held for sale on the Consolidated Balance Sheets. See Note 6 for additional discussion of notional, fair value and impact on earnings of these contracts.

The following table summarizes the fair values of derivative contracts recorded as "derivative contracts" assets and liabilities in the balance sheet at June 30, 2017 (in thousands):

	Assets					
	Notional[1]	Gross Fair Value	Netting Adjustments	Net Fair Value Before Cash Collateral	Cash Collateral	Fair Value Net of Cash Collateral
Customer risk management programs:						
Interest rate contracts						
To-be-announced residential mortgage-backed securities	$16,174,687	$57,948	$(29,034)	$28,914	$—	$28,914
Interest rate swaps	1,450,193	29,932	—	29,932	(2,206)	27,726
Energy contracts	891,480	56,824	(20,546)	36,278	(21,267)	15,011
Agricultural contracts	45,250	3,541	(1,027)	2,514	—	2,514
Foreign exchange contracts	169,529	162,429	—	162,429	(7)	162,422
Equity option contracts	100,159	4,437	—	4,437	(920)	3,517
Total customer risk management programs	18,831,298	315,111	(50,607)	264,504	(24,400)	240,104
Internal risk management programs	10,680,498	40,185	—	40,185	—	40,185
Total derivative contracts	$29,511,796	$355,296	$(50,607)	$304,689	$(24,400)	$280,289

	Liabilities					
	Notional[1]	Gross Fair Value	Netting Adjustments	Net Fair Value Before Cash Collateral	Cash Collateral	Fair Value Net of Cash Collateral
Customer risk management programs:						
Interest rate contracts						
To-be-announced residential mortgage-backed securities	$16,174,687	$53,829	$(29,034)	$24,795	$—	$24,795
Interest rate swaps	1,450,193	29,982	—	29,982	(15,396)	14,586
Energy contracts	874,625	53,895	(20,546)	33,349	—	33,349
Agricultural contracts	45,262	3,538	(1,027)	2,511	(2,511)	—
Foreign exchange contracts	169,553	162,276	—	162,276	(3,188)	159,088
Equity option contracts	100,159	4,437	—	4,437	—	4,437
Total customer risk management programs	18,814,479	307,957	(50,607)	257,350	(21,095)	236,255
Internal risk management programs	8,310,950	49,564	—	49,564	—	49,564
Total derivative contracts	$27,125,429	$357,521	$(50,607)	$306,914	$(21,095)	$285,819

1 Notional amounts for commodity contracts are converted into dollar-equivalent amounts based on dollar prices at the inception of the contract.

The following table summarizes the fair values of derivative contracts recorded as “derivative contracts” assets and liabilities in the balance sheet at December 31, 2016 (in thousands):

	Assets					
	Notional [1]	Gross Fair Value	Netting Adjustments	Net Fair Value Before Cash Collateral	Cash Collateral	Fair Value Net of Cash Collateral
Customer risk management programs:						
Interest rate contracts						
To-be-announced residential mortgage-backed securities	$16,949,152	$180,695	$(60,555)	$120,140	$—	$120,140
Interest rate swaps	1,403,408	34,442	—	34,442	(4,567)	29,875
Energy contracts	835,566	64,140	(28,298)	35,842	(71)	35,771
Agricultural contracts	53,209	1,382	(515)	867	—	867
Foreign exchange contracts	580,886	494,349	—	494,349	(5,183)	489,166
Equity option contracts	100,924	4,357	—	4,357	(730)	3,627
Total customer risk management programs	19,923,145	779,365	(89,368)	689,997	(10,551)	679,446
Internal risk management programs	2,514,169	10,426	—	10,426	—	10,426
Total derivative contracts	$22,437,314	$789,791	$(89,368)	$700,423	$(10,551)	$689,872

	Liabilities					
	Notional [1]	Gross Fair Value	Netting Adjustments	Net Fair Value Before Cash Collateral	Cash Collateral	Fair Value Net of Cash Collateral
Customer risk management programs:						
Interest rate contracts						
To-be-announced residential mortgage-backed securities	$16,637,532	$176,928	$(60,555)	$116,373	$—	$116,373
Interest rate swaps	1,403,408	34,442	—	34,442	(11,977)	22,465
Energy contracts	820,365	64,306	(28,298)	36,008	(31,534)	4,474
Agricultural contracts	53,216	1,365	(515)	850	(769)	81
Foreign exchange contracts	580,712	494,695	—	494,695	(3,630)	491,065
Equity option contracts	100,924	4,357	—	4,357	—	4,357
Total customer risk management programs	19,596,157	776,093	(89,368)	686,725	(47,910)	638,815
Internal risk management programs	2,582,202	25,716	—	25,716	—	25,716
Total derivative contracts	$22,178,359	$801,809	$(89,368)	$712,441	$(47,910)	$664,531

[1] Notional amounts for commodity contracts are converted into dollar-equivalent amounts based on dollar prices at the inception of the contract.

The following table summarizes the fair values of derivative contracts recorded as "derivative contracts" assets and liabilities in the balance sheet at June 30, 2016 (in thousands):

	Assets					
	Notional[1]	Gross Fair Value	Netting Adjustments	Net Fair Value Before Cash Collateral	Cash Collateral	Fair Value Net of Cash Collateral
Customer risk management programs:						
Interest rate contracts						
To-be-announced residential mortgage-backed securities	$18,774,134	$183,118	$(67,383)	$115,735	$—	$115,735
Interest rate swaps	1,299,985	54,978	—	54,978	(1,100)	53,878
Energy contracts	757,669	59,103	(33,996)	25,107	(155)	24,952
Agricultural contracts	50,848	2,488	(1,609)	879	(37)	842
Foreign exchange contracts	701,436	675,804	—	675,804	(5,054)	670,750
Equity option contracts	116,901	4,236	—	4,236	(478)	3,758
Total customer risk management programs	21,700,973	979,727	(102,988)	876,739	(6,824)	869,915
Internal risk management programs	1,337,000	13,758	—	13,758	—	13,758
Total derivative contracts	$23,037,973	$993,485	$(102,988)	$890,497	$(6,824)	$883,673

	Liabilities					
	Notional[1]	Gross Fair Value	Netting Adjustments	Net Fair Value Before Cash Collateral	Cash Collateral	Fair Value Net of Cash Collateral
Customer risk management programs:						
Interest rate contracts						
To-be-announced residential mortgage-backed securities	$18,662,334	$179,443	$(67,383)	$112,060	$(103,724)	$8,336
Interest rate swaps	1,299,985	55,404	—	55,404	(32,597)	22,807
Energy contracts	734,538	58,033	(33,996)	24,037	(11,784)	12,253
Agricultural contracts	50,843	2,476	(1,609)	867	—	867
Foreign exchange contracts	701,219	675,383	—	675,383	(4,723)	670,660
Equity option contracts	116,901	4,236	—	4,236	—	4,236
Total customer risk management programs	21,565,820	974,975	(102,988)	871,987	(152,828)	719,159
Internal risk management programs	—	—	—	—	—	—
Total derivative contracts	$21,565,820	$974,975	$(102,988)	$871,987	$(152,828)	$719,159

[1] Notional amounts for commodity contracts are converted into dollar-equivalent amounts based on dollar prices at the inception of the contract.

The following summarizes the pre-tax net gains (losses) on derivative instruments and where they are recorded in the income statement (in thousands):

	Three Months Ended			
	June 30, 2017		June 30, 2016	
	Brokerage and Trading Revenue	Gain (Loss) on Derivatives, Net	Brokerage and Trading Revenue	Gain (Loss) on Derivatives, Net
Customer risk management programs:				
Interest rate contracts				
To-be-announced residential mortgage-backed securities	$9,205	$ —	$9,862	$ —
Interest rate swaps	665	—	723	—
Energy contracts	1,666	—	2,749	—
Agricultural contracts	11	—	32	—
Foreign exchange contracts	90	—	134	—
Equity option contracts	—	—	—	—
Total customer risk management programs	11,637	—	13,500	—
Internal risk management programs	6,485	3,241	(9)	10,766
Total derivative contracts	$18,122	$ 3,241	$13,491	$ 10,766

	Six Months Ended			
	June 30, 2017		June 30, 2016	
	Brokerage and Trading Revenue	Gain (Loss) on Derivatives, Net	Brokerage and Trading Revenue	Gain (Loss) on Derivatives, Net
Customer risk management programs:				
Interest rate contracts				
To-be-announced residential mortgage-backed securities	$17,232	$ —	$17,302	$ —
Interest rate swaps	1,124	—	1,048	—
Energy contracts	4,539	—	3,445	—
Agricultural contracts	20	—	61	—
Foreign exchange contracts	360	—	512	—
Equity option contracts	—	—	—	—
Total customer risk management programs	23,275	—	22,368	—
Internal risk management programs	6,018	2,791	(9)	17,904
Total derivative contracts	$29,293	$ 2,791	$22,359	$ 17,904

(4) Loans and Allowances for Credit Losses

Loans

Loans are either secured or unsecured based on the type of loan and the financial condition of the borrower. Repayment is generally expected from cash flow or proceeds from the sale of selected assets of the borrower. BOK Financial is exposed to risk of loss on loans due to the borrower’s difficulties, which may arise from any number of factors, including problems within the respective industry or local economic conditions. Access to collateral, in the event of borrower default, is reasonably assured through adherence to applicable lending laws and through sound lending standards and credit review procedures. Accounting policies for all loans, excluding residential mortgage loans guaranteed by U.S. government agencies, are as follows.

Interest is accrued at the applicable interest rate on the principal amount outstanding. Loans are placed on nonaccruing status when, in the opinion of management, full collection of principal or interest is uncertain. Internally risk graded loans are individually evaluated for nonaccruing status quarterly. Non-risk graded loans are generally placed on nonaccruing status when more than 90 days past due or within 60 days of being notified of the borrower's bankruptcy filing. Interest previously accrued but not collected is charged against interest income when the loan is placed on nonaccruing status. Payments on nonaccruing loans are applied to principal or recognized as interest income, according to management’s judgment as to the collectability of principal. Loans may be returned to accruing status when, in the opinion of management, full collection of principal and interest, including principal previously charged off, is probable based on improvements in the borrower’s financial condition or a sustained period of performance.

Loans to borrowers experiencing financial difficulties may be modified in troubled debt restructurings ("TDRs"). All TDRs are classified as nonaccruing, excluding loans guaranteed by U.S. government agencies. Modifications generally consist of extension of payment terms or interest rate concessions and may result either voluntarily through negotiations with the borrower or involuntarily through court order. Generally, principal and accrued but unpaid interest is not voluntarily forgiven.

Performing loans may be renewed under the current collateral value, debt service ratio and other underwriting standards. Nonaccruing loans may be renewed and will remain classified as nonaccruing.

All loans are charged off when the loan balance or a portion of the loan balance is no longer supported by the paying capacity of the borrower or when the required cash flow is reduced in a TDR. The charge-off amount is determined through a quarterly evaluation of available cash resources and collateral value and charge-offs are taken in the quarter in which the loss is identified. Non-risk graded loans that are past due between 60 days and 180 days, based on the loan product type, are charged off. Loans to borrowers whose personal obligation has been discharged through Chapter 7 bankruptcy proceedings are charged off within 60 days of notice of the bankruptcy filing, regardless of payment status.

Loan origination and commitment fees and direct loan acquisition and origination costs are deferred and amortized as an adjustment to yield over the life of the loan or over the commitment period, as applicable.

Qualifying residential mortgage loans guaranteed by U.S. government agencies have been sold into GNMA pools. Under certain performance conditions specified in government programs, the Company may have the right, but not the obligation to repurchase loans from GNMA pools. These loans no longer qualify for sale accounting and are recognized in the Consolidated Balance Sheets. Guaranteed loans are considered impaired because we do not expect to receive all principal and interest based on the loan's contractual terms. The principal balance continues to be guaranteed; however, interest accrues at a curtailed rate as specified in the programs. The carrying value of these loans is reduced based on an estimate of the expected cash flows discounted at the original note rate plus a liquidity spread.

Guaranteed loans may be modified in TDRs in accordance with U.S. government agency guidelines. Interest continues to accrue based on the modified rate. Guaranteed loans may either be resold into GNMA pools after a performance period specified by the programs or foreclosed and conveyed to the guarantors.

Loans are disaggregated into portfolio segments and further disaggregated into classes. The portfolio segment is the level at which the Company develops and documents a systematic method for determining its allowance for credit losses. Classes are a further disaggregation of portfolio segments based on the risk characteristics of the loans and the Company's method for monitoring and assessing credit risk.

Portfolio segments of the loan portfolio are as follows (in thousands):

	June 30, 2017				December 31, 2016			
	Fixed Rate	Variable Rate	Non-accrual	Total	Fixed Rate	Variable Rate	Non-accrual	Total
Commercial	$2,198,066	$8,242,732	$197,157	$10,637,955	$2,327,085	$7,884,786	$178,953	$10,390,824
Commercial real estate	594,542	3,090,275	3,775	3,688,592	624,187	3,179,338	5,521	3,809,046
Residential mortgage	1,597,587	297,376	44,235	1,939,198	1,647,357	256,255	46,220	1,949,832
Personal	150,728	766,900	272	917,900	154,971	684,697	290	839,958
Total	$4,540,923	$12,397,283	$245,439	$17,183,645	$4,753,600	$12,005,076	$230,984	$16,989,660
Accruing loans past due (90 days)[1]				$1,414				$5

	June 30, 2016			
	Fixed Rate	Variable Rate	Non-accrual	Total
Commercial	$1,994,415	$8,180,033	$181,989	$10,356,437
Commercial real estate	612,822	2,961,364	7,780	3,581,966
Residential mortgage	1,586,116	237,746	57,061	1,880,923
Personal	109,447	477,622	354	587,423
Total	$4,302,800	$11,856,765	$247,184	$16,406,749
Accruing loans past due (90 days)[1]				$2,899

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

At June 30, 2017, $5.7 billion or 33 percent of our total loan portfolio is to businesses and individuals attributed to the Texas market and $3.4 billion or 20 percent of the total loan portfolio is to businesses and individuals attributed to the Oklahoma market. These geographic concentrations subject the loan portfolio to the general economic conditions within these areas.

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 ongoing 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, interest 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 ongoing cash flow from operations of the customer’s business. Inherent lending risk is centrally monitored on a continuous basis from underwriting throughout the life of the loan for compliance with commercial lending policies.

At June 30, 2017, commercial loans attributed to the Texas market totaled $3.6 billion or 33 percent of the commercial loan portfolio segment and commercial loans attributed to the Oklahoma market totaled $2.1 billion or 19 percent of the commercial loan portfolio segment.

The commercial loan portfolio segment is further divided into loan classes. The energy loan class totaled $2.8 billion or 17 percent of total loans at June 30, 2017, including $2.4 billion of outstanding loans to energy producers. Approximately 58 percent of committed production loans are secured by properties primarily producing oil and 42 percent are secured by properties producing natural gas. The services loan class totaled $3.0 billion or 17 percent of total loans at June 30, 2017. Approximately $1.5 billion of loans in the services category consist of loans with individual balances of less than $10 million. Businesses included in the services class include governmental, finance and insurance, not-for-profit, educational services and loans to entities providing services for real estate and construction. The healthcare loan class totaled $2.2 billion or 13 percent of total loans at June 30, 2017. The healthcare loan class consists primarily of loans for the development and operation of senior housing and care facilities, including independent living, assisted living and skilled nursing. Healthcare also includes loans to hospitals and other medical service providers.

Commercial Real Estate

Commercial real estate loans are for the construction of buildings or other improvements to real estate and property held by borrowers for investment purposes primarily within our geographical footprint. 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.

At June 30, 2017, 32 percent of commercial real estate loans are secured by properties primarily located in the Dallas and Houston areas of Texas. An additional 12 percent of commercial real estate loans are secured by properties located primarily in the Tulsa and Oklahoma City metropolitan areas of Oklahoma.

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 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. Loans may be individually underwritten or credit scored based on size and other criteria. Credit scoring is assessed based on significant credit characteristics including credit history, residential and employment stability. Residential mortgage loans retained in the Company’s portfolio are primarily composed of various mortgage programs to support customer relationships including jumbo mortgage loans, non-builder construction loans and special loan programs for high net worth individuals and certain professionals. Jumbo loans may be fixed or variable rate and are fully amortizing. Jumbo loans generally conform to government sponsored entity standards, except that the loan size exceeds maximums required under these standards. These loans generally require a minimum FICO score of 720 and a maximum debt-to-income ratio (“DTI”) of 38 percent. Loan-to-value (“LTV”) ratios are tiered from 60 percent to 100 percent, depending on the market. Special mortgage programs include fixed and variable 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 June 30, 2017, residential mortgage loans included $192 million of loans guaranteed by U.S. government agencies previously sold into GNMA mortgage pools. These loans either have been repurchased or are eligible to be repurchased by the Company when certain defined delinquency criteria are met. Although payments on these loans generally are past due more than 90 days, interest continues to accrue based on the government guarantee.

Home equity loans totaled $758 million at June 30, 2017. Approximately 65 percent of the home equity loan portfolio is comprised of first lien loans and 35 percent of the home equity portfolio is comprised of junior lien loans. Junior lien loans are distributed 49 percent to amortizing term loans and 51 percent to revolving lines of credit. Home equity loans generally require a minimum FICO score of 700 and a maximum DTI of 40 percent. 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 a 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.

Credit Commitments

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of conditions established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. At June 30, 2017, outstanding commitments totaled $9.6 billion. Because some commitments are expected to expire before being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. BOK Financial uses the same credit policies in making commitments as it does loans.

The amount of collateral obtained, if deemed necessary, is based upon management's credit evaluation of the borrower.

Standby letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. Because the credit risk involved in issuing standby letters of credit is essentially the same as that involved in extending loan commitments, BOK Financial uses the same credit policies in evaluating the creditworthiness of the customer. Additionally, BOK Financial uses the same evaluation process in obtaining collateral on standby letters of credit as it does for loan commitments. The term of these standby letters of credit is defined in each commitment and typically corresponds with the underlying loan commitment. At June 30, 2017, outstanding standby letters of credit totaled $615 million. Commercial letters of credit are used to facilitate customer trade transactions with the drafts being drawn when the underlying transaction is consummated. At June 30, 2017, outstanding commercial letters of credit totaled $3.2 million.

Allowances for Credit Losses

BOK Financial maintains an allowance for loan losses and an accrual for off-balance sheet credit risk. The accrual for off-balance sheet credit risk is maintained at a level that is appropriate to cover estimated losses associated with credit instruments that are not currently recognized as assets such as loan commitments, standby letters of credit or guarantees. As discussed in greater detail in Note 6, the Company also has separate accruals for off-balance sheet credit risk related to residential mortgage loans previously sold with full or partial recourse and for residential mortgage loans sold to government sponsored agencies under standard representations and warranties.

The appropriateness of the allowance for loan losses and accrual for off-balance sheet credit losses (collectively "allowance for credit losses") is assessed by management based on an ongoing quarterly evaluation of the probable estimated losses inherent in the portfolio, including probable losses on both outstanding loans and unused commitments.

The allowance for loan losses consists of specific allowances attributed to impaired loans that have not yet been charged down to amounts we expect to recover, general allowances for unimpaired loans based on estimated loss rates by loan class and nonspecific allowances based on general economic conditions, risk concentration and related factors. There have been no material changes in the approach or techniques utilized in developing the allowance for loan losses and the accrual for off-balance sheet credit losses for the three and six months ended June 30, 2017.

Loans are considered to be impaired when it becomes probable that BOK Financial will be unable to collect all amounts due according to the contractual terms of the loan agreements. 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 based on evaluation of the borrowers' ability to repay. Certain commercial loans and most residential mortgage and consumer loans are small balance, homogeneous pools of loans that are not risk graded. Non-risk graded loans are identified as impaired based on performance status. Generally, non-risk graded loans 90 days or more past due or modified in a TDR or in bankruptcy are considered to be impaired.

Specific allowances for impaired loans are measured by an evaluation of estimated future cash flows discounted at the loans’ 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 are generally not adjusted by the Company. Updated appraisals are obtained at least annually or more frequently if market conditions indicate collateral values have declined. Collateral value of mineral rights is generally determined by our internal staff of engineers based on projected 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 at 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 gross loss rate for each loan class is determined by the greater of the current gross loss rate based on the most recent twelve months or a ten-year gross loss rate. Recoveries are not directly considered in the estimation of 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 actions. For risk graded loans, gross loss rates are adjusted for changes in risk grading. For each loan class, the current weighted average risk grade is compared to the long-term average risk grade. This comparison determines whether credit risk in each loan class is increasing or decreasing. Loss rates are adjusted upward or downward in proportion to changes in average risk grading. General allowances for unimpaired loans also consider inherent risks identified for each loan class. Inherent risks consider loss rates that most appropriately represent the current credit cycle and other factors attributable to specific loan classes which have not yet been represented in the gross loss rates or risk grading. 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 products.

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

An accrual for off-balance sheet credit losses is included in Other liabilities in the Consolidated Balance Sheets. The appropriateness of this accrual is determined in the same manner as the allowance for loan losses.

A provision for credit losses is charged against or credited to earnings in amounts necessary to maintain an appropriate allowance for credit losses. Recoveries of loans previously charged off are added to the allowance when received.

The activity in the allowance for loan losses and the allowance for off-balance sheet credit losses related to loan commitments and standby letters of credit for the three months ended June 30, 2017 is summarized as follows (in thousands):

	Commercial	Commercial Real Estate	Residential Mortgage	Personal	Nonspecific Allowance	Total
Allowance for loan losses:						
Beginning balance	$ 137,616	$ 58,343	$ 18,177	$ 7,247	$ 27,327	$ 248,710
Provision for loan losses	1,546	105	(47)	1,358	47	3,009
Loans charged off	(1,703)	(76)	(40)	(1,053)	—	(2,872)
Recoveries	283	208	169	554	—	1,214
Ending balance	$ 137,742	$ 58,580	$ 18,259	$ 8,106	$ 27,374	$ 250,061
Allowance for off-balance sheet credit losses:						
Beginning balance	$ 9,288	$ 106	$ 40	$ 6	$ —	$ 9,440
Provision for off-balance sheet credit losses	(2,987)	(22)	(2)	2	—	(3,009)
Ending balance	$ 6,301	$ 84	$ 38	$ 8	$ —	$ 6,431
Total provision for credit losses	$ (1,441)	$ 83	$ (49)	$ 1,360	$ 47	$ —

The activity in the allowance for loan losses and the allowance for off-balance sheet credit losses related to loan commitments and standby letters of credit for the six months ended June 30, 2017 is summarized as follows (in thousands):

	Commercial	Commercial Real Estate	Residential Mortgage	Personal	Nonspecific Allowance	Total
Allowance for loan losses:						
Beginning balance	$ 140,213	$ 50,749	$ 18,224	$ 8,773	$ 28,200	$ 246,159
Provision for loan losses	(1,809)	6,964	(86)	570	(826)	4,813
Loans charged off	(2,127)	(76)	(276)	(2,546)	—	(5,025)
Recoveries	1,465	943	397	1,309	—	4,114
Ending balance	$ 137,742	$ 58,580	$ 18,259	$ 8,106	$ 27,374	$ 250,061
Allowance for off-balance sheet credit losses:						
Beginning balance	$ 11,063	$ 123	$ 50	$ 8	$ —	$ 11,244
Provision for off-balance sheet credit losses	(4,762)	(39)	(12)	—	—	(4,813)
Ending balance	$ 6,301	$ 84	$ 38	$ 8	$ —	$ 6,431
Total provision for credit losses	$ (6,571)	$ 6,925	$ (98)	$ 570	$ (826)	$ —

The activity in the allowance for loan losses and the allowance for off-balance sheet credit losses related to loan commitments and standby letters of credit for the three months ended June 30, 2016 is summarized as follows (in thousands):

	Commercial	Commercial Real Estate	Residential Mortgage	Personal	Nonspecific Allowance	Total
Allowance for loan losses:						
Beginning balance	$ 139,793	$ 44,453	$ 18,467	$ 5,022	$ 25,421	$ 233,156
Provision for loan losses	12,478	2,010	368	1,443	1,263	17,562
Loans charged off	(7,355)	—	(345)	(1,145)	—	(8,845)
Recoveries	223	282	200	681	—	1,386
Ending balance	$ 145,139	$ 46,745	$ 18,690	$ 6,001	$ 26,684	$ 243,259
Allowance for off-balance sheet credit losses:						
Beginning balance	$ 6,319	$ 228	$ 58	$ 2	$ —	$ 6,607
Provision for off-balance sheet credit losses	2,433	(25)	4	26	—	2,438
Ending balance	$ 8,752	$ 203	$ 62	$ 28	$ —	$ 9,045
Total provision for credit losses	$ 14,911	$ 1,985	$ 372	$ 1,469	$ 1,263	$ 20,000

The activity in the allowance for loan losses and the allowance for off-balance sheet credit losses related to loan commitments and standby letters of credit for the six months ended June 30, 2016 is summarized as follows (in thousands):

	Commercial	Commercial Real Estate	Residential Mortgage	Personal	Nonspecific Allowance	Total
Allowance for loan losses:						
Beginning balance	$ 130,334	$ 41,391	$ 19,509	$ 4,164	$ 30,126	$ 225,524
Provision for loan losses	43,575	4,987	(363)	2,909	(3,442)	47,666
Loans charged off	(29,481)	—	(819)	(2,536)	—	(32,836)
Recoveries	711	367	363	1,464	—	2,905
Ending balance	$ 145,139	$ 46,745	$ 18,690	$ 6,001	$ 26,684	$ 243,259
Allowance for off-balance sheet credit losses:						
Beginning balance	$ 1,506	$ 153	$ 30	$ 22	$ —	$ 1,711
Provision for off-balance sheet credit losses	7,246	50	32	6	—	7,334
Ending balance	$ 8,752	$ 203	$ 62	$ 28	$ —	$ 9,045
Total provision for credit losses	$ 50,821	$ 5,037	$ (331)	$ 2,915	$ (3,442)	$ 55,000

The allowance for loan losses and recorded investment of the related loans by portfolio segment for each impairment measurement method at June 30, 2017 is as follows (in thousands):

	Collectively Measured for Impairment		Individually Measured for Impairment		Total	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Commercial	$ 10,440,798	$ 128,049	$ 197,157	$ 9,693	$ 10,637,955	$ 137,742
Commercial real estate	3,684,817	58,580	3,775	—	3,688,592	58,580
Residential mortgage	1,894,963	18,259	44,235	—	1,939,198	18,259
Personal	917,628	8,106	272	—	917,900	8,106
Total	16,938,206	212,994	245,439	9,693	17,183,645	222,687
Nonspecific allowance	—	—	—	—	—	27,374
Total	$ 16,938,206	$ 212,994	$ 245,439	$ 9,693	$ 17,183,645	$ 250,061

The allowance for loan losses and recorded investment of the related loans by portfolio segment for each impairment measurement method at December 31, 2016 is as follows (in thousands):

	Collectively Measured for Impairment		Individually Measured for Impairment		Total	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Commercial	$ 10,211,871	$ 139,416	$ 178,953	$ 797	$ 10,390,824	$ 140,213
Commercial real estate	3,803,525	50,749	5,521	—	3,809,046	50,749
Residential mortgage	1,903,612	18,178	46,220	46	1,949,832	18,224
Personal	839,668	8,773	290	—	839,958	8,773
Total	16,758,676	217,116	230,984	843	16,989,660	217,959

Nonspecific allowance	—	—	—	—	—	28,200
Total	$16,758,676	$217,116	$230,984	$ 843	$16,989,660	$246,159

The allowance for loan losses and recorded investment of the related loans by portfolio segment for each impairment measurement method at June 30, 2016 is as follows (in thousands):

	Collectively Measured for Impairment		Individually Measured for Impairment		Total	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Commercial	$10,174,448	$ 140,911	$181,989	$ 4,228	$10,356,437	$ 145,139
Commercial real estate	3,574,186	46,727	7,780	18	3,581,966	46,745
Residential mortgage	1,823,862	18,626	57,061	64	1,880,923	18,690
Personal	587,069	6,001	354	—	587,423	6,001
Total	16,159,565	212,265	247,184	4,310	16,406,749	216,575
Nonspecific allowance	—	—	—	—	—	26,684
Total	$16,159,565	$ 212,265	$247,184	$ 4,310	$16,406,749	$ 243,259

Credit Quality Indicators

The Company utilizes loan class and risk grading as primary credit quality indicators. Substantially all commercial and commercial real estate loans and certain residential mortgage and consumer loans are risk graded based on a quarterly evaluation of the borrowers' ability to repay the loans. Certain commercial loans and most residential mortgage and consumer loans are small, homogeneous pools that are not risk graded.

The allowance for loan losses and recorded investment of the related loans by portfolio segment for risk graded and non-risk graded loans at June 30, 2017 is as follows (in thousands):

	Internally Risk Graded		Non-Graded		Total	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Commercial	$10,612,477	$ 136,819	$25,478	$ 923	$10,637,955	$ 137,742
Commercial real estate	3,688,592	58,580	—	—	3,688,592	58,580
Residential mortgage	216,007	2,976	1,723,191	15,283	1,939,198	18,259
Personal	824,318	5,742	93,582	2,364	917,900	8,106
Total	15,341,394	204,117	1,842,251	18,570	17,183,645	222,687
Nonspecific allowance	—	—	—	—	—	27,374
Total	$15,341,394	$ 204,117	$1,842,251	$ 18,570	$17,183,645	$ 250,061

The allowance for loan losses and recorded investment of the related loans by portfolio segment for risk graded and non-risk graded loans at December 31, 2016 is as follows (in thousands):

	Internally Risk Graded		Non-Graded		Total	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Commercial	$10,360,725	$ 139,293	$30,099	$ 920	$10,390,824	$ 140,213
Commercial real estate	3,809,046	50,749	—	—	3,809,046	50,749
Residential mortgage	243,703	2,893	1,706,129	15,331	1,949,832	18,224
Personal	744,602	5,035	95,356	3,738	839,958	8,773
Total	15,158,076	197,970	1,831,584	19,989	16,989,660	217,959
Nonspecific allowance	—	—	—	—	—	28,200
Total	$15,158,076	$ 197,970	$1,831,584	$ 19,989	$16,989,660	$ 246,159

The allowance for loan losses and recorded investment of the related loans by portfolio segment for risk graded and non-risk graded loans at June 30, 2016 is as follows (in thousands):

	Internally Risk Graded		Non-Graded		Total	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Commercial	$10,331,701	$ 144,217	$24,736	$ 922	$10,356,437	$ 145,139
Commercial real estate	3,581,966	46,745	—	—	3,581,966	46,745
Residential mortgage	202,520	2,995	1,678,403	15,695	1,880,923	18,690
Personal	500,240	3,624	87,183	2,377	587,423	6,001
Total	14,616,427	197,581	1,790,322	18,994	16,406,749	216,575
Nonspecific allowance	—	—	—	—	—	26,684
Total	$14,616,427	$ 197,581	$1,790,322	$ 18,994	$16,406,749	$ 243,259

Loans are considered to be performing if they are in compliance with the original terms of the agreement and currently exhibit no factors that cause management to have doubts about the borrowers' ability to remain in compliance with the original terms of the agreement, which is consistent with the regulatory guideline of “pass.” Performing loans also include past due residential mortgages that are guaranteed by agencies of the U.S. government that continue to accrue interest based on criteria of the guarantors' programs. Other loans especially mentioned are currently performing in compliance with the original terms of the agreement but may have a potential weakness that deserves management’s close attention, consistent with regulatory guidelines.

The risk grading process identified certain loans that have a well-defined weakness (e.g. inadequate debt service coverage or liquidity or marginal capitalization; repayment may depend on collateral or other risk mitigation) that may jeopardize liquidation of the debt and represent a greater risk due to deterioration in the financial condition of the borrower. This is consistent with the regulatory guideline for “substandard.” Because the borrowers are still performing in accordance with the original terms of the loan agreements, these loans were not placed in nonaccruing status.

Nonaccruing loans represent loans for which full collection of principal and interest is uncertain. This is substantially the same criteria used to determine whether a loan is impaired and includes certain loans considered “substandard” and all loans considered “doubtful” by regulatory guidelines.

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The following table summarizes the Company's loan portfolio at June 30, 2017 by the risk grade categories (in thousands):

	Internally Risk Graded Performing				Non-Graded		
	Pass	Other Loans Especially Mentioned	Accruing Substandard	Nonaccrual	Performing	Nonaccrual	Total
Commercial:							
Energy	$2,376,368	$120,473	$226,407	$123,992	$—	$—	$2,847,240
Services	2,921,510	12,452	17,111	7,754	—	—	2,958,827
Wholesale/retail	1,507,063	16,224	9,788	10,620	—	—	1,543,695
Manufacturing	513,442	6,540	16,499	9,656	—	—	546,137
Healthcare	2,130,339	33,554	33,120	24,505	—	—	2,221,518
Other commercial and industrial	453,712	2,961	17,861	20,526	25,374	104	520,538
Total commercial	9,902,434	192,204	320,786	197,053	25,374	104	10,637,955
Commercial real estate:							
Residential construction and land development	138,790	—	751	2,051	—	—	141,592
Retail	720,730	1,774	—	301	—	—	722,805
Office	859,722	2,855	—	396	—	—	862,973
Multifamily	947,950	—	4,420	10	—	—	952,380
Industrial	693,635	—	—	—	—	—	693,635
Other commercial real estate	314,187	—	3	1,017	—	—	315,207
Total commercial real estate	3,675,014	4,629	5,174	3,775	—	—	3,688,592
Residential mortgage:							
Permanent mortgage	212,563	1,693	478	1,273	750,891	22,142	989,040
Permanent mortgages guaranteed by U.S. government agencies	—	—	—	—	182,677	9,052	191,729
Home equity	—	—	—	—	746,661	11,768	758,429
Total residential mortgage	212,563	1,693	478	1,273	1,680,229	42,962	1,939,198
Personal	823,304	49	877	88	93,398	184	917,900
Total	$14,613,315	$198,575	$327,315	$202,189	$1,799,001	$43,250	$17,183,645

The following table summarizes the Company's loan portfolio at December 31, 2016 by the risk grade categories (in thousands):

	Internally Risk Graded Performing				Non-Graded		
	Pass	Other Loans Especially Mentioned	Accruing Substandard	Nonaccrual	Performing	Nonaccrual	Total
Commercial:							
Energy	$1,937,790	$119,583	$307,996	$132,499	$—	$—	$2,497,868
Services	3,052,002	10,960	37,855	8,173	—	—	3,108,990
Wholesale/retail	1,535,463	16,886	13,062	11,407	—	—	1,576,818
Manufacturing	468,314	26,532	15,198	4,931	—	—	514,975
Healthcare	2,140,458	44,472	16,161	825	—	—	2,201,916
Other commercial and industrial	433,789	5,309	—	21,060	30,041	58	490,257
Total commercial	9,567,816	223,742	390,272	178,895	30,041	58	10,390,824
Commercial real estate:							
Residential construction and land development	131,630	—	470	3,433	—	—	135,533
Retail	756,418	4,745	399	326	—	—	761,888
Office	798,462	—	—	426	—	—	798,888
Multifamily	898,800	—	4,434	38	—	—	903,272
Industrial	871,673	—	—	76	—	—	871,749
Other commercial real estate	336,488	—	6	1,222	—	—	337,716
Total commercial real estate	3,793,471	4,745	5,309	5,521	—	—	3,809,046
Residential mortgage:							
Permanent mortgage	238,769	1,186	2,331	1,417	741,679	21,438	1,006,820
Permanent mortgages guaranteed by U.S. government agencies	—	—	—	—	187,541	11,846	199,387
Home equity	—	—	—	—	732,106	11,519	743,625
Total residential mortgage	238,769	1,186	2,331	1,417	1,661,326	44,803	1,949,832
Personal	743,451	—	1,054	97	95,163	193	839,958
Total	$14,343,507	$229,673	$398,966	$185,930	$1,786,530	$45,054	$16,989,660

The following table summarizes the Company's loan portfolio at June 30, 2016 by the risk grade categories (in thousands):

	Internally Risk Graded Performing				Non-Graded		
	Pass	Other Loans Especially Mentioned	Accruing Substandard	Nonaccrual	Performing	Nonaccrual	Total
Commercial:							
Energy	$2,031,955	$ 197,531	$ 421,025	$ 168,145	$—	$ —	$2,818,656
Services	2,805,307	6,253	9,916	9,388	—	—	2,830,864
Wholesale/retail	1,478,966	24,595	26,624	2,772	—	—	1,532,957
Manufacturing	556,741	18,757	19,612	293	—	—	595,403
Healthcare	2,011,934	29,420	8,917	875	—	—	2,051,146
Other commercial and industrial	478,169	24,053	—	453	24,673	63	527,411
Total commercial	9,363,072	300,609	486,094	181,926	24,673	63	10,356,437
Commercial real estate:							
Residential construction and land development	152,343	—	972	4,261	—	—	157,576
Retail	787,779	5,962	413	1,265	—	—	795,419
Office	767,296	906	304	606	—	—	769,112
Multifamily	781,058	—	6,077	65	—	—	787,200
Industrial	645,510	—	—	76	—	—	645,586
Other commercial real estate	425,558	—	8	1,507	—	—	427,073
Total commercial real estate	3,559,544	6,868	7,774	7,780	—	—	3,581,966
Residential mortgage:							
Permanent mortgage	194,962	1,197	3,406	2,955	742,214	24,273	969,007
Permanent mortgages guaranteed by U.S. government agencies	—	—	—	—	172,991	19,741	192,732
Home equity	—	—	—	—	709,092	10,092	719,184
Total residential mortgage	194,962	1,197	3,406	2,955	1,624,297	54,106	1,880,923
Personal	496,534	—	3,590	116	86,945	238	587,423
Total	$13,614,112	$ 308,674	$ 500,864	$ 192,777	$1,735,915	$ 54,407	$16,406,749

Impaired Loans

Loans are considered to be impaired when it is probable that the Company will not be able to collect all amounts due according to the contractual terms of the loan agreement. This includes all nonaccruing loans, all loans modified in a TDR and all loans repurchased from GNMA pools.

A summary of impaired loans follows (in thousands):

	As of June 30, 2017					For the Three Months Ended June 30, 2017		For the Six Months Ended June 30, 2017	
		Recorded Investment							
	Unpaid Principal Balance	Total	With No Allowance	With Allowance	Related Allowance	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
Commercial:									
Energy	$141,091	$123,992	$56,988	$ 67,004	$ 8,874	$117,209	$ —	$128,246	$ —
Services	11,209	7,754	7,754	—	—	7,734	—	7,964	—
Wholesale/retail	17,392	10,620	10,620	—	—	10,855	—	11,013	—
Manufacturing	10,223	9,656	9,656	—	—	7,781	—	7,293	—
Healthcare	24,795	24,505	18,883	5,622	802	12,707	—	12,665	—
Other commercial and industrial	28,933	20,630	20,609	21	17	20,706	—	20,874	—
Total commercial	233,643	197,157	124,510	72,647	9,693	176,992	—	188,055	—
Commercial real estate:									
Residential construction and land development	3,676	2,051	2,051	—	—	2,334	—	2,742	—
Retail	518	301	301	—	—	308	—	314	—
Office	499	396	396	—	—	404	—	411	—
Multifamily	1,000	10	10	—	—	17	—	24	—
Industrial	—	—	—	—	—	38	—	38	—
Other commercial real estate	1,212	1,017	1,017	—	—	1,024	—	1,119	—
Total commercial real estate	6,905	3,775	3,775	—	—	4,125	—	4,648	—
Residential mortgage:									
Permanent mortgage	28,603	23,415	23,415	—	—	23,801	307	23,135	598
Permanent mortgage guaranteed by U.S. government agencies[1]	197,659	191,729	191,729	—	—	202,946	2,021	205,159	3,925
Home equity	13,064	11,768	11,768	—	—	11,776	—	11,643	—
Total residential mortgage	239,326	226,912	226,912	—	—	238,523	2,328	239,937	4,523
Personal	307	272	272	—	—	253	—	281	—

Total	$480,181	$428,116	$355,469	$72,647	$9,693	$419,893	$2,328	$432,921	$4,523

[1] All permanent mortgage loans guaranteed by U.S. government agencies are considered impaired as we do not expect full collection of contractual principal and interest. At June 30, 2017, $9.1 million of these loans were nonaccruing and $183 million were accruing based on the guarantee by U.S. government agencies.

Generally, no interest income is recognized on impaired loans until all principal balances, including amounts charged-off, are recovered.

A summary of impaired loans at December 31, 2016 follows (in thousands):

		Recorded Investment			
	Unpaid Principal Balance	Total	With No Allowance	With Allowance	Related Allowance
Commercial:					
Energy	$146,897	$132,499	$121,418	$ 11,081	$ 762
Services	11,723	8,173	8,173	—	—
Wholesale/retail	17,669	11,407	11,407	—	—
Manufacturing	5,320	4,931	4,931	—	—
Healthcare	1,147	825	825	—	—
Other commercial and industrial	29,006	21,118	21,083	35	35
Total commercial	211,762	178,953	167,837	11,116	797
Commercial real estate:					
Residential construction and land development	4,951	3,433	3,433	—	—
Retail	530	326	326	—	—
Office	521	426	426	—	—
Multifamily	1,000	38	38	—	—
Industrial	76	76	76	—	—
Other commercial real estate	7,349	1,222	1,222	—	—
Total commercial real estate	14,427	5,521	5,521	—	—
Residential mortgage:					
Permanent mortgage	28,830	22,855	22,809	46	46
Permanent mortgage guaranteed by U.S. government agencies[1]	205,564	199,387	199,387	—	—
Home equity	12,611	11,519	11,519	—	—
Total residential mortgage	247,005	233,761	233,715	46	46
Personal	332	290	290	—	—
Total	$473,526	$418,525	$407,363	$ 11,162	$ 843

[1] All permanent mortgage loans guaranteed by U.S. government agencies are considered impaired as we do not expect full collection of contractual principal and interest. At December 31, 2016, $12 million of these loans were nonaccruing and $188 million were accruing based on the guarantee by U.S. government agencies.

A summary of impaired loans at June 30, 2016 follows (in thousands):

	As of June 30, 2016					For the Three Months Ended		For the Six Months Ended	
		Recorded Investment				June 30, 2016		June 30, 2016	
	Unpaid Principal Balance	Total	With No Allowance	With Allowance	Related Allowance	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
Commercial:									
Energy	$202,369	$168,145	$136,264	$31,881	$4,228	$163,849	$ —	$97,923	$ —
Services	12,780	9,388	9,388	—	—	9,450	—	9,839	—
Wholesale/retail	8,697	2,772	2,772	—	—	3,229	—	2,846	—
Manufacturing	650	293	293	—	—	303	—	312	—
Healthcare	1,175	875	875	—	—	949	—	973	—
Other commercial and industrial	8,186	516	516	—	—	542	—	569	—
Total commercial	233,857	181,989	150,108	31,881	4,228	178,322	—	112,462	—
Commercial real estate:									
Residential construction and land development	7,177	4,261	4,261	—	—	4,525	—	4,335	—
Retail	1,914	1,265	1,265	—	—	1,283	—	1,292	—
Office	907	606	606	—	—	618	—	628	—
Multifamily	1,000	65	65	—	—	157	—	169	—
Industrial	76	76	76	—	—	76	—	76	—
Other commercial real estate	7,445	1,507	1,355	152	18	1,865	—	1,890	—
Total commercial real estate	18,519	7,780	7,628	152	18	8,524	—	8,390	—
Residential mortgage:									
Permanent mortgage	33,793	27,228	27,117	111	64	27,362	304	28,106	631
Permanent mortgage guaranteed by U.S. government agencies[1]	198,534	192,732	192,732	—	—	191,430	2,023	195,563	3,795
Home equity	10,964	10,092	10,092	—	—	10,311	—	10,224	—
Total residential mortgage	243,291	230,052	229,941	111	64	229,103	2,327	233,893	4,426
Personal	1,174	354	354	—	—	342	—	409	—
Total	$496,841	$420,175	$388,031	$32,144	$4,310	$416,291	$2,327	$355,154	$4,426

[1] All permanent mortgage loans guaranteed by U.S. government agencies are considered impaired as we do not expect full collection of contractual principal and interest. At June 30, 2016, $20 million of these loans were nonaccruing and $173 million were accruing based on the guarantee by U.S. government agencies.

Troubled Debt Restructurings

A summary of troubled debt restructurings ("TDRs") by accruing status as of June 30, 2017 is as follows (in thousands):

	As of June 30, 2017				Amounts Charged Off During:	
	Recorded Investment	Performing in Accordance With Modified Terms	Not Performing in Accordance With Modified Terms	Specific Allowance	Three Months Ended June 30, 2017	Six Months Ended June 30, 2017
Nonaccruing TDRs:						
Commercial:						
Energy	$22,466	$ 12,692	$ 9,774	$ 4,308	$—	$ —
Services	7,208	6,561	647	—	3	3
Wholesale/retail	10,524	10,524	—	—	—	—
Manufacturing	195	195	—	—	—	—
Healthcare	—	—	—	—	—	—
Other commercial and industrial	20,531	35	20,496	—	—	—
Total commercial	60,924	30,007	30,917	4,308	3	3
Commercial real estate:						
Residential construction and land development	381	145	236	—	—	—
Retail	301	301	—	—	—	—
Office	121	—	121	—	—	—
Multifamily	—	—	—	—	—	—
Industrial	—	—	—	—	—	—
Other commercial real estate	365	365	—	—	—	—
Total commercial real estate	1,168	811	357	—	—	—
Residential mortgage:						
Permanent mortgage	14,284	9,939	4,345	—	—	—
Permanent mortgage guaranteed by U.S. government agencies	5,962	1,176	4,786	—	—	—
Home equity	5,549	4,239	1,310	—	—	31
Total residential mortgage	25,795	15,354	10,441	—	—	31
Personal	228	228	—	—	7	8
Total nonaccruing TDRs	$88,115	$ 46,400	$ 41,715	$ 4,308	$10	$ 42
Accruing TDRs:						
Permanent mortgages guaranteed by U.S. government agencies	80,624	24,506	56,118	—	—	—

Total TDRs	$168,739	$ 70,906	$ 97,833	$ 4,308	$10	$ 42

A summary of troubled debt restructurings by accruing status as of December 31, 2016 is as follows (in thousands):

	As of December 31, 2016			
	Recorded Investment	Performing in Accordance With Modified Terms	Not Performing in Accordance With Modified Terms	Specific Allowance
Nonaccruing TDRs:				
Commercial:				
Energy	$16,893	$ 10,867	$ 6,026	$ —
Services	7,527	6,830	697	—
Wholesale/retail	11,291	11,251	40	—
Manufacturing	224	224	—	—
Healthcare	607	—	607	—
Other commercial and industrial	337	53	284	—
Total commercial	36,879	29,225	7,654	—
Commercial real estate:				
Residential construction and land development	690	97	593	—
Retail	326	326	—	—
Office	143	143	—	—
Multifamily	—	—	—	—
Industrial	—	—	—	—
Other commercial real estate	548	548	—	—
Total commercial real estate	1,707	1,114	593	—
Residential mortgage:				
Permanent mortgage	14,876	10,175	4,701	46
Permanent mortgage guaranteed by U.S. government agencies	6,702	2,241	4,461	—
Home equity	5,346	4,458	888	—
Total residential mortgage	26,924	16,874	10,050	46
Personal	237	236	1	—
Total nonaccruing TDRs	$65,747	$ 47,449	$ 18,298	$ 46
Accruing TDRs:				
Permanent mortgages guaranteed by U.S. government agencies	81,370	27,289	54,081	—
Total TDRs	$147,117	$ 74,738	$ 72,379	$ 46

A summary of troubled debt restructurings by accruing status as of June 30, 2016 is as follows (in thousands):

	As of June 30, 2016				Amounts Charged Off During:	
	Recorded Investment	Performing in Accordance With Modified Terms	Not Performing in Accordance With Modified Terms	Specific Allowance	Three Months Ended June 30, 2016	Six Months Ended June 30, 2016
Nonaccruing TDRs:						
Commercial:						
Energy	$2,246	$ —	$ 2,246	$ —	$500	$ 500
Services	8,610	7,853	757	—	—	—
Wholesale/retail	2,467	2,427	40	—	—	—
Manufacturing	253	253	—	—	—	—
Healthcare	640	640	—	—	—	—
Other commercial and industrial	516	63	453	—	—	57
Total commercial	14,732	11,236	3,496	—	500	557
Commercial real estate:						
Residential construction and land development	1,601	1,079	522	—	—	—
Retail	1,264	907	357	—	—	—
Office	152	152	—	—	—	—
Multifamily	—	—	—	—	—	—
Industrial	—	—	—	—	—	—
Other commercial real estate	793	372	421	—	—	—
Total commercial real estate	3,810	2,510	1,300	—	—	—
Residential mortgage:						
Permanent mortgage	17,367	12,462	4,905	64	37	52
Permanent mortgage guaranteed by U.S. government agencies	9,709	2,024	7,685	—	—	—
Home equity	4,763	4,139	624	—	60	126
Total residential mortgage	31,839	18,625	13,214	64	97	178
Personal	298	276	22	—	3	9
Total nonaccruing TDRs	$50,679	$ 32,647	$ 18,032	$ 64	$600	$ 744
Accruing TDRs:						
Permanent mortgages guaranteed by U.S. government agencies	78,806	27,999	50,807	—	—	—
Total TDRs	$129,485	$ 60,646	$ 68,839	$ 64	$600	$ 744

Troubled debt restructurings generally consist of interest rate concessions, payment stream concessions or a combination of concessions to distressed borrowers. The following tables detail the recorded balance of loans at June 30, 2017 by class that were restructured during the three months ended June 30, 2017 by primary type of concession (in thousands):

	Three Months Ended June 30, 2017						
	Accruing			Nonaccrual			
	Payment Stream	Combination & Other	Total	Payment Stream	Combination & Other	Total	Total
Commercial:							
Energy	$—	$ —	$—	$—	$ —	$—	$—
Services	—	—	—	—	—	—	—
Wholesale/retail	—	—	—	—	626	626	626
Manufacturing	—	—	—	—	—	—	—
Healthcare	—	—	—	—	—	—	—
Other commercial and industrial	—	—	—	20,242	—	20,242	20,242
Total commercial	—	—	—	20,242	626	20,868	20,868
Commercial real estate:							
Residential construction and land development	—	—	—	—	—	—	—
Retail	—	—	—	—	—	—	—
Office	—	—	—	—	—	—	—
Multifamily	—	—	—	—	—	—	—
Industrial	—	—	—	—	—	—	—
Other commercial real estate	—	—	—	—	—	—	—
Total commercial real estate	—	—	—	—	—	—	—
Residential mortgage:							
Permanent mortgage	—	—	—	138	53	191	191
Permanent mortgage guaranteed by U.S. government agencies	10,410	1,568	11,978	223	—	223	12,201
Home equity	—	—	—	26	559	585	585
Total residential mortgage	10,410	1,568	11,978	387	612	999	12,977
Personal	—	—	—	—	47	47	47
Total	$10,410	$ 1,568	$11,978	$20,629	$ 1,285	$21,914	$33,892

	Six Months Ended June 30, 2017						
	Accruing			Nonaccrual			
	Payment Stream	Combination & Other	Total	Payment Stream	Combination & Other	Total	Total
Commercial:							
Energy	$—	$ —	$—	$13,010	$ —	$13,010	$13,010
Services	—	—	—	—	—	—	—
Wholesale/retail	—	—	—	—	626	626	626
Manufacturing	—	—	—	—	—	—	—
Healthcare	—	—	—	—	—	—	—
Other commercial and industrial	—	—	—	20,242	—	20,242	20,242
Total commercial	—	—	—	33,252	626	33,878	33,878
Commercial real estate:							
Residential construction and land development	—	—	—	—	—	—	—
Retail	—	—	—	—	—	—	—
Office	—	—	—	—	—	—	—
Multifamily	—	—	—	—	—	—	—
Industrial	—	—	—	—	—	—	—
Other commercial real estate	—	—	—	—	—	—	—
Total commercial real estate	—	—	—	—	—	—	—
Residential mortgage:							
Permanent mortgage	—	—	—	153	84	237	237
Permanent mortgage guaranteed by U.S. government agencies	14,883	2,586	17,469	224	85	309	17,778
Home equity	—	—	—	149	1,053	1,202	1,202
Total residential mortgage	14,883	2,586	17,469	526	1,222	1,748	19,217
Personal	—	—	—	—	51	51	51
Total	$14,883	$ 2,586	$17,469	$33,778	$ 1,899	$35,677	$53,146

Troubled debt restructurings generally consist of interest rate concessions, payment stream concessions or a combination of concessions to distressed borrowers. The following tables detail the recorded balance of loans by class that were restructured during three months ended June 30, 2016 by primary type of concession (in thousands):

	Three Months Ended June 30, 2016						
	Accruing			Nonaccrual			
	Payment Stream	Combination & Other	Total	Payment Stream	Combination & Other	Total	Total
Commercial:							
Energy	$—	$ —	$—	$—	$ —	$—	$—
Services	—	—	—	—	—	—	—
Wholesale/retail	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—
Healthcare	—	—	—	—	—	—	—
Other commercial and industrial	—	—	—	—	—	—	—
Total commercial	—	—	—	—	—	—	—
Commercial real estate:							
Residential construction and land development	—	—	—	—	—	—	—
Retail	—	—	—	—	—	—	—
Office	—	—	—	—	—	—	—
Multifamily	—	—	—	—	—	—	—
Industrial	—	—	—	—	—	—	—
Other commercial real estate	—	—	—	—	—	—	—
Total commercial real estate	—	—	—	—	—	—	—
Residential mortgage:							
Permanent mortgage	—	—	—	684	1,183	1,867	1,867
Permanent mortgage guaranteed by U.S. government agencies	2,783	4,455	7,238	—	625	625	7,863
Home equity	—	—	—	48	329	377	377
Total residential mortgage	2,783	4,455	7,238	732	2,137	2,869	10,107
Personal	—	—	—	—	65	65	65
Total	$2,783	$ 4,455	$7,238	$732	$ 2,202	$2,934	$10,172

	Six Months Ended June 30, 2016						
	Accruing			Nonaccrual			
	Payment Stream	Combination & Other	Total	Payment Stream	Combination & Other	Total	Total
Commercial:							
Energy	$—	$ —	$—	$501	$ —	$501	$501
Services	—	—	—	—	—	—	—
Wholesale/retail	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—
Healthcare	—	—	—	—	—	—	—
Other commercial and industrial	—	—	—	—	—	—	—
Total commercial	—	—	—	501	—	501	501
Commercial real estate:							
Residential construction and land development	—	—	—	—	—	—	—
Retail	—	—	—	—	—	—	—
Office	—	—	—	—	—	—	—
Multifamily	—	—	—	—	—	—	—
Industrial	—	—	—	—	—	—	—
Other commercial real estate	—	—	—	—	—	—	—
Total commercial real estate	—	—	—	—	—	—	—
Residential mortgage:							
Permanent mortgage	—	—	—	1,046	1,244	2,290	2,290
Permanent mortgage guaranteed by U.S. government agencies	6,625	7,818	14,443	—	625	625	15,068
Home equity	—	—	—	48	791	839	839
Total residential mortgage	6,625	7,818	14,443	1,094	2,660	3,754	18,197
Personal	—	—	—	—	72	72	72
Total	$6,625	$ 7,818	$14,443	$1,595	$ 2,732	$4,327	$18,770

The following table summarizes, by loan class, the recorded investment at June 30, 2017 and 2016, respectively, of loans modified as TDRs within the previous 12 months and for which there was a payment default during the three months ended June 30, 2017 and 2016, respectively (in thousands):

	Three Months Ended June 30, 2017			Six Months Ended June 30, 2017		
	Accruing	Nonaccrual	Total	Accruing	Nonaccrual	Total
Commercial:						
Energy	$—	$ 9,774	$9,774	$—	$ 9,774	$9,774
Services	—	—	—	—	—	—
Wholesale/retail	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—
Healthcare	—	—	—	—	—	—
Other commercial and industrial	—	20,242	20,242	—	20,242	20,242
Total commercial	—	30,016	30,016	—	30,016	30,016
Commercial real estate:						
Residential construction and land development	—	—	—	—	—	—
Retail	—	—	—	—	—	—
Office	—	—	—	—	—	—
Multifamily	—	—	—	—	—	—
Industrial	—	—	—	—	—	—
Other commercial real estate	—	—	—	—	—	—
Total commercial real estate	—	—	—	—	—	—
Residential mortgage:						
Permanent mortgage	—	161	161	—	161	161
Permanent mortgage guaranteed by U.S. government agencies	22,234	918	23,152	22,590	918	23,508
Home equity	—	1,113	1,113	—	1,262	1,262
Total residential mortgage	22,234	2,192	24,426	22,590	2,341	24,931
Personal	—	—	—	—	—	—
Total	$22,234	$ 32,208	$54,442	$22,590	$ 32,357	$54,947

A payment default is defined as being 30 days or more past due. The table above includes loans that experienced a payment default during the period, but may be performing in accordance with the modified terms as of the balance sheet date.

	Three Months Ended June 30, 2016			Six Months Ended June 30, 2016		
	Accruing	Nonaccrual	Total	Accruing	Nonaccrual	Total
Commercial:						
Energy	$—	$ 2,246	$2,246	$—	$ 2,246	$2,246
Services	—	—	—	—	—	—
Wholesale/retail	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—
Healthcare	—	—	—	—	—	—
Other commercial and industrial	—	—	—	—	—	—
Total commercial	—	2,246	2,246	—	2,246	2,246
Commercial real estate:						
Residential construction and land development	—	—	—	—	—	—
Retail	—	—	—	—	—	—
Office	—	—	—	—	—	—
Multifamily	—	—	—	—	—	—
Industrial	—	—	—	—	—	—
Other commercial real estate	—	—	—	—	—	—
Total commercial real estate	—	—	—	—	—	—
Residential mortgage:						
Permanent mortgage	—	788	788	—	1,806	1,806
Permanent mortgage guaranteed by U.S. government agencies	18,893	1,006	19,899	20,621	1,006	21,627
Home equity	—	232	232	—	232	232
Total residential mortgage	18,893	2,026	20,919	20,621	3,044	23,665
Personal	—	—	—	—	—	—
Total	$18,893	$ 4,272	$23,165	$20,621	$ 5,290	$25,911

Nonaccrual & Past Due Loans

Past due status for all loan classes is based on the actual number of days since the last payment was due according to the contractual terms of the loans.

A summary of loans currently performing, loans past due and accruing and nonaccrual loans as of June 30, 2017 is as follows (in thousands):

	Current	Past Due 30 to 59 Days	60 to 89 Days	90 Days or More	Nonaccrual	Total
Commercial:						
Energy	$2,723,248	$—	$—	$—	$ 123,992	$2,847,240
Services	2,949,562	50	180	1,281	7,754	2,958,827
Wholesale/retail	1,532,986	89	—	—	10,620	1,543,695
Manufacturing	536,481	—	—	—	9,656	546,137
Healthcare	2,196,088	925	—	—	24,505	2,221,518
Other commercial and industrial	499,743	45	119	1	20,630	520,538
Total commercial	10,438,108	1,109	299	1,282	197,157	10,637,955
Commercial real estate:						
Residential construction and land development	139,070	471	—	—	2,051	141,592
Retail	722,504	—	—	—	301	722,805
Office	862,577	—	—	—	396	862,973
Multifamily	952,370	—	—	—	10	952,380
Industrial	693,635	—	—	—	—	693,635
Other commercial real estate	314,187	3	—	—	1,017	315,207
Total commercial real estate	3,684,343	474	—	—	3,775	3,688,592
Residential mortgage:						
Permanent mortgage	962,443	2,024	1,026	132	23,415	989,040
Permanent mortgages guaranteed by U.S. government agencies	36,867	18,416	13,581	113,813	9,052	191,729
Home equity	744,735	1,564	362	—	11,768	758,429
Total residential mortgage	1,744,045	22,004	14,969	113,945	44,235	1,939,198
Personal	916,852	487	289	—	272	917,900
Total	$16,783,348	$24,074	$15,557	$115,227	$ 245,439	$17,183,645

A summary of loans currently performing, loans past due and accruing and nonaccrual loans as of December 31, 2016 is as follows (in thousands):

	Current	Past Due			Nonaccrual	Total
		30 to 59 Days	60 to 89 Days	90 Days or More		
Commercial:						
Energy	$2,364,890	$479	—	$—	$ 132,499	$2,497,868
Services	3,099,605	191	1,021	—	8,173	3,108,990
Wholesale/retail	1,561,650	3,761	—	—	11,407	1,576,818
Manufacturing	509,662	382	—	—	4,931	514,975
Healthcare	2,201,050	—	41	—	825	2,201,916
Other commercial and industrial	468,981	155	3	—	21,118	490,257
Total commercial	10,205,838	4,968	1,065	—	178,953	10,390,824
Commercial real estate:						
Residential construction and land development	132,100	—	—	—	3,433	135,533
Retail	761,562	—	—	—	326	761,888
Office	798,462	—	—	—	426	798,888
Multifamily	903,234	—	—	—	38	903,272
Industrial	871,673	—	—	—	76	871,749
Other commercial real estate	336,488	6	—	—	1,222	337,716
Total commercial real estate	3,803,519	6	—	—	5,521	3,809,046
Residential mortgage:						
Permanent mortgage	979,386	3,299	1,280	—	22,855	1,006,820
Permanent mortgages guaranteed by U.S. government agencies	40,594	17,465	13,803	115,679	11,846	199,387
Home equity	729,493	2,276	337	—	11,519	743,625
Total residential mortgage	1,749,473	23,040	15,420	115,679	46,220	1,949,832
Personal	838,811	589	263	5	290	839,958
Total	$16,597,641	$28,603	16,748	$115,684	$ 230,984	$16,989,660

A summary of loans currently performing, loans past due and accruing and nonaccrual loans as of June 30, 2016 is as follows (in thousands):

	Current	Past Due 30 to 59 Days	Past Due 60 to 89 Days	Past Due 90 Days or More	Nonaccrual	Total
Commercial:						
Energy	$2,647,678	$—	—	$2,833	$ 168,145	$2,818,656
Services	2,817,217	494	3,765	—	9,388	2,830,864
Wholesale/retail	1,530,110	75	—	—	2,772	1,532,957
Manufacturing	595,110	—	—	—	293	595,403
Healthcare	2,050,271	—	—	—	875	2,051,146
Other commercial and industrial	526,691	76	82	46	516	527,411
Total commercial	10,167,077	645	3,847	2,879	181,989	10,356,437
Commercial real estate:						
Residential construction and land development	153,315	—	—	—	4,261	157,576
Retail	794,154	—	—	—	1,265	795,419
Office	768,506	—	—	—	606	769,112
Multifamily	784,826	2,309	—	—	65	787,200
Industrial	645,510	—	—	—	76	645,586
Other commercial real estate	425,566	—	—	—	1,507	427,073
Total commercial real estate	3,571,877	2,309	—	—	7,780	3,581,966
Residential mortgage:						
Permanent mortgage	935,857	5,798	124	—	27,228	969,007
Permanent mortgages guaranteed by U.S. government agencies	42,019	15,349	11,869	103,754	19,741	192,732
Home equity	707,024	1,889	159	20	10,092	719,184
Total residential mortgage	1,684,900	23,036	12,152	103,774	57,061	1,880,923
Personal	586,611	400	58	—	354	587,423
Total	$16,010,465	$26,390	16,057	$106,653	$ 247,184	$16,406,749

(5) Acquisitions

On December 1, 2016, the Company acquired MBT Bancshares (“MBT”), parent company of Missouri Bank and Trust of Kansas City (“Mobank”) following regulatory approval of the transaction. Mobank operated four banking branches in the Kansas City, Mo. area. BOK Financial paid $102.5 million in an all-cash deal for all outstanding shares of MBT stock. MBT was merged into BOK Financial and Mobank became a wholly owned subsidiary of BOK Financial on December 1, 2016. On February 21, 2017, Mobank was merged with the Bank of Kansas City division of BOKF, NA. All branches in the Kansas City market will operate under the Mobank name. The preliminary purchase price allocation was updated in the first quarter of 2017 resulting in a $2.0 million increase in identifiable intangibles, $1.5 million decrease in premises and equipment and other repossessed assets, and a $526 thousand decrease in goodwill.
(6) Mortgage Banking Activities

Residential Mortgage Loan Production

The Company originates, markets and services conventional and government-sponsored residential mortgage loans. Generally, conforming fixed rate residential mortgage loans are held for sale in the secondary market and non-conforming and adjustable-rate residential mortgage loans are retained for investment. Residential mortgage loans originated for sale by the Company are carried at fair value based on sales commitments and market quotes. Changes in the fair value of mortgage loans held for sale are included in Other operating revenue – Mortgage banking revenue. Residential mortgage loans held for sale also includes the fair value of residential mortgage loan commitments and forward sale commitments which are considered derivative contracts that have not been designated as hedging instruments for accounting purposes. The volume of mortgage loans originated for sale and secondary market prices are the primary drivers of originating and marketing revenue.

Residential mortgage loan commitments are generally outstanding for 60 to 90 days, which represents the typical period from commitment to originate a residential mortgage loan to when the closed loan is sold to an investor. Residential mortgage loan commitments are subject to both credit and interest rate risk. Credit risk is managed through underwriting policies and procedures, including collateral requirements, which are generally accepted by the secondary loan markets. Exposure to interest rate fluctuations is partially managed through forward sales of residential mortgage-backed securities and forward sales contracts. These latter contracts set the price for loans that will be delivered in the next 60 to 90 days.

The unpaid principal balance of residential mortgage loans held for sale, notional amounts of derivative contracts related to residential mortgage loan commitments and forward contract sales and their related fair values included in Mortgage loans held for sale on the Consolidated Balance Sheets were (in thousands):

	June 30, 2017		Dec. 31, 2016		June 30, 2016	
	Unpaid Principal Balance/ Notional	Fair Value	Unpaid Principal Balance/ Notional	Fair Value	Unpaid Principal Balance/ Notional	Fair Value
Residential mortgage loans held for sale	$269,772	$275,179	$286,414	$286,971	$404,507	$417,542
Residential mortgage loan commitments	362,088	10,993	318,359	9,733	965,631	25,499
Forward sales contracts	587,595	1,087	569,543	5,193	1,216,966	(12,313)
		$287,259		$301,897		$430,728

No residential mortgage loans held for sale were 90 days or more past due or considered impaired as of June 30, 2017, December 31, 2016 or June 30, 2016. No credit losses were recognized on residential mortgage loans held for sale for the three and six month periods ended June 30, 2017 and 2016.

Mortgage banking revenue was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Production revenue:				
Net realized gains on sale of mortgage loans	$11,787	$15,865	$20,402	$24,314
Net change in unrealized gain on mortgage loans held for sale	985	3,884	4,827	7,167
Net change in the fair value of mortgage loan commitments	(3,274)	5,329	1,260	17,365
Net change in the fair value of forward sales contracts	4,342	(5,992)	(4,106)	(13,113)
Total production revenue	13,840	19,086	22,383	35,733
Servicing revenue	16,436	15,798	33,084	31,251
Total mortgage banking revenue	$30,276	$34,884	$55,467	$66,984

Production revenue includes gain (loss) on residential mortgage loans held for sale and changes in the fair value of derivative contracts not designated as hedging instruments for accounting purposes related to residential mortgage loan commitments and forward sales contracts. Servicing revenue includes servicing fee income and late charges on loans serviced for others.

Residential Mortgage Servicing

Mortgage servicing rights may be originated or purchased. Both originated and purchased mortgage servicing rights are initially recognized at fair value. The Company has elected to carry all mortgage servicing rights at fair value. Changes in the fair value are recognized in earnings as they occur. The unpaid principal balance of loans serviced for others is the primary driver of servicing revenue.

The following represents a summary of mortgage servicing rights (Dollars in thousands):

	June 30, 2017	Dec. 31, 2016	June 30, 2016
Number of residential mortgage loans serviced for others	138,335	139,340	137,210
Outstanding principal balance of residential mortgage loans serviced for others	$22,095,232	$21,997,568	$21,178,387
Weighted average interest rate	3.95 %	3.97 %	4.06 %
Remaining term (in months)	299	301	301

Activity in capitalized mortgage servicing rights during the three months ended June 30, 2017 was as follows (in thousands):

	Purchased	Originated	Total
Balance, March 31, 2017	$ 8,316	$241,087	$249,403
Additions, net	—	11,078	11,078
Change in fair value due to scheduled payments and full-balance payoffs	(464)	(7,835)	(8,299)
Change in fair value due to market assumption changes	143	(7,086)	(6,943)
Balance, June 30, 2017	$ 7,995	$237,244	$245,239

	Purchased	Originated	Total
Balance, Dec. 31, 2016	$ 8,909	$238,164	$247,073
Additions, net	—	19,514	19,514
Change in fair value due to scheduled payments and full-balance payoffs	(973)	(15,288)	(16,261)
Change in fair value due to market assumption changes	59	(5,146)	(5,087)
Balance, June 30, 2017	$ 7,995	$237,244	$245,239

Activity in capitalized mortgage servicing rights during the three months ended June 30, 2016 was as follows (in thousands):

	Purchased	Originated	Total
Balance, March 31, 2016	$ 5,949	$ 190,106	$ 196,055
Additions, net	—	20,773	20,773
Change in fair value due to scheduled payments and full-balance payoffs	(730)	(9,068)	(9,798)
Change in fair value due to market assumption changes	(1,152)	(15,131)	(16,283)
Balance, June 30, 2016	$ 4,067	$ 186,680	$ 190,747

	Purchased	Originated	Total
Balance, Dec. 31, 2015	$ 9,911	$ 208,694	$ 218,605
Additions, net	—	34,355	34,355
Change in fair value due to scheduled payments and full-balance payoffs	(1,356)	(16,586)	(17,942)
Change in fair value due to market assumption changes	(4,488)	(39,783)	(44,271)
Balance, June 30, 2016	$ 4,067	$ 186,680	$ 190,747

Changes in the fair value of mortgage servicing rights are included in Other operating revenue in the Consolidated Statements of Earnings. Changes in fair value due to actual loan payments are included in Mortgage banking costs. Changes in fair value due to market assumption changes are reported separately. Changes in fair value due to market assumption changes during the period relate to assets held at the reporting date.

There is no active market for trading in mortgage servicing rights after origination. Fair value is determined by discounting the projected net cash flows. Significant assumptions used to determine fair value based on significant unobservable inputs were as follows:

	June 30, 2017	Dec. 31, 2016	June 30, 2016
Discount rate – risk-free rate plus a market premium	9.84%	10.08%	10.09%
Prepayment rate - based upon loan interest rate, original term and loan type	8.61%-15.91%	8.98%-16.91%	9.26%-42.77%
Loan servicing costs – annually per loan based upon loan type:			
Performing loans	$65-$120	$63 - $120	$63 - $120
Delinquent loans	$150-$500	$150 - $500	$150 - $500
Loans in foreclosure	$1,000-$4,250	$650 - $4,250	$650 - $4,250
Escrow earnings rate – indexed to rates paid on deposit accounts with comparable average life	1.95%	1.98%	0.99%
Primary/secondary mortgage rate spread	105 bps	105 bps	115 bps

Changes in primary residential mortgage interest rates directly affect the prepayment speeds used in valuing our mortgage servicing rights. 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 periodically for changes in market conditions and adjusted to better correlate with actual performance of BOK Financial's servicing portfolio.

The aging status of our mortgage loans serviced for others by investor at June 30, 2017 follows (in thousands):

	Current	Past Due 30 to 59 Days	60 to 89 Days	90 Days or More	Total
FHLMC	$ 8,083,330	$ 48,659	$ 12,294	$ 27,338	$ 8,171,621
FNMA	6,756,211	46,918	10,679	23,981	6,837,789
GNMA	6,331,439	170,889	47,335	16,082	6,565,745

Other	514,272	3,278	932	1,595	520,077
Total	$21,685,252	$269,744	$71,240	$68,996	$22,095,232

The Company has obligations to repurchase or provide indemnification for residential mortgage loans sold to government sponsored entities due to standard representations and warranties made under contractual agreements and to service loans in accordance with investor guidelines. The Company has established accruals for losses related to these obligations that are included in Other liabilities in the Consolidated Balance Sheets and in Mortgage banking costs in the Consolidated Statements of Earnings.

The Company repurchased five loans from the agencies for $1.3 million during the second quarter of 2017. There were four indemnifications on loans paid during the second quarter of 2017. Losses recognized on repurchases were insignificant.

A summary of unresolved deficiency requests from the agencies follows (in thousands, except for number of unresolved deficiency requests):

	June 30, 2017	2016
Number of unresolved deficiency requests	206	211
Aggregate outstanding principal balance subject to unresolved deficiency requests	$ 13,370	$ 15,920
Unpaid principal balance subject to indemnification by the Company	5,074	5,519

The activity in the accruals for mortgage losses related to repurchases is summarized as follows (in thousands).

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Beginning balance	$2,587	$2,974	$2,788	$3,359
Provision for losses	(895)	368	(1,094)	250
Charge-offs, net	(45)	(89)	(47)	(356)
Ending balance	$1,647	$3,253	$1,647	$3,253

(7) Commitments and Contingent Liabilities

Litigation Contingencies

As a member of Visa, BOK Financial is obligated for a proportionate share of certain covered litigation losses incurred by Visa under a retrospective responsibility plan. A contingent liability was recognized for the Company's share of Visa's covered litigation liabilities. Visa funded an escrow account to cover litigation claims, including covered litigation losses under the retrospective responsibility plan, with proceeds from its initial public offering in 2008 and from available cash.

BOK Financial currently owns 252,233 Visa Class B shares which are convertible into 415,755 shares of Visa Class A shares after the final settlement of all covered litigation. Class B shares may be diluted in the future if the escrow fund is not adequate to cover future covered litigation costs. Therefore, no value has been currently assigned to the Class B shares and no value may be assigned until the Class B shares are converted into a known number of Class A shares.

On March 3, 2015, BOKF, NA and the Company were named as defendants in a class action alleging (1) that the manner in which the Bank posted charges to its consumer deposit accounts was improper from September 1, 2011 through July 8, 2014, the period after which the Bank and BOK Financial had settled a class action respecting a similar claim, and before it made changes to its posting order and (2) that the manner in which the Bank posted charges to its small business deposit accounts was improper from July 9, 2009 through July 8, 2014. Following mediation of the case in August 2016, the Class Representatives and the Bank reached a settlement of the action for $7.8 million. The Settlement was approved by the Court in a final order, the Company funded the settlement, and the settlement has been implemented.

On June 24, 2015, the Bank received a complaint alleging that an employee had colluded with a bond issuer and an individual in misusing revenues pledged to municipal bonds for which the Bank served as trustee under the bond indenture. The Company conducted an investigation and concluded that employees in one of its Corporate Trust offices had, with respect to a single group of affiliated bond issuances, violated Company policies and procedures by waiving financial covenants, granting forbearances and accepting without disclosure to the bondholders, debt service payments from sources other than pledged revenues. The relationship manager was terminated. The Company reported the circumstances to, and cooperated with an investigation by, the Securities and Exchange Commission ("SEC"). On December 28, 2015, in an action brought by the SEC, the United States District Court for the District of New Jersey entered a judgment against the principals involved in issuing the bonds, precluding the principals from denying the alleged violations of the federal securities laws and requiring the principals to pay all outstanding principal, accrued interest, and other amounts required under the bond documents (estimated to be approximately $73 million, less the value of the facilities securing repayment of the bonds), subject to oversight by a court appointed monitor. On September 7, 2016, the Bank agreed, and the SEC entered, a consent order finding that the Bank had violated Section 17(a) of the Securities Act of 1933 and Section 10(b) of the Securities Exchange Act and requiring the Bank to disgorge $1,067,721 of fees and pay a civil penalty of $600,000. The Bank has disgorged the fees and paid the penalty. On August 26, 2016, the Bank was sued in the United States District Court for New Jersey by two bondholders in a putative class action on behalf of all holders of the bonds alleging the Bank participated in the fraudulent sale of securities by the principals. On September 14, 2016, the Bank was sued in the District Court of Tulsa County, Oklahoma by 19 bondholders alleging the Bank participated in the fraudulent sale of securities by the principals. Management has been advised by counsel that the Bank has valid defenses to the claims. The Bank expects the Court ordered payment plan will result in the payment of the bonds by the principals. Accordingly, no loss is probable at this time and no provision for loss has been made. If the payment plan does not result in payment of the bonds, a loss could become probable. A reasonable estimate cannot be made at this time though the amount could be material to the Company.

On March 14, 2017, the Bank was sued in the United States District Court for the Northern District of Oklahoma by bondholders in a second putative class action. The bondholders in this second action allege two individuals purchased facilities from the principals who are the subject of the SEC New Jersey proceedings by means of the fraudulent sale of $60 million of municipal securities for which the Bank also served as indenture trustee. The bondholders allege the

Bank failed to disclose that the seller of the purchased facilities had engaged in the conduct complained of in the New Jersey action. The Bank properly performed all duties as indenture trustee of this second set of municipal securities, timely commenced proceedings against the issuer of the securities when default occurred, is cooperating with the SEC in actions against the two principals, is not a target of the SEC proceedings, and has been advised by counsel that the Bank has valid defenses to the claims of these bondholders. It is the opinion of management that no loss is probable at this time.

The County of Bernalillo, New Mexico, commenced arbitration pursuant to the Arbitration Rules of FINRA seeking recovery of $5.6 million alleging that various municipal bonds purchased by the elected County Treasurer of Bernalillo County, New Mexico, from BOK Financial Securities, Inc. were unsuitable. The arbitration was conducted in July 2017. Management has been advised by counsel that a loss is not probable.

On March 30, 2017, two deposit customers of the Bank sued the Bank in the District Court of Harris County, Texas. A judgment creditor had served a garnishment summons on the Bank. The deposit customers allege that, because the Bank was unable to produce adequate documentation of ownership of a series of deposit accounts at the Bank owned by them, they were compelled to enter into a settlement agreement with the judgment creditor pursuant to which the Bank paid $4.2 million from the accounts to the judgment creditor. The two deposit customers seek $7 million. Management has been advised by counsel that a loss is not probable and that the amount of the liability, if any, cannot be quantified at this time.
On March 7, 2017, a plaintiff filed a putative class action in the United States District Court for the Northern District of Texas alleging an extended overdraft fee charged by BOKF, NA is interest and exceeds permitted rates. BOKF, NA was previously sued in a class action in the United States District Court for the Northern District of Oklahoma making the same allegations. Pursuant to a motion to dismiss, the Northern District of Oklahoma Court action was dismissed. Other courts considering the question whether extended overdraft fees are interest have likewise determined such fees are not interest. BOKF, NA has moved to dismiss the action. Management is advised by counsel that a loss is not probable and that the loss, if any, cannot be reasonably estimated.

In the ordinary course of business, BOK Financial and its subsidiaries are subject to legal actions and complaints. Management believes, based upon the opinion of counsel, that the actions and liability or loss, if any, resulting from the final outcomes of the proceedings, will not have a material effect on the Company’s financial condition, results of operations or cash flows.

Alternative Investment Commitments

The Company sponsors two private equity funds and invests in several tax credit entities and other funds as permitted by banking regulations. Consolidation of these investments is based on the variable interest model determined by the nature of the entity. Variable interest entities are generally defined as entities that either do not have sufficient equity to finance their activities without support from other parties or whose equity investors lack a controlling financial interest. Variable interest entities are consolidated based on the determination that the Company is the primary beneficiary including the power to direct the activities that most significantly impact the variable interest's economic performance and the obligation to absorb losses of the variable interest or the right to receive benefits of the variable interest that could be significant to the variable interest.

BOKF Equity, LLC, an indirect wholly-owned subsidiary, is the general partner of two consolidated private equity funds (“the Funds”). The Funds provide alternative investment opportunities to certain customers, some of which are related parties, through unaffiliated limited partnerships. These unaffiliated limited partnerships generally invest in distressed assets, asset buy-outs or venture capital companies. As general partner, BOKF Equity, LLC has the power to direct activities that most significantly affect the Funds' performance and contingent obligations to make additional investments totaling $4.0 million at June 30, 2017. Substantially all of the obligations are offset by limited partner commitments. The Company does not accrue its contingent liability to fund investments. The Volcker Rule in Title VI of the Dodd-Frank Act will limit both the amount and structure of these types of investments.

Consolidated tax credit investment entities represent the Company's interest in entities earning federal new market tax credits related to qualifying loans. The Company has the power to direct the activities that most significantly impact the variable interest's economic performance of the entity including being the primary beneficiary of or the obligation to absorb losses of the variable interest that could be significant to the variable interest.

Other consolidated alternative investments include entities held under merchant banking authority. While the Company owns a majority of the voting interest in these entities, its ability to manage daily operations is limited by applicable banking regulations. Consolidated other assets includes total tangible assets, identifiable intangible assets and goodwill held by these entities.

The Company also has interests in various unrelated alternative investments generally consisting of unconsolidated limited partnership interests in or loans to entities for which investment return is primarily in the form of tax credits or that invest in distressed real estate loans and properties, energy development, venture capital and other activities. The Company is prohibited by banking regulations from controlling or actively managing the activities of these investments and the Company's maximum exposure to loss is restricted to its investment balance. The Company's obligation to fund alternative investments is included in Other liabilities in the Consolidated Balance Sheets.

A summary of consolidated and unconsolidated alternative investments as of June 30, 2017, December 31, 2016 and June 30, 2016 is as follows (in thousands):

	June 30, 2017				
	Loans	Other assets	Other liabilities	Other borrowings	Non-controlling interests
Consolidated:					
Private equity funds	$—	$16,905	$—	$ —	$ 14,199
Tax credit entities	10,000	11,274	—	10,964	10,000
Other	—	15,894	1,621	878	2,877
Total consolidated	$10,000	$44,073	$1,621	$ 11,842	$ 27,076
Unconsolidated:					
Tax credit entities	$59,744	$148,525	$63,822	$ —	$ —
Other	—	33,155	13,680	—	—
Total unconsolidated	$59,744	$181,680	$77,502	$ —	$ —

	Dec. 31, 2016				
	Loans	Other assets	Other liabilities	Other borrowings	Non-controlling interests
Consolidated:					
Private equity funds	$—	$17,357	$—	$ —	$ 13,237
Tax credit entities	10,000	11,585	—	10,964	10,000
Other	—	29,783	3,189	1,092	8,266
Total consolidated	$10,000	$58,725	$3,189	$ 12,056	$ 31,503
Unconsolidated:					
Tax credit entities	$44,488	$143,715	$63,329	$ —	$ —
Other	—	31,675	15,028	—	—
Total unconsolidated	$44,488	$175,390	$78,357	$ —	$ —

	June 30, 2016				
	Loans	Other assets	Other liabilities	Other borrowings	Non-controlling interests
Consolidated:					
Private equity funds	$—	$20,469	$—	$ —	$ 16,316
Tax credit entities	10,000	11,895	—	10,964	10,000
Other	—	35,387	2,004	2,272	7,589
Total consolidated	$10,000	$67,751	$2,004	$ 13,236	$ 33,905
Unconsolidated:					
Tax credit entities	$32,679	$102,138	$30,953	$ —	$ —
Other	—	23,439	13,767	—	—
Total unconsolidated	$32,679	$125,577	$44,720	$ —	$ —

Other Commitments and Contingencies

At June 30, 2017, Cavanal Hill Funds' assets included U.S. Treasury, cash management and tax-free money market funds. Assets of these funds consist of highly-rated, short-term obligations of the U.S. Treasury, corporate issuers and U.S. states and municipalities. The net asset value of units in these funds was $1.00 at June 30, 2017. An investment in these funds is not insured by the Federal Deposit Insurance Corporation or guaranteed by BOK Financial or any of its subsidiaries. BOK Financial may, but is not obligated to purchase assets from these funds to maintain the net asset value at $1.00. No assets were purchased from the funds in 2017 or 2016.

(8) Shareholders' Equity

On July 25, 2017, the Company declared a quarterly cash dividend of $0.44 per common share on or about August 25, 2017 to shareholders of record as of August 11, 2017.

Dividends declared were $0.44 per share and $0.88 per share during the three and six months ended June 30, 2017 and $0.43 per share and $0.86 per share during the three and six months ended June 30, 2016.

Accumulated Other Comprehensive Income (Loss)

AOCI includes unrealized gains and losses on available for sale ("AFS") securities and non-credit related unrealized losses on AFS securities for which an other-than-temporary impairment has been recorded in earnings. AOCI also includes unrealized gains on AFS securities that were transferred from AFS to investment securities in the third quarter of 2011. Such amounts are being amortized over the estimated remaining life of the security as an adjustment to yield, offsetting the related amortization of premium on the transferred securities. Unrealized losses on employee benefit plans will be reclassified into income as pension plan costs are recognized over the remaining service period of plan participants. Gains and losses in AOCI are net of deferred income taxes.

A rollforward of the components of accumulated other comprehensive income (loss) is included as follows (in thousands):

	Unrealized Gain (Loss) on			
	Available for Sale Securities	Investment Securities Transferred from AFS	Employee Benefit Plans	Total
Balance, Dec. 31, 2015	$23,284	$ 68	$(1,765)	$21,587
Net change in unrealized gain (loss)	166,566	—	—	166,566
Reclassification adjustments included in earnings:				
Interest revenue, Investment securities, Taxable securities	—	(112)	—	(112)
Gain on available for sale securities, net	(9,290)	—	—	(9,290)
Other comprehensive income (loss), before income taxes	157,276	(112)	—	157,164
Federal and state income taxes[1]	61,163	(44)	—	61,119
Other comprehensive income (loss), net of income taxes	96,113	(68)	—	96,045
Balance, June 30, 2016	$119,397	$ —	$(1,765)	$117,632
Balance, Dec. 31, 2016	$(9,087)	$ —	$(1,880)	$(10,967)
Net change in unrealized gain (loss)	33,369	—	—	33,369
Reclassification adjustments included in earnings:				
Gain on available for sale securities, net	(2,429)	—	—	(2,429)
Other comprehensive income, before income taxes	30,940	—	—	30,940
Federal and state income taxes[1]	12,009		—	12,009

Other comprehensive income, net of income taxes	18,931	—	—	18,931
Balance, June 30, 2017	$9,844	$ —	$(1,880)	$7,964

[1] Calculated using a 39 percent effective tax rate.

(9) Earnings Per Share

(In thousands, except share and per share amounts)	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Numerator:				
Net income attributable to BOK Financial Corp. shareholders	$88,147	$ 65,801	$176,503	$ 108,365
Less: Earnings allocated to participating securities	926	821	1,929	1,359
Numerator for basic earnings per share – income available to common shareholders	87,221	64,980	174,574	107,006
Effect of reallocating undistributed earnings of participating securities	1	—	1	—
Numerator for diluted earnings per share – income available to common shareholders	$87,222	$ 64,980	$174,575	$ 107,006
Denominator:				
Weighted average shares outstanding	65,416,274	66,069,392	65,436,909	66,100,279
Less: Participating securities included in weighted average shares outstanding	686,522	823,505	714,165	829,065
Denominator for basic earnings per common share	64,729,752	65,245,887	64,722,744	65,271,214
Dilutive effect of employee stock compensation plans[1]	63,382	57,039	65,578	45,963
Denominator for diluted earnings per common share	64,793,134	65,302,926	64,788,322	65,317,177
Basic earnings per share	$1.35	$ 1.00	$2.70	$ 1.64
Diluted earnings per share	$1.35	$ 1.00	$2.69	$ 1.64
[1] Excludes employee stock options with exercise prices greater than current market price.	—	—	—	145,247

(10) Reportable Segments

Reportable segments reconciliation to the Consolidated Financial Statements for the three months ended June 30, 2017 is as follows (in thousands):

	Commercial	Consumer	Wealth Management	Funds Management and Other	BOK Financial Consolidated
Net interest revenue from external sources	$144,164	$23,503	$10,474	$27,063	$205,204
Net interest revenue (expense) from internal sources	(20,347)	11,837	10,325	(1,815)	—
Net interest revenue	123,817	35,340	20,799	25,248	205,204
Provision for credit losses	1,228	926	(93)	(2,061)	—
Net interest revenue after provision for credit losses	122,589	34,414	20,892	27,309	205,204
Other operating revenue	55,778	52,102	75,569	(1,197)	182,252
Other operating expense	59,128	55,709	60,615	75,433	250,885
Net direct contribution	119,239	30,807	35,846	(49,321)	136,571
Gain on financial instruments, net	3	5,224	—	(5,227)	—
Change in fair value of mortgage servicing rights	—	(6,943)	—	6,943	—
Gain on repossessed assets, net	1,403	98	—	(1,501)	—
Corporate expense allocations	8,862	17,039	9,947	(35,848)	—
Net income before taxes	111,783	12,147	25,899	(13,258)	136,571
Federal and state income taxes	43,484	4,725	10,075	(10,579)	47,705
Net income	68,299	7,422	15,824	(2,679)	88,866
Net income attributable to non-controlling interests	—	—	—	719	719
Net income attributable to BOK Financial Corp. shareholders	$68,299	$7,422	$15,824	$(3,398)	$88,147
Average assets	$17,596,273	$8,845,398	$6,763,093	$(836,193)	$32,368,571

Reportable segments reconciliation to the Consolidated Financial Statements for the six months ended June 30, 2017 is as follows (in thousands):

	Commercial	Consumer	Wealth Management	Funds Management and Other	BOK Financial Consolidated
Net interest revenue from external sources	$278,868	$44,632	$21,960	$ 60,926	$406,386
Net interest revenue (expense) from internal sources	(37,140)	22,789	19,181	(4,830)	—
Net interest revenue	241,728	67,421	41,141	56,096	406,386
Provision for credit losses	(234)	2,198	(53)	(1,911)	—
Net interest revenue after provision for credit losses	241,962	65,223	41,194	58,007	406,386
Other operating revenue	102,048	99,408	149,727	1,365	352,548
Other operating expense	111,565	109,242	121,025	153,764	495,596
Net direct contribution	232,445	55,389	69,896	(94,392)	263,338
Gain on financial instruments, net	41	3,557	—	(3,598)	—
Change in fair value of mortgage servicing rights	—	(5,087)	—	5,087	—
Gain (loss) on repossessed assets, net	1,398	(39)	—	(1,359)	—
Corporate expense allocations	17,493	33,908	20,619	(72,020)	—
Net income before taxes	216,391	19,912	49,277	(22,242)	263,338
Federal and state income taxes	84,176	7,746	19,169	(25,283)	85,808
Net income	132,215	12,166	30,108	3,041	177,530
Net income attributable to non-controlling interests	—	—	—	1,027	1,027
Net income attributable to BOK Financial Corp. shareholders	$132,215	$12,166	$30,108	$ 2,014	$176,503
Average assets	$17,517,960	$8,747,524	$6,960,872	$ (566,196)	$32,660,160

Reportable segments reconciliation to the Consolidated Financial Statements for the three months ended June 30, 2016 is as follows (in thousands):

	Commercial	Consumer	Wealth Management	Funds Management and Other	BOK Financial Consolidated
Net interest revenue from external sources	$118,480	$22,349	$6,271	$ 35,512	$182,612
Net interest revenue (expense) from internal sources	(14,575)	8,876	$7,193	(1,494)	—
Net interest revenue	103,905	31,225	13,464	34,018	182,612
Provision for credit losses	6,852	1,318	(239)	12,069	20,000
Net interest revenue after provision for credit losses	97,053	29,907	13,703	21,949	162,612
Other operating revenue	51,497	57,440	75,772	833	185,542
Other operating expense	52,594	62,806	61,414	74,571	251,385
Net direct contribution	95,956	24,541	28,061	(51,789)	96,769
Gain on financial instruments, net	—	15,045	—	(15,045)	—
Change in fair value of mortgage servicing rights	—	(16,283)	—	16,283	—
Gain (loss) on repossessed assets, net	(598)	252	—	346	—

Corporate expense allocations	8,883	16,630	10,417	(35,930)	—
Net income before taxes	86,475	6,925	17,644	(14,275)	96,769
Federal and state income taxes	33,639	2,694	6,864	(12,700)	30,497
Net income	52,836	4,231	10,780	(1,575)	66,272
Net gain attributable to non-controlling interests	—	—	—	471	471
Net income attributable to BOK Financial Corp. shareholders	$52,836	$4,231	$10,780	$ (2,046)	$65,801
Average assets	$16,973,663	$8,774,881	$5,765,390	$ 472,108	$31,986,042

Reportable segments reconciliation to the Consolidated Financial Statements for the six months ended June 30, 2016 is as follows (in thousands):

	Commercial	Consumer	Wealth Management	Funds Management and Other	BOK Financial Consolidated
Net interest revenue from external sources	$235,116	$43,799	$12,349	$ 73,920	$365,184
Net interest revenue (expense) from internal sources	(29,208)	18,229	$14,857	(3,878)	—
Net interest revenue	205,908	62,028	27,206	70,042	365,184
Provision for credit losses	28,423	3,020	(390)	23,947	55,000
Net interest revenue after provision for credit losses	177,485	59,008	27,596	46,095	310,184
Other operating revenue	96,605	111,469	144,518	(9,636)	342,956
Other operating expense	108,663	118,524	122,098	144,670	493,955
Net direct contribution	165,427	51,953	50,016	(108,211)	159,185
Gain on financial instruments, net	—	31,626	—	(31,626)	—
Change in fair value of mortgage servicing rights	—	(44,271)	—	44,271	—
Gain (loss) on repossessed assets, net	(680)	406	—	274	—
Corporate expense allocations	17,627	32,608	20,952	(71,187)	—
Net income before taxes	147,120	7,106	29,064	(24,105)	159,185
Federal and state income taxes	57,230	2,764	11,306	(19,375)	51,925
Net income	89,890	4,342	17,758	(4,730)	107,260
Net loss attributable to non-controlling interests	—	—	—	(1,105)	(1,105)
Net income attributable to BOK Financial Corp. shareholders	$89,890	$4,342	$17,758	$ (3,625)	$108,365
Average assets	$16,971,339	$8,731,085	$5,665,218	$ 379,615	$31,747,257

(11) Fair Value Measurements

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 market for the given asset or liability at the measurement date based on market conditions at that date. Certain assets and liabilities are recorded in the Company’s financial statements at fair value. Some are recorded on a recurring basis and some on a non-recurring basis.

For some assets and liabilities, observable market transactions and market information might be available. For other assets and liabilities, observable market transactions and market information might not be available. A hierarchy for fair value has been established which categorizes into three levels the inputs to valuation techniques used to measure fair value. The three levels are as follows:

Quoted Prices in Active Markets for Identical Assets or Liabilities (Level 1) - Fair value is based on unadjusted quoted prices in active markets for identical assets or liabilities.

Significant Other Observable Inputs (Level 2) - Fair value is based on significant other observable inputs which are generally determined based on a single price for each financial instrument provided to us by an applicable third-party pricing service and is based on 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.

Significant Unobservable Inputs (Level 3) - Fair value is based upon model-based valuation techniques for which at least one significant assumption is not observable in the market.

Transfers between levels are recognized as of the end of the reporting period. There were no transfers in or out of quoted prices in active markets for identical instruments to significant other observable inputs or significant unobservable inputs during the three and six months ended June 30, 2017 and 2016, respectively. Transfers between significant other observable inputs and significant unobservable inputs during the three and six months ended June 30, 2017 and 2016 are included in the summary of changes in recurring fair values measured using unobservable inputs.

The underlying methods used by the third-party pricing services are considered in determining the primary inputs used to determine fair values. Management has evaluated 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 June 30, 2017, December 31, 2016 or June 30, 2016.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The fair value of financial assets and liabilities measured on a recurring basis was as follows as of June 30, 2017 (in thousands):

	Total	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Trading securities:				
U.S. government agency debentures	$ 20,954	$ —	$ 20,954	$ —
U.S. government agency residential mortgage-backed securities	365,171	—	365,171	—
Municipal and other tax-exempt securities	45,444	—	45,444	—
Other trading securities	9,845	—	9,845	—
Total trading securities	441,414	—	441,414	—
Available for sale securities:				
U.S. Treasury	998	998	—	—
Municipal and other tax-exempt securities	32,765	—	28,110	4,655
U.S. government agency residential mortgage-backed securities	5,382,377	—	5,382,377	—
Privately issued residential mortgage-backed securities	103,383	—	103,383	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,782,070	—	2,782,070	—
Other debt securities	4,152	—	—	4,152
Perpetual preferred stock	16,568	—	16,568	—
Equity securities and mutual funds	18,728	3,516	15,212	—
Total available for sale securities	8,341,041	4,514	8,327,720	8,807
Fair value option securities – U.S. government agency residential mortgage-backed securities	445,169	—	445,169	—
Residential mortgage loans held for sale	287,259	—	274,524	12,735
Mortgage servicing rights[1]	245,239	—	—	245,239
Derivative contracts, net of cash collateral[2]	280,289	20,213	260,076	—
Liabilities:				
Derivative contracts, net of cash collateral[2]	285,819	5,919	279,900	—

1 A reconciliation of the beginning and ending fair value of mortgage servicing rights and disclosures of significant assumptions used to determine fair value are presented in Note 6, Mortgage Banking Activities.

2 See Note 3 for detail of fair value of derivative contracts by contract type. Derivative contracts in asset positions that were valued based on quoted prices in active markets for identical instruments (Level 1) are primarily exchange-traded energy and interest rate derivative contacts. Derivative contacts in liability positions that were valued using quoted prices in active markets for identical instruments are exchange-traded interest rate and agricultural derivative contracts, net of cash margin.

The fair value of financial assets and liabilities measured on a recurring basis was as follows as of December 31, 2016 (in thousands):

	Total	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Trading securities:				
U.S. government agency debentures	$ 6,234	$ —	$ 6,234	$ —
U.S. government agency residential mortgage-backed securities	310,067	—	310,067	—
Municipal and other tax-exempt securities	14,427	—	14,427	—
Other trading securities	6,900	—	6,900	—
Total trading securities	337,628	—	337,628	—
Available for sale securities:				
U.S. Treasury	999	999	—	—
Municipal and other tax-exempt securities	40,993	—	35,204	5,789
U.S. government agency residential mortgage-backed securities	5,460,386	—	5,460,386	—
Privately issued residential mortgage-backed securities	115,535	—	115,535	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	3,017,933	—	3,017,933	—
Other debt securities	4,152	—	—	4,152
Perpetual preferred stock	18,474	—	18,474	—
Equity securities and mutual funds	18,357	3,495	14,862	—
Total available for sale securities	8,676,829	4,494	8,662,394	9,941
Fair value option securities – U.S. government agency residential mortgage-backed securities	77,046	—	77,046	—
Residential mortgage loans held for sale	301,897	—	290,280	11,617
Mortgage servicing rights[1]	247,073	—	—	247,073
Derivative contracts, net of cash collateral[2]	689,872	7,541	682,331	—
Liabilities:				
Derivative contracts, net of cash collateral[2]	664,531	6,972	657,559	—

1 A reconciliation of the beginning and ending fair value of mortgage servicing rights and disclosures of significant assumptions used to determine fair value are presented in Note 6, Mortgage Banking Activities.

2 See Note 3 for detail of fair value of derivative contracts by contract type. Derivative contracts based on quoted prices in active markets for identical instruments (Level 1) are exchange-traded interest-rate and energy derivative contacts, net of cash margin. Derivative contracts in liability positions that were valued using quoted prices in active markets for identical instruments (Level 1) are exchange-traded interest rate, energy and agricultural derivative contracts, net of cash margin.

The fair value of financial assets and liabilities measured on a recurring basis was as follows as of June 30, 2016 (in thousands):

	Total	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Trading securities:				
U.S. government agency debentures	$ 18,909	$ —	$ 18,909	$ —
U.S. government agency residential mortgage-backed securities	122,306	—	122,306	—
Municipal and other tax-exempt securities	52,721	—	52,721	—
Other trading securities	17,686	—	17,686	—
Total trading securities	211,622	—	211,622	—
Available for sale securities:				
U.S. Treasury	1,004	1,004	—	—
Municipal and other tax-exempt securities	50,262	—	40,662	9,600
U.S. government agency residential mortgage-backed securities	5,700,268	—	5,700,268	—
Privately issued residential mortgage-backed securities	126,313	—	126,313	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,911,946	—	2,911,946	—
Other debt securities	4,151	—	—	4,151
Perpetual preferred stock	17,931	—	17,931	—
Equity securities and mutual funds	18,814	3,785	15,029	—
Total available for sale securities	8,830,689	4,789	8,812,149	13,751
Fair value option securities:				
U.S. Treasury	25,306	25,306	—	—
U.S. government agency residential mortgage-backed securities	237,959	—	237,959	—
Total fair value option securities	263,265	25,306	237,959	—
Residential mortgage loans held for sale	430,728	—	420,979	9,749
Mortgage servicing rights[1]	190,747	—	—	190,747
Derivative contracts, net of cash collateral[2]	883,673	7,246	876,427	—
Liabilities:				
Derivative contracts, net of cash collateral[2]	719,159	4,808	714,351	—

1 A reconciliation of the beginning and ending fair value of mortgage servicing rights and disclosures of significant assumptions used to determine fair value are presented in Note 6, Mortgage Banking Activities.

2 See Note 3 for detail of fair value of derivative contracts by contract type. Derivative contracts based on quoted prices in active markets for identical instruments (Level 1) are exchange-traded energy and agricultural derivative contacts, net of cash margin. Derivative contracts in liability positions that were valued using quoted prices in active markets for identical instruments (Level 1) are exchange-traded interest rate and energy derivative contracts, net cash margin.

Following is a description of the Company's valuation methodologies used for assets and liabilities measured on a recurring basis:

Securities

The fair values of trading, available for sale and fair value option securities are based on quoted prices for identical instruments in active markets, when available. If quoted prices for identical instruments are not available, fair values are based on significant other observable inputs such as quoted prices of comparable instruments or interest rates and credit spreads, yield curves, volatilities, prepayment speeds and loss severities.

The fair value of certain available for sale municipal and other debt securities may be based on significant unobservable inputs. These significant unobservable inputs include limited observed trades, projected cash flows, current credit rating of the issuers and, when applicable, the insurers of the debt and observed trades of similar debt. Discount rates are primarily based on references to interest rate spreads on comparable securities of similar duration and credit rating as determined by the nationally-recognized rating agencies adjusted for a lack of trading volume. Significant unobservable inputs are developed by investment securities professionals involved in the active trading of similar securities. A summary of significant inputs used to value these securities follows. A management committee composed of senior members from the Company's Capital Markets, Risk Management and Finance departments assesses the appropriateness of these inputs quarterly.

Derivatives

All derivative instruments are carried on the balance sheet at fair value. Fair values for exchange-traded contracts are based on quoted prices. Fair values for over-the-counter interest rate, commodity and foreign exchange contracts are based on valuations provided either by third-party dealers in the contracts, quotes provided by independent pricing services, or a third-party provided pricing model that uses significant other observable market inputs.

Credit risk is considered in determining the fair value of derivative instruments. Management determines fair value adjustments 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. Decreases in counterparty credit rating or grading and increases in price volatility and expected loss severity all tend to increase the credit quality adjustment which reduces the fair value of asset contracts. The reduction in fair value is recognized in earnings during the current period.

We also consider our own credit risk in determining the fair value of derivative contracts. Changes in our credit rating would affect the fair value of our derivative liabilities. In the event of a credit downgrade, the fair value of our derivative liabilities would increase. The change in the fair value would be recognized in earnings in the current period.

Residential Mortgage Loans Held for Sale

Residential mortgage loans held for sale are carried on the balance sheet at fair value. The fair values of residential mortgage loans held for sale are based upon quoted market prices of such loans sold in securitization transactions, including related unfunded loan commitments and forward sales contracts. The fair value of mortgage loans that were unable to be sold to U.S. government agencies were determined using quoted prices of loans that are sold in securitization transactions with a liquidity discount applied.

Other Assets - Private Equity Funds

The fair value of the portfolio investments of the Company's two private equity funds is based upon net asset value reported by the underlying funds, as adjusted by the general partner when necessary, as a practical expedient to measure the fair value of the investments in the underlying funds. The Company's private equity funds provide customers alternative investment opportunities as limited partners of the funds. As fund of funds, the private equity funds invest in other limited partnerships or limited liability companies that invest substantially all of their assets in U.S. companies pursuing diversified investment strategies including early-stage venture capital, distressed securities and corporate or asset buy-outs. Private equity fund assets are long-term, illiquid investments. No secondary market exists for these assets. The private equity funds typically invest in funds that provide no redemption rights to investors. The fair value of the private equity investments may only be realized through cash distributions from the underlying funds.

See Note 7 for disclosure of the fair value of the private equity funds using the net asset value per share of the underlying investments, as a practical expedient, included in Other assets in the Consolidated Balance Sheets of the Company.

The following represents the changes for the three and six months ended June 30, 2017 related to assets measured at fair value on a recurring basis using significant unobservable inputs (in thousands):

	Available for Sale Securities		
	Municipal and other tax-exempt securities	Other debt securities	Residential mortgage loans held for sale
Balance, March 31, 2017	$5,722	$ 4,153	$ 12,679
Transfer to Level 3 from Level 2[1]	—	—	853
Purchases	—	—	—
Proceeds from sales	—	—	(1,030)
Redemptions and distributions	(1,100)	—	—
Gain (loss) recognized in earnings:			
Mortgage banking revenue	—	—	233
Other comprehensive income (loss):			
Net change in unrealized gain (loss)	33	(1)	—
Balance, June 30, 2017	$4,655	$ 4,152	$ 12,735

1 Recurring transfers to Level 3 from Level 2 consist of residential mortgage loans intended for sale to U.S. government agencies that fail to meet conforming standards.

	Available for Sale Securities		
	Municipal and other tax-exempt	Other debt securities	Residential mortgage loans held for sale
Balance, Dec. 31, 2016	$5,789	$ 4,152	$ 11,617
Transfer to Level 3 from Level 2[1]	—	—	2,740
Purchases	—	—	—
Proceeds from sales	—	—	(1,702)
Redemptions and distributions	(1,100)	—	—
Gain (loss) recognized in earnings:			
Mortgage banking revenue	—	—	80
Other comprehensive income (loss):			
Net change in unrealized gain (loss)	(34)	—	—
Balance, June 30, 2017	$4,655	$ 4,152	$ 12,735

1 Recurring transfers to Level 3 from Level 2 consist of residential mortgage loans intended for sale to U.S. government agencies that fail to meet conforming standards.

The following represents the changes for the three and six months ended June 30, 2016 related to assets measured at fair value on a recurring basis using significant unobservable inputs (in thousands):

	Available for Sale Securities		
	Municipal and other tax-exempt securities	Other debt securities	Residential mortgage loans held for sale
Balance, March 31, 2016	$9,614	$ 4,151	$ 8,099
Transfer to Level 3 from Level 2[1]	—	—	3,080
Purchases	—	—	—
Proceeds from sales	—	—	(1,249)
Redemptions and distributions	—	—	—
Gain (loss) recognized in earnings:			
Mortgage banking revenue	—	—	(181)
Other comprehensive income (loss):			
Net change in unrealized gain (loss)	(14)	—	—
Balance, June 30, 2016	$9,600	$ 4,151	$ 9,749

1 Recurring transfers to Level 3 from Level 2 consist of residential mortgage loans intended for sale to U.S. government agencies that fail to meet conforming standards.

	Available for Sale Securities		
	Municipal and other tax-exempt	Other debt securities	Residential mortgage loans held for sale
Balance, Dec. 31, 2015	$9,610	$ 4,151	$ 7,874
Transfer to Level 3 from Level 2[1]	—	—	3,540
Purchases	—	—	—
Proceeds from sales	—	—	(1,362)
Redemptions and distributions	—	—	—
Gain (loss) recognized in earnings			
Mortgage banking revenue	—	—	(303)
Other comprehensive income (loss):			
Net change in unrealized gain (loss)	(10)	—	—
Balance, June 30, 2016	$9,600	$ 4,151	$ 9,749

1 Recurring transfers to Level 3 from Level 2 consist of residential mortgage loans intended for sale to U.S. government agencies that fail to meet conforming standards.

A summary of quantitative information about assets measured at fair value on a recurring basis using Significant Unobservable Inputs (Level 3) as of June 30, 2017 follows (in thousands):

	Par Value	Amortized Cost/Unpaid Principal Balance	Fair Value	Valuation Technique(s)	Unobservable Input	Range (Weighted Average)
Available for sale securities						
Municipal and other tax-exempt securities	$5,095	$ 5,067	$4,655	Discounted cash flows [1]	Interest rate spread	5.98%-5.98% (5.98%) [2] 90.00%-94.90% (92.93%) [3]
Other debt securities	4,400	4,400	4,152	Discounted cash flows [1]	Interest rate spread	5.41%-6.72% (6.57%) [4] 94.31% - 94.38 (94.37%) [3]
Residential mortgage loans held for sale	N/A	13,274	12,563	Quoted prices of loans sold in securitization transactions, with a liquidity discount applied	Liquidity discount applied to the market value of a mortgage loans qualifying for sale to U.S. government agencies.	94.64%

[1] Discounted cash flows developed using discount rates primarily based on reference to interest rate spreads for comparable securities of similar duration and credit rating as determined by the nationally-recognized rating agencies, adjusted for lack of trading volume.

[2] Interest rate yields used to value investment grade tax-exempt securities represent a spread of 360 to 446 basis points over average yields for comparable tax-exempt securities.

[3] Represents fair value as a percentage of par value.

[4] Interest rate yields used to value investment grade taxable securities based on comparable short-term taxable securities which are generally yielding less than 3 percent.

A summary of quantitative information about Recurring Fair Value Measurements based on Significant Unobservable Inputs (Level 3) as of December 31, 2016 follows (in thousands):

	Par Value	Amortized Cost/Unpaid Principal Balance	Fair Value	Valuation Technique(s)	Unobservable Input	Range (Weighted Average)
Available for sale securities						
Municipal and other tax-exempt securities	$6,195	$ 6,163	$5,789	Discounted cash flows [1]	Interest rate spread	5.91%-6.21% (6.16%) [2] 90.00%-93.40% (92.20%) [3]
Other debt securities	4,400	4,400	4,152	Discounted cash flows [1]	Interest rate spread	6.01%-6.26% (6.23%) [4] [3]

						94.34% - 94.36 (94.36%)
Residential mortgage loans held for sale	N/A	12,431	11,617	Quoted prices of loans sold in securitization transactions, with a liquidity discount applied	Liquidity discount applied to the market value of a mortgage loans qualifying for sale to U.S. government agencies.	93.45%

[1] Discounted cash flows developed using discount rates primarily based on reference to interest rate spreads for comparable securities of similar duration and credit rating as determined by the nationally-recognized rating agencies, adjusted for lack of trading volume.

[2] Interest rate yields used to value investment grade tax-exempt securities represent a spread of 467 to 525 basis points over average yields for comparable tax-exempt securities.

[3] Represents fair value as a percentage of par value.

[4] Interest rate yields used to value investment grade taxable securities based on comparable short-term taxable securities which are generally yielding less than 1 percent.

A summary of quantitative information about Recurring Fair Value Measurements based on Significant Unobservable Inputs (Level 3) as of June 30, 2016 follows (in thousands):

	Par Value	Amortized Cost	Fair Value	Valuation Technique(s)	Unobservable Input	Range (Weighted Average)
Available for sale securities						
Municipal and other tax-exempt securities	$10,370	$ 10,312	$9,600	Discounted cash flows [1]	Interest rate spread	5.34%-5.64% (5.60%) [2] 90.00%-93.28% (92.58%) [3]
Other debt securities	4,400	4,400	4,151	Discounted cash flows [1]	Interest rate spread	5.51%-5.96% (5.91%) [4] 94.32% - 94.34 (94.34%) [3]
Residential mortgage loans held for sale	N/A	10,518	9,749	Quoted prices of loans sold in securitization transactions, with a liquidity discount applied	Liquidity discount applied to the market value of a mortgage loans qualifying for sale to U.S. government agencies.	92.69%

[1] Discounted cash flows developed using discount rates primarily based on reference to interest rate spreads for comparable securities of similar duration and credit rating as determined by the nationally-recognized rating agencies, adjusted for lack of trading volume.

[2] Interest rate yields used to value investment grade tax-exempt securities represent a spread of 474 to 513 basis points over average yields for comparable tax-exempt securities.

[3] Represents fair value as a percentage of par value.

[4] Interest rate yields used to value investment grade taxable securities based on comparable short-term taxable securities which are generally yielding less than 1 percent.

Fair Value of Assets and Liabilities Measured on a Non-Recurring Basis

Assets measured at fair value on a non-recurring basis include collateral for certain impaired loans and real property and other assets acquired to satisfy loans, which are based primarily on comparisons to completed sales of similar assets.

The following represents the carrying value of assets measured at fair value on a non-recurring basis (and related losses) during the period. The carrying value represents only those assets with a balance at June 30, 2017 for which the fair value was adjusted during the six months ended June 30, 2017:

Carrying Value at June 30, 2017			Fair Value Adjustments for the Three Months Ended June 30, 2017 Recognized in:		Six Months Ended June 30, 2017 Recognized in:	
Quoted Prices	Significant Other Observable	Significant Unobservable Inputs	Gross charge-offs against	Net losses and expenses of	Gross charge-offs against	Net losses and expenses of

	in Inputs Active Markets for Identical Instruments			allowance for loan losses	repossessed assets, net	allowance for loan losses	repossessed assets, net
Impaired loans	$—	$ 464	$ 3,570	$232	$ —	$ 676	$ —
Real estate and other repossessed assets	—	3,488	530	—	772	—	906

The following represents the carrying value of assets measured at fair value on a non-recurring basis (and related losses) during the period. The carrying value represents only those assets with a balance at June 30, 2016 for which the fair value was adjusted during the six months ended June 30, 2016:

	Carrying Value at June 30, 2016			Fair Value Adjustments for the Three Months Ended June 30, 2016 Recognized in:		Six Months Ended June 30, 2016 Recognized in:	
	Quoted Prices in Active Markets for Identical Instruments	Other Observable Inputs	Significant Unobservable Inputs	Gross charge-offs against allowance for loan losses	Net losses and expenses of repossessed assets, net	Gross charge-offs against allowance for loan losses	Net losses and expenses of repossessed assets, net
Impaired loans	$—	$ 634	$ 42,342	$ 7,041	$ —	$ 29,186	$ —
Real estate and other repossessed assets	—	5,709	1,693	—	751	—	1,068

The fair value of collateral-dependent impaired loans secured by real estate and real estate and other repossessed assets and the related fair value adjustments are generally based on unadjusted third-party appraisals. Our appraisal review policies require appraised values to be supported by observed inputs derived principally from or corroborated by observable market data. Appraisals that are not based on observable inputs or that require significant adjustments or fair value measurements that are not based on third-party appraisals are considered to be based on significant unobservable inputs. Non-recurring fair value measurements of collateral-dependent impaired loans and real estate and other repossessed assets based on significant unobservable inputs are generally due to estimates of current fair values between appraisal dates. Significant unobservable inputs include listing prices for the same or comparable assets, uncorroborated expert opinions or management's knowledge of the collateral or industry. Non-recurring fair value measurements of collateral dependent loans secured by mineral rights are generally determined by our internal staff of engineers on projected cash flows under current market conditions and are based on significant unobservable inputs. Projected cash flows are discounted according to risk characteristics of the underlying oil and gas properties. Assets 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 prices with existing conventional equipment, operating methods and costs. Significant unobservable inputs are developed by asset management and workout professionals and approved by senior Credit Administration executives.

A summary of quantitative information about Non-recurring Fair Value Measurements based on Significant Unobservable Inputs (Level 3) as of June 30, 2017 follows (in thousands):

	Fair Value	Valuation Technique(s)	Unobservable Input	Range (Weighted Average)
Impaired loans	$3,570	Discounted cash flows	Recoverable oil and gas reserves, forward-looking commodity prices, estimated operating costs	75% - 90% (83%)[1]
Real estate and other repossessed assets	530	Appraised value, as adjusted	Marketability adjustment off appraised value[2]	65% - 88% (80%)

[1] Represents fair value as a percentage of the unpaid principal balance.

[2] Marketability adjustments include consideration of estimated costs to sell which is approximately 10% of the fair value.

A summary of quantitative information about Non-recurring Fair Value Measurements based on Significant Unobservable Inputs (Level 3) as of June 30, 2016 follows (in thousands):

	Fair Value	Valuation Technique(s)	Unobservable Input	Range (Weighted Average)
Impaired loans	$ 42,342	Discounted cash flows	Recoverable oil and gas reserves, forward-looking commodity prices, estimated operating costs	25% - 71% (58%)[1]
Real estate and other repossessed assets	1,693	Appraised value, as adjusted	Marketability adjustments off appraised value2	68% - 80% (71%)

1 Represents fair value as a percentage of the unpaid principal balance.

2 Marketability adjustments include consideration of estimated costs to sell which is approximately 10% of the fair value.

Fair Value of Financial Instruments

The following table presents the carrying values and estimated fair values of all financial instruments, including those financial assets and liabilities that are not measured and reported at fair value on a recurring basis or non-recurring basis as of June 30, 2017 (dollars in thousands):

	Carrying Value	Estimated Fair Value	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and due from banks	$ 561,587	$ 561,587	$ 561,587	$ —	$ —
Interest-bearing cash and cash equivalents	2,078,831	2,078,831	2,078,831	—	—
Trading securities:				—	
U.S. government agency debentures	20,954	20,954	—	20,954	—
U.S. government agency residential mortgage-backed securities	365,171	365,171	—	365,171	—
Municipal and other tax-exempt securities	45,444	45,444	—	45,444	—
Other trading securities	9,845	9,845	—	9,845	—
Total trading securities	441,414	441,414	—	441,414	—
Investment securities:					
Municipal and other tax-exempt securities	267,375	270,531	—	270,531	—
U.S. government agency residential mortgage-backed securities	18,035	18,642	—	18,642	—
Other debt securities	205,016	226,502	—	226,502	—
Total investment securities	490,426	515,675	—	515,675	—
Available for sale securities:					
U.S. Treasury	998	998	998	—	—
Municipal and other tax-exempt securities	32,765	32,765	—	28,110	4,655
U.S. government agency residential mortgage-backed securities	5,382,377	5,382,377	—	5,382,377	—
Privately issued residential mortgage-backed securities	103,383	103,383	—	103,383	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,782,070	2,782,070	—	2,782,070	—
Other debt securities	4,152	4,152	—	—	4,152
Perpetual preferred stock	16,568	16,568	—	16,568	—
Equity securities and mutual funds	18,728	18,728	3,516	15,212	—
Total available for sale securities	8,341,041	8,341,041	4,514	8,327,720	8,807
Fair value option securities – U.S. government agency residential mortgage-backed securities	445,169	445,169	—	445,169	—
Residential mortgage loans held for sale	287,259	287,259	—	274,524	12,735
Loans:					
Commercial	10,637,955	10,413,704	—	—	10,413,704
Commercial real estate	3,688,592	3,636,365	—	—	3,636,365
Residential mortgage	1,939,198	1,950,577	—	—	1,950,577
Personal	917,900	909,055	—	—	909,055
Total loans	17,183,645	16,909,701	—	—	16,909,701

Allowance for loan losses	(250,061)	—	—	—	—
Loans, net of allowance	16,933,584	16,909,701	—	—	16,909,701
Mortgage servicing rights	245,239	245,239	—	—	245,239
Derivative instruments with positive fair value, net of cash collateral	280,289	280,289	46,366	233,923	—
Deposits with no stated maturity	20,120,352	20,120,352	—	—	20,120,352
Time deposits	2,196,122	2,164,115	—	—	2,164,115
Other borrowed funds	5,696,666	5,664,273	—	—	5,664,273
Subordinated debentures	144,658	147,204	—	147,204	—
Derivative instruments with negative fair value, net of cash collateral	285,819	285,819	20,915	264,904	—

The following table presents the carrying values and estimated fair values of all financial instruments, including those financial assets and liabilities that are not measured and reported at fair value on a recurring basis or non-recurring basis as of December 31, 2016 (dollars in thousands):

	Carrying Value	Estimated Fair Value	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and due from banks	$ 620,846	$ 620,846	$ 620,846	$ —	$ —
Interest-bearing cash and cash equivalents	1,916,651	1,916,651	1,916,651	—	—
Trading securities:				—	
U.S. government agency debentures	6,234	6,234	—	6,234	—
U.S. government agency residential mortgage-backed securities	310,067	310,067	—	310,067	—
Municipal and other tax-exempt securities	14,427	14,427	—	14,427	—
Other trading securities	6,900	6,900	—	6,900	—
Total trading securities	337,628	337,628	—	337,628	—
Investment securities:					
Municipal and other tax-exempt securities	320,364	321,225	—	321,225	—
U.S. government agency residential mortgage-backed securities	20,777	21,473	—	21,473	—
Other debt securities	205,004	222,795	—	222,795	—
Total investment securities	546,145	565,493	—	565,493	—
Available for sale securities:					
U.S. Treasury	999	999	999	—	—
Municipal and other tax-exempt securities	40,993	40,993	—	35,204	5,789
U.S. government agency residential mortgage-backed securities	5,460,386	5,460,386	—	5,460,386	—
Privately issued residential mortgage-backed securities	115,535	115,535	—	115,535	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	3,017,933	3,017,933	—	3,017,933	—
Other debt securities	4,152	4,152	—	—	4,152
Perpetual preferred stock	18,474	18,474	—	18,474	—
Equity securities and mutual funds	18,357	18,357	3,495	14,862	—
Total available for sale securities	8,676,829	8,676,829	4,494	8,662,394	9,941
Fair value option securities – U.S. government agency residential mortgage-backed securities	77,046	77,046	—	77,046	—
Residential mortgage loans held for sale	301,897	301,897	—	290,280	11,617
Loans:					
Commercial	10,390,824	10,437,016	—	—	10,437,016
Commercial real estate	3,809,046	3,850,981	—	—	3,850,981
Residential mortgage	1,949,832	2,025,159	—	—	2,025,159
Personal	839,958	864,904	—	—	864,904
Total loans	16,989,660	17,178,060	—	—	17,178,060
Allowance for loan losses	(246,159)	—	—	—	—
Loans, net of allowance	16,743,501	17,178,060	—	—	17,178,060
Mortgage servicing rights	247,073	247,073	—	—	247,073

Derivative instruments with positive fair value, net of cash collateral	689,872	689,872	7,541	682,331	—
Deposits with no stated maturity	20,526,295	20,526,295	—	—	20,526,295
Time deposits	2,221,800	2,218,303	—	—	2,218,303
Other borrowed funds	5,572,662	5,556,327	—	—	5,556,327
Subordinated debentures	144,640	128,903	—	128,903	—
Derivative instruments with negative fair value, net of cash collateral	664,531	664,531	6,972	657,559	—

The following table presents the carrying values and estimated fair values of all financial instruments, including those financial assets and liabilities that are not measured and reported at fair value on a recurring basis or non-recurring basis as of June 30, 2016 (dollars in thousands):

	Carrying Value	Estimated Fair Value	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and due from banks	$ 498,713	$ 498,713	$ 498,713	$ —	$ —
Interest-bearing cash and cash equivalents	1,907,838	1,907,838	1,907,838	—	—
Trading securities:				—	
U.S. government agency debentures	18,909	18,909	—	18,909	—
U.S. government agency residential mortgage-backed securities	122,306	122,306	—	122,306	—
Municipal and other tax-exempt securities	52,721	52,721	—	52,721	—
Other trading securities	17,686	17,686	—	17,686	—
Total trading securities	211,622	211,622	—	211,622	—
Investment securities:					
Municipal and other tax-exempt securities	334,551	340,700	—	340,700	—
U.S. government agency residential mortgage-backed securities	23,750	25,233	—	25,233	—
Other debt securities	202,410	233,129	—	233,129	—
Total investment securities	560,711	599,062	—	599,062	—
Available for sale securities:					
U.S. Treasury	1,004	1,004	1,004	—	—
Municipal and other tax-exempt securities	50,262	50,262	—	40,662	9,600
U.S. government agency residential mortgage-backed securities	5,700,268	5,700,268	—	5,700,268	—
Privately issued residential mortgage-backed securities	126,313	126,313	—	126,313	—
Commercial mortgage-backed securities guaranteed by U.S. government agencies	2,911,946	2,911,946	—	2,911,946	—
Other debt securities	4,151	4,151	—	—	4,151
Perpetual preferred stock	17,931	17,931	—	17,931	—
Equity securities and mutual funds	18,814	18,814	3,785	15,029	—
Total available for sale securities	8,830,689	8,830,689	4,789	8,812,149	13,751
Fair value option securities:					
U.S. Treasury	25,306	25,306	25,306	—	—
U.S. government agency residential mortgage-backed securities	237,959	237,959	—	237,959	—
Total fair value option securities	263,265	263,265	25,306	237,959	—
Residential mortgage loans held for sale	430,728	430,728	—	420,979	9,749
Loans:					
Commercial	10,356,437	10,172,701	—	—	10,172,701
Commercial real estate	3,581,966	3,563,378	—	—	3,563,378
Residential mortgage	1,880,923	1,913,208	—	—	1,913,208
Personal	587,423	582,353	—	—	582,353
Total loans	16,406,749	16,231,640	—	—	16,231,640

Allowance for loan losses	(243,259)	—	—	—	—
Loans, net of allowance	16,163,490	16,231,640	—	—	16,231,640
Mortgage servicing rights	190,747	190,747	—	—	190,747
Derivative instruments with positive fair value, net of cash collateral	883,673	883,673	7,246	876,427	—
Deposits with no stated maturity	18,512,740	18,512,740	—	—	18,512,740
Time deposits	2,247,061	2,252,212	—	—	2,252,212
Other borrowed funds	6,360,199	6,342,885	—	—	6,342,885
Subordinated debentures	371,812	371,808	—	150,234	221,574
Derivative instruments with negative fair value, net of cash collateral	719,159	719,159	4,808	714,351	—

Because no market exists for certain of these financial instruments and management does not intend to sell these financial instruments, the fair values shown in the tables above may not represent values at which the respective financial instruments could be sold individually or in the aggregate at the given reporting date.

The following methods and assumptions were used in estimating the fair value of these financial instruments:

Cash and Cash Equivalents

The book value reported in the consolidated balance sheets for cash and short-term instruments approximates those assets' fair values.

Securities

The fair values of securities are generally based on Significant Other Observable Inputs such as quoted prices for comparable instruments or interest rates and credit spreads, yield curves, volatilities, prepayment speeds and loss severities.

Loans

The fair value of loans, excluding loans held for sale, are based on discounted cash flow analyses using interest rates and credit and liquidity spreads currently being offered for loans with similar remaining terms to maturity and risk, adjusted for the impact of interest rate floors and ceilings, which are classified as Significant Unobservable Inputs. The fair values of loans were estimated to approximate their discounted cash flows less loan loss allowances allocated to these loans of $223 million at June 30, 2017, $218 million at December 31, 2016 and $217 million at June 30, 2016. A summary of assumptions used in determining the fair value of loans follows:

	Range of Contractual Yields	Average Re-pricing (in years)	Discount Rate
June 30, 2017:			
Commercial	0.38% - 30.00%	0.64	0.71% - 4.56%
Commercial real estate	0.38% - 18.00%	0.77	1.03% - 4.31%
Residential mortgage	1.74% - 18.00%	2.18	1.75% - 4.19%
Personal	0.25% - 21.00%	0.28	0.70% - 4.68%
December 31, 2016:			
Commercial	0.38% - 30.00%	0.70	0.64% - 4.60%
Commercial real estate	0.38% - 18.00%	0.71	0.94% - 4.27%
Residential mortgage	1.74% - 18.00%	2.27	1.71% - 4.26%
Personal	0.25% - 21.00%	0.40	1.03% - 4.59%
June 30, 2016:			
Commercial	0.38% - 30.00%	0.69	0.55% - 3.68%
Commercial real estate	0.38% - 18.00%	0.73	0.80% - 3.65%
Residential mortgage	1.70% - 18.00%	1.97	1.25% - 3.75%
Personal	0.25% - 21.00%	0.35	0.71% - 3.91%

Deposits

The fair values of time deposits are based on discounted cash flow analyses using interest rates currently being offered on similar transactions which are considered Significant Unobservable Inputs. Estimated fair value of deposits with no stated maturity, which includes demand deposits, transaction deposits, money market deposits and savings accounts, is equal to the amount payable on demand. Although market premiums paid reflect an additional value for these low cost deposits, adjusting fair value for the expected benefit of these deposits is prohibited. Accordingly, the positive effect of such deposits is not included in the tables above.

A summary of assumptions used in determining the fair value of time deposits follows:

	Range of Contractual Yields	Average Re-pricing (in years)	Discount Rate
June 30, 2017	0.03% - 10.00%	1.91	1.81% - 2.12%
December 31, 2016	0.02% - 9.65%	1.96	1.57% - 2.00%
June 30, 2016	0.03% - 9.64%	2.15	1.16% - 1.43%

Other Borrowings and Subordinated Debentures

The fair values of these instruments are based upon discounted cash flow analyses using interest rates currently being offered on similar instruments, which are considered Significant Unobservable Inputs. A summary of assumptions used in determining the fair value of other borrowings and subordinated debentures follows:

	Range of Contractual Yields	Average Re-pricing (in years)	Discount Rate
June 30, 2017:			
Other borrowed funds	0.25% - 3.58%	0.02	1.06% - 3.69%
Subordinated debentures	5.38%	16.90	4.89%
December 31, 2016:			
Other borrowed funds	0.25% - 3.50%	0.00	0.55% - 3.22%
Subordinated debentures	5.38%	16.86	6.11%
June 30, 2016:			
Other borrowed funds	0.25% - 3.28%	0.02	0.30% - 2.92%
Subordinated debentures	1.32% - 5.38%	8.35	2.16% - 5.38%

Off-Balance Sheet Instruments

The fair values of commercial loan commitments are based on fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements. The fair values of these off-balance sheet instruments were not significant at June 30, 2017, December 31, 2016 or June 30, 2016.

Fair Value Election

As more fully disclosed in Note 2 and Note 6 to the Consolidated Financial Statements, the Company has elected to carry all residential mortgage-backed securities guaranteed by U.S. government agencies and U.S. Treasury securities held as economic hedges against changes in the fair value of mortgage servicing rights and all residential mortgage loans originated for sale at fair value. Changes in the fair value of these financial instruments are recognized in earnings.

(12) Federal and State Income Taxes

The reconciliations of income (loss) attributable to continuing operations at the U.S. federal statutory tax rate to income tax expense are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Amount:				
Federal statutory tax	$47,800	$33,869	$92,168	$55,715
Tax exempt revenue	(3,224)	(2,568)	(6,335)	(5,100)
Effect of state income taxes, net of federal benefit	2,944	1,557	5,389	3,858
Utilization of tax credits:				
Low-income housing tax credit, net of amortization	(526)	(572)	(2,249)	(1,882)
Other tax credits	(363)	(521)	(727)	(1,042)
Bank-owned life insurance	(775)	(810)	(1,547)	(1,601)
Share-based compensation	1,636	—	(2,301)	—
Other, net	213	(458)	1,410	1,977
Total income tax expense	$47,705	$30,497	$85,808	$51,925

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Percent of pretax income:				
Federal statutory tax	35.0 %	35.0 %	35.0 %	35.0 %
Tax exempt revenue	(2.4)	(2.7)	(2.4)	(3.2)
Effect of state income taxes, net of federal benefit	2.2	1.6	2.0	2.4
Utilization of tax credits:				
Low-income housing tax credit, net of amortization	(0.4)	(0.6)	(0.8)	(1.2)
Other tax credits	(0.3)	(0.5)	(0.3)	(0.6)
Bank-owned life insurance	(0.6)	(0.8)	(0.6)	(1.0)
Share-based compensation	1.2	—	(0.9)	—
Other, net	0.2	(0.5)	0.6	1.2
Total	34.9 %	31.5 %	32.6 %	32.6 %

(13) Subsequent Events

The Company evaluated events from the date of the consolidated financial statements on June 30, 2017 through the issuance of those consolidated financial statements included in this Quarterly Report on Form 10-Q. No events were identified requiring recognition in and/or disclosure in the consolidated financial statements.

Six-Month Financial Summary – Unaudited
Consolidated Daily Average Balances, Average Yields and Rates

(In Thousands, Except Per Share Data)	Six Months Ended					
	June 30, 2017			June 30, 2016		
	Average Balance	Revenue/ Expense	Yield/ Rate	Average Balance	Revenue/ Expense	Yield/ Rate
Assets						
Interest-bearing cash and cash equivalents	$2,047,633	$9,442	0.93%	$2,037,433	$5,275	0.52%
Trading securities	517,447	8,886	3.59%	212,954	1,502	2.13%
Investment securities						
Taxable	220,528	5,944	5.39%	228,460	6,244	5.47%
Tax-exempt	294,539	3,650	2.48%	346,468	3,862	2.23%
Total investment securities	515,067	9,594	3.73%	574,928	10,106	3.52%
Available for sale securities						
Taxable	8,420,578	85,847	2.06%	8,848,806	88,277	2.04%
Tax-exempt	54,470	1,453	5.71%	71,967	1,738	5.01%
Total available for sale securities	8,475,048	87,300	2.08%	8,920,773	90,015	2.06%
Fair value option securities	446,478	5,919	2.62%	409,456	4,651	2.29%
Restricted equity securities	304,074	8,708	5.73%	306,833	8,174	5.33%
Residential mortgage loans held for sale	232,932	4,222	3.65%	345,429	6,208	3.62%
Loans	17,132,662	336,258	3.96%	16,127,563	286,889	3.58%
Allowance for loan losses	(250,512)			(239,782)		
Loans, net of allowance	16,882,150	336,258	4.01%	15,887,781	286,889	3.63%
Total earning assets	29,420,829	470,329	3.23%	28,695,587	412,820	2.91%
Receivable on unsettled securities sales	70,990			82,335		
Cash and other assets	3,168,341			2,969,335		
Total assets	$32,660,160			$31,747,257		
Liabilities and equity						
Interest-bearing deposits:						
Transaction	$10,326,232	$11,651	0.23%	$9,673,849	$6,577	0.14%
Savings	451,476	182	0.08%	407,300	195	0.10%
Time	2,231,526	12,143	1.10%	2,332,082	13,767	1.19%
Total interest-bearing deposits	13,009,234	23,976	0.37%	12,413,231	20,539	0.33%
Funds purchased	59,407	160	0.54%	91,446	109	0.24%
Repurchase agreements	475,191	100	0.04%	636,952	161	0.05%
Other borrowings	5,654,534	26,921	0.96%	5,829,974	16,482	0.57%
Subordinated debentures	144,649	4,028	5.62%	229,581	1,588	1.39%
Total interest-bearing liabilities	19,343,015	55,185	0.58%	19,201,184	38,879	0.41%
Non-interest bearing demand deposits	9,220,877			8,133,945		
Due on unsettled securities purchases	124,666			125,931		
Other liabilities	602,964			951,455		
Total equity	3,368,638			3,334,742		
Total liabilities and equity	$32,660,160			$31,747,257		
Tax-equivalent Net Interest Revenue		$415,144	2.65%		$373,941	2.50%
Tax-equivalent Net Interest Revenue to Earning Assets			2.85%			2.64%
Less tax-equivalent adjustment		8,758			8,757	
Net Interest Revenue		406,386			365,184	
Provision for credit losses		—			55,000	
Other operating revenue		352,548			342,956	

Other operating expense	495,596	493,955
Income before taxes	263,338	159,185
Federal and state income taxes	85,808	51,925
Net income	177,530	107,260
Net income (loss) attributable to non-controlling interests	1,027	(1,105)
Net income attributable to BOK Financial Corp. shareholders	$176,503	$108,365
Earnings Per Average Common Share Equivalent:		
Net income:		
Basic	$2.70	$1.64
Diluted	$2.69	$1.64

Yield calculations are shown on a tax equivalent at the statutory federal and state rates for the periods presented. The yield calculations exclude security trades that have been recorded on trade date with no corresponding interest income and the unrealized gains and losses. The yield calculation also includes average loan balances for which the accrual of interest has been discontinued and are net of unearned income. Yield / rate calculations are generally based on the conventions that determine how interest income and expense is accrued.

Quarterly Financial Summary – Unaudited
Consolidated Daily Average Balances, Average Yields and Rates

(In Thousands, Except Per Share Data)	Three Months Ended					
	June 30, 2017			March 31, 2017		
	Average Balance	Revenue/ Expense	Yield/ Rate	Average Balance	Revenue/ Expense	Yield/ Rate
Assets						
Interest-bearing cash and cash equivalents	$2,007,746	$5,198	1.04%	$2,087,964	$4,244	0.82%
Trading securities	456,028	3,517	3.23%	579,549	5,369	3.87%
Investment securities						
Taxable	219,385	2,931	5.34%	221,684	3,013	5.44%
Tax-exempt	279,987	1,757	2.51%	309,252	1,893	2.45%
Total investment securities	499,372	4,688	3.76%	530,936	4,906	3.70%
Available for sale securities						
Taxable	8,332,709	42,920	2.09%	8,509,423	42,927	2.02%
Tax-exempt	51,348	725	6.09%	57,626	728	5.37%
Total available for sale securities	8,384,057	43,645	2.11%	8,567,049	43,655	2.05%
Fair value option securities	476,102	3,539	2.92%	416,524	2,380	2.27%
Restricted equity securities	295,743	4,399	5.95%	312,498	4,309	5.52%
Residential mortgage loans held for sale	245,401	2,386	3.92%	220,325	1,836	3.35%
Loans	17,129,533	172,139	4.03%	17,135,825	164,119	3.88%
Allowance for loan losses	(251,632)			(249,379)		
Loans, net of allowance	16,877,901	172,139	4.09%	16,886,446	164,119	3.94%
Total earning assets	29,242,350	239,511	3.30%	29,601,291	230,818	3.15%
Receivable on unsettled securities sales	79,248			62,641		
Cash and other assets	3,046,973			3,291,057		
Total assets	$32,368,571			$32,954,989		
Liabilities and equity						
Interest-bearing deposits:						
Transaction	$10,087,640	$6,437	0.26%	$10,567,475	$5,214	0.20%
Savings	461,586	95	0.08%	441,254	87	0.08%
Time	2,204,422	6,090	1.11%	2,258,930	6,053	1.09%
Total interest-bearing deposits	12,753,648	12,622	0.40%	13,267,659	11,354	0.35%
Funds purchased	63,263	96	0.61%	55,508	64	0.47%
Repurchase agreements	427,353	68	0.06%	523,561	32	0.02%
Other borrowings	5,572,031	15,188	1.09%	5,737,955	11,733	0.83%
Subordinated debentures	144,654	2,003	5.55%	144,644	2,025	5.68%
Total interest-bearing liabilities	18,960,949	29,977	0.63%	19,729,327	25,208	0.52%
Non-interest bearing demand deposits	9,338,683			9,101,763		
Due on unsettled securities purchases	157,438			91,529		
Other liabilities	502,068			704,978		
Total equity	3,409,433			3,327,392		
Total liabilities and equity	$32,368,571			$32,954,989		
Tax-equivalent Net Interest Revenue		$209,534	2.67%		$205,610	2.63%
Tax-equivalent Net Interest Revenue to Earning Assets			2.89%			2.81%
Less tax-equivalent adjustment		4,330			4,428	
Net Interest Revenue		205,204			201,182	
Provision for credit losses		—			—	

Other operating revenue	182,252	170,296
Other operating expense	250,885	244,711
Income before taxes	136,571	126,767
Federal and state income taxes	47,705	38,103
Net income	88,866	88,664
Net income (loss) attributable to non-controlling interests	719	308
Net income attributable to BOK Financial Corp. shareholders	$88,147	$88,356
Earnings Per Average Common Share Equivalent:		
Basic	$1.35	$1.35
Diluted	$1.35	$1.35

Yield calculations are shown on a tax equivalent at the statutory federal and state rates for the periods presented. The yield calculations exclude security trades that have been recorded on trade date with no corresponding interest income and the unrealized gains and losses. The yield calculation also includes average loan balances for which the accrual of interest has been discontinued and are net of unearned income. Yield / rate calculations are generally based on the conventions that determine how interest income and expense is accrued.

Three Months Ended								
December 31, 2016			September 30, 2016			June 30, 2016		
Average Balance	Revenue /Expense	Yield / Rate	Average Balance	Revenue / Expense	Yield / Rate	Average Balance	Revenue / Expense	Yield / Rate
$2,032,785	$2,800	0.55%	$2,047,991	$2,651	0.51%	$2,022,028	$2,569	0.51%
476,498	4,554	3.91%	366,545	3,157	2.71%	237,808	775	1.89%
224,376	3,024	5.39%	224,518	3,000	5.34%	227,103	3,069	5.41%
318,493	1,854	2.33%	328,074	1,851	2.26%	335,288	1,878	2.25%
542,869	4,878	3.60%	552,592	4,851	3.51%	562,391	4,947	3.52%
8,706,449	42,482	1.98%	8,795,869	42,513	1.99%	8,819,135	43,345	2.01%
60,106	748	5.27%	66,721	867	5.47%	70,977	862	5.06%
8,766,555	43,230	2.00%	8,862,590	43,380	2.01%	8,890,112	44,207	2.04%
210,733	541	0.99%	266,998	1,531	1.70%	368,434	2,062	2.19%
334,114	4,554	5.45%	335,812	4,510	5.37%	319,136	3,863	4.84%
345,066	2,835	3.31%	445,930	3,615	3.28%	401,114	3,508	3.53%
16,723,588	156,734	3.67%	16,447,750	150,077	3.63%	16,263,132	144,708	3.58%
(246,977)			(247,901)			(245,448)		
16,476,611	156,734	3.72%	16,199,849	150,077	3.69%	16,017,684	144,708	3.63%
29,185,231	220,126	2.98%	29,078,307	213,772	2.93%	28,818,707	206,639	2.91%
33,813			259,906			49,568		
3,742,032			3,308,260			3,117,767		
$32,961,076			$32,646,473			$31,986,042		
$9,980,132	$3,912	0.16%	$9,650,618	$3,417	0.14%	$9,590,855	$3,260	0.14%
421,654	91	0.09%	420,009	100	0.09%	417,122	102	0.10%
2,177,035	6,140	1.12%	2,197,350	6,295	1.14%	2,297,621	6,635	1.16%
12,578,821	10,143	0.32%	12,267,977	9,812	0.32%	12,305,598	9,997	0.33%
62,004	44	0.28%	68,280	33	0.19%	70,682	33	0.19%
560,891	34	0.02%	522,822	53	0.04%	611,264	72	0.05%
6,072,150	9,315	0.61%	6,342,369	9,105	0.57%	6,076,028	8,675	0.57%
144,635	2,003	5.51%	255,890	2,468	3.84%	232,795	878	1.52%
19,418,501	21,539	0.44%	19,457,338	21,471	0.44%	19,296,367	19,655	0.41%
9,124,595			8,497,037			8,162,134		
77,575			200,574			93,812		
1,004,212			1,099,858			1,089,483		
3,336,193			3,391,666			3,344,246		
$32,961,076			$32,646,473			$31,986,042		
	$198,587	2.54%		$192,301	2.49%		$186,984	2.50%
		2.69%			2.64%			2.63%
	4,389			4,455			4,372	
	194,198			187,846			182,612	
	—			10,000			20,000	
	143,754			187,310			185,542	
	265,547			258,088			251,385	
	72,405			107,068			96,769	

22,496	31,956	30,497
49,909	75,112	66,272
(117)	835	471
$50,026	$74,277	$65,801
$0.76	$1.13	$1.00
$0.76	$1.13	$1.00

Quarterly Earnings Trends – Unaudited
(In thousands, except share and per share data)

	Three Months Ended				
	June 30, 2017	Mar. 31, 2017	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016
Interest revenue	$235,181	$226,390	$215,737	$209,317	$202,267
Interest expense	29,977	25,208	21,539	21,471	19,655
Net interest revenue	205,204	201,182	194,198	187,846	182,612
Provision for credit losses	—	—	—	10,000	20,000
Net interest revenue after provision for credit losses	205,204	201,182	194,198	177,846	162,612
Other operating revenue					
Brokerage and trading revenue	31,764	33,623	28,500	38,006	39,530
Transaction card revenue	35,296	32,127	34,521	33,933	34,950
Fiduciary and asset management revenue	41,808	38,631	34,535	34,073	34,813
Deposit service charges and fees	23,354	23,030	23,365	23,668	22,618
Mortgage banking revenue	30,276	25,191	28,414	38,516	34,884
Other revenue	14,984	11,752	12,693	13,080	13,352
Total fees and commissions	177,482	164,354	162,028	181,276	180,147
Other gains, net	6,108	3,627	(1,279)	2,442	1,307
Gain (loss) on derivatives, net	3,241	(450)	(35,815)	2,226	10,766
Gain (loss) on fair value option securities, net	1,984	(1,140)	(20,922)	(3,355)	4,279
Change in fair value of mortgage servicing rights	(6,943)	1,856	39,751	2,327	(16,283)
Gain (loss) on available for sale securities, net	380	2,049	(9)	2,394	5,326
Total other operating revenue	182,252	170,296	143,754	187,310	185,542
Other operating expense					
Personnel	143,744	136,425	141,132	139,212	139,213
Business promotion	7,738	6,717	7,344	6,839	6,703
Charitable contributions to BOKF Foundation	—	—	2,000	—	—
Professional fees and services	12,419	11,417	16,828	14,038	14,158
Net occupancy and equipment	21,125	21,624	21,470	20,111	19,677
Insurance	689	6,404	8,705	9,390	7,129
Data processing and communications	36,330	34,902	33,691	33,331	32,802
Printing, postage and supplies	4,140	3,851	3,998	3,790	3,889
Net losses (gains) and operating expenses of repossessed assets	2,267	1,009	1,627	(926)	1,588
Amortization of intangible assets	1,803	1,802	1,558	1,521	2,624
Mortgage banking costs	12,072	13,003	17,348	15,963	15,746
Other expense	8,558	7,557	9,846	14,819	7,856
Total other operating expense	250,885	244,711	265,547	258,088	251,385
Net income before taxes	136,571	126,767	72,405	107,068	96,769
Federal and state income taxes	47,705	38,103	22,496	31,956	30,497
Net income	88,866	88,664	49,909	75,112	66,272
Net income (loss) attributable to non-controlling interests	719	308	(117)	835	471
Net income attributable to BOK Financial Corporation shareholders	$88,147	$88,356	$50,026	$74,277	$65,801
Earnings per share:					
Basic	$1.35	$1.35	$0.76	$1.13	$1.00

Diluted	$1.35	$1.35	$0.76	$1.13	$1.00
Average shares used in computation:					
Basic	64,729,752	64,715,964	64,719,018	65,085,392	65,245,887
Diluted	64,793,134	64,783,737	64,787,728	65,157,841	65,302,926

PART II. Other Information

Item 1. Legal Proceedings

See discussion of legal proceedings at Note 7 to the Consolidated Financial Statements.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

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 June 30, 2017.

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
April 1 to April 30, 2017	—	$ ——		2,120,757
May 1 to May 31, 2017	—	$ ——		2,120,757
June 1 to June 30, 2017	—	$ ——		2,120,757
Total	—		—	

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 June 30, 2017, the Company had repurchased 2,879,243 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 mature shares from employees to cover the exercise price and taxes in connection with employee equity compensation.

Item 6. Exhibits

31.1 Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

31.2 Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

32 Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

101 Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Earnings, (iii) the Consolidated Statements of Changes in Equity, (iv) the Consolidated Statement of Cash Flows and (v) the Notes to Consolidated Financial Statements

Items 1A, 3, 4 and 5 are not applicable and have been omitted.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

BOK FINANCIAL CORPORATION
(Registrant)

Date: July 28, 2017

/s/ Steven E. Nell
Steven E. Nell
Executive Vice President and
Chief Financial Officer

/s/ John C. Morrow
John C. Morrow
Senior Vice President and
Chief Accounting Officer