Investor Presentation

NASDAQ: BOKF
FORWARD LOOKING STATEMENTS
This presentation contains statements that are based on management's beliefs, assumptions, current expectations, estimates, and projections about BOK Financial Corporation, the financial services industry, and the economy generally. These remarks constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “anticipates”, “believes”, “estimates”, “expects”, “forecasts”, “plans”, “projects”, variations of 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 involve judgments as to future events and are inherently forward-looking statements. Assessments that BOK Financial’s acquisitions, including its latest acquisition of CoBiz Financial, Inc., 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 which BOKF has not independently verified. These statements are not guarantees of future performance and involve certain risks, uncertainties, and assumptions which 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 interest rates and interest rate relationships, inflation, demand for products and services, the degree of competition by traditional and non-traditional 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. There may also be difficulties and delays in integrating CoBiz Financial Inc.’s business or fully realizing cost savings and other benefits including, but not limited to, business disruption and customer acceptance of BOK Financial Corporation’s products and services. For a discussion of risk factors that may cause actual results to differ from expectations, please refer to BOK Financial Corporation’s most recent annual and quarterly reports. BOK Financial Corporation 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.
Annualized, pro forma, projected and estimated numbers are used for illustrative purpose only, are not forecasts and may not reflect actual results.
Non-GAAP Financial Measures: This presentation may refer to non-GAAP financial measures. Additional information on these financial measures is available in BOK Financial’s 10-Q and 10-K filings with the Securities and Exchange Commission which can be accessed at www.BOKF.com.
• Top 30 national/regional bank*

• Long-term focused Midwest/Southwest franchise with market cap over $6 billion.

• Seasoned management team

• Proven ability to deliver organic growth

• Consistent execution

• Consistent strategy

• NASDAQ: BOKF

• CoBiz Financial added $3.9 billion in assets on Oct 1, 2018

---

* Total assets at 12/31/2018

---

<table>
<thead>
<tr>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>$38 billion</td>
</tr>
<tr>
<td>Loans</td>
<td>$22 billion</td>
</tr>
<tr>
<td>Deposits</td>
<td>$25 billion</td>
</tr>
<tr>
<td>Fiduciary Assets</td>
<td>$45 billion</td>
</tr>
<tr>
<td>Assets Under Management &amp; Custody</td>
<td>$76 billion</td>
</tr>
</tbody>
</table>
Core Strategy: Build a recession-proof bank that will outperform peers across the economic cycle

- Consistent organic growth
- Robust portfolio of fee generating businesses provides balance in periods of economic instability
- Differentiated and growing specialty lending businesses
- Opportunistic investment in new businesses
- Disciplined credit focus

<table>
<thead>
<tr>
<th></th>
<th>As of 12/31/18</th>
<th>10 Yr. TSR</th>
<th>15 Yr. TSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOKF</td>
<td>134%</td>
<td>165%</td>
<td></td>
</tr>
<tr>
<td>Peer average</td>
<td>132%</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>Peer median</td>
<td>106%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>NASDAQ Bank Index</td>
<td>100%</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>KBW Bank Index</td>
<td>135%</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>

“There is no principle more emphasized in our organization than managing for long-term value rather than short-term results.”

– George Kaiser, Chairman
• Closed October 1, 2018 -- Only 3.5 months after announcement

• Acquisition of a “Best in Class” commercial bank is manifesting itself in both the quality of the people and the client relationships

• Full business integration of revenue producers and client facing employees into our lines of business at 12/31/2018

• Integration teams executing to a conversion date over the March 23rd weekend
  ◦ $40 million in projected integration costs
  ◦ 2018: $17 million
  ◦ Q1 2019: $23 million

• Full run-rate efficiencies anticipated for Q2, Q3, and Q4 2019

• Pro forma 2019 GAAP EPS accretion of ~6% or better is the expectation
• 39% fee income is a differentiator for BOKF compared to other midsized regional banks

• Well diversified: no single component of fee income accounts for more than 12% of total revenue

• Further diversity within the fee income categories:
  
  • **Brokerage and trading**: institutional trading, retail brokerage, investment banking, and financial risk management
  
  • **Transaction card**: ATM network and merchant services
  
  • **Fiduciary and asset management**: Mutual funds; corporate, foundation, and personal trust; 401(k) services; and professional services including mineral management
  
  • **Mortgage banking**: direct and online mortgage originations, mortgage servicing

**Sources of Revenue: 12/31/2018 YTD**

- Net Interest Revenue: 61%
- Brokerage and Trading: 7%
- Transaction Card: 5%
- Fiduciary and Asset Management: 11%
- Deposit Service Charges: 7%
- Mortgage Banking: 6%
- Other Revenue: 3%
### Strong Balance Sheet

<table>
<thead>
<tr>
<th>Metric</th>
<th>12/31/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period End Loans</td>
<td>$21.7 billion</td>
</tr>
<tr>
<td>Period End Deposits</td>
<td>$25.3 billion</td>
</tr>
<tr>
<td>Loan to Deposit Ratio</td>
<td>85.7%</td>
</tr>
</tbody>
</table>

**Capital Ratios:**

<table>
<thead>
<tr>
<th>Capital Ratios</th>
<th>Regulatory minimum for well-capitalized</th>
<th>12/31/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Equity Tier 1</td>
<td>7%</td>
<td>10.92%</td>
</tr>
<tr>
<td>Tier 1 Capital Ratio</td>
<td>8.5%</td>
<td>10.92%</td>
</tr>
<tr>
<td>Total Capital Ratio</td>
<td>10.5%</td>
<td>12.50%</td>
</tr>
<tr>
<td>Leverage Ratio</td>
<td>4%</td>
<td>8.82%</td>
</tr>
</tbody>
</table>

### Capital Deployment

- Primary use is for organic growth and regular quarterly dividends
- Disciplined M&A of targeted firms that add to the quality, scale and scope of client offerings
- Opportunistic share re-purchases
Strong Core Deposit Franchise

Deposit mix and cost ($bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand</th>
<th>Interest-bearing transaction</th>
<th>Savings</th>
<th>Time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec '14</td>
<td>$21</td>
<td></td>
<td></td>
<td></td>
<td>$25</td>
</tr>
<tr>
<td>Dec '15</td>
<td>$21</td>
<td></td>
<td></td>
<td></td>
<td>$24</td>
</tr>
<tr>
<td>Dec '16</td>
<td>$23</td>
<td></td>
<td></td>
<td></td>
<td>$23</td>
</tr>
<tr>
<td>Dec '17</td>
<td>$22</td>
<td></td>
<td></td>
<td></td>
<td>$22</td>
</tr>
<tr>
<td>Dec '18</td>
<td>$25</td>
<td></td>
<td></td>
<td></td>
<td>$24</td>
</tr>
</tbody>
</table>

Cost: 0.40% 0.34% 0.44% 0.79% 0.87%

Geographic deposit mix

<table>
<thead>
<tr>
<th>MSA</th>
<th>Branches</th>
<th>Deposit share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tulsa, OK</td>
<td>24</td>
<td>32%</td>
</tr>
<tr>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>21</td>
<td>2%</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Albuquerque, NM</td>
<td>16</td>
<td>11%</td>
</tr>
<tr>
<td>Houston-The Woodlands-Sugar Land, TX</td>
<td>12</td>
<td>1%</td>
</tr>
<tr>
<td>Denver-Aurora-Lakewood, CO</td>
<td>17</td>
<td>4%</td>
</tr>
<tr>
<td>Kansas City, MO-KS</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td>Phoenix-Mesa-Scottsdale, AZ</td>
<td>8</td>
<td>1%</td>
</tr>
<tr>
<td>Fayetteville-Springdale-Rogers, AR-MO</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Other MSAs</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td><strong>Total Branches</strong></td>
<td><strong>148</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Company filings; SNL Financial
Diversified Loan Portfolio

Loan Portfolio Segmentation

- General C&I 31%
- Commercial Real Estate 23%
- Energy 17%
- Healthcare 13%
- Resi 11%
- Personal 5%
- Other 19%

Loan Portfolio by Market

- TX 29%
- CO 15%
- AZ 8%
- KS/MO 6%
- NM 4%
- OK 19%
- Other 19%

Disciplined concentration management
Diversified by sector and geography
100 year history in energy lending and a playbook that works:

- Focus on first lien, senior secured E&P lending – the “sweet spot” in energy lending
- Internal staff of 13 petroleum engineers and engineering techs to confirm property values – a material investment that is a key to strong credit performance across the cycle.
- Focus on on-shore “lower 48” property sets with no deep-water offshore exposure
- Minimal exposure to second liens, undeveloped reserves, or other higher-risk components of the capital stack
- 50-60% loan to value on proved producing reserves
- Actual forward markets are the value determinant for borrowing bases
- Extraction and transportation costs are deducted from collateral values

At 12/31/2018:

- $3.6 billion outstanding and $3.2 billion unfunded commitments
- E&P line utilization 54%

Portfolio Composition at 12/31/2018

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>E&amp;P</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.07%</td>
<td>1.43%</td>
<td>0.23%</td>
<td>0.61%</td>
</tr>
<tr>
<td>Total Energy</td>
<td>-0.01%</td>
<td>-0.15%</td>
<td>0.17%</td>
<td>1.17%</td>
<td>0.18%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

Strong through-the-cycle credit performance:
Healthcare Banking Expertise

- Growing line of business within commercial banking
- As of December 31, 2018, outstandings totaled $2.4 billion across 31 states
- Healthcare portfolio characteristics:
  - Favorable LIBOR spreads
  - Above-average loan utilization rates
  - Predominately BOK Financial originated commitments - less than 12% of commitments from broadly syndicated transactions
  - Senior Housing commitments real-estate collateralized and secured
  - Favorable credit metrics - No senior housing charge-offs (net of recoveries) since 2003

<table>
<thead>
<tr>
<th>Loans Outstanding ($000,000’s)</th>
<th>2013</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR: 16.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Charge-Offs</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Housing</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Hospital</td>
<td>-1.10%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.93%</td>
<td>2.05%</td>
</tr>
<tr>
<td>Medical</td>
<td>0.02%</td>
<td>-0.03%</td>
<td>-0.12%</td>
<td>-0.02%</td>
<td>1.31%</td>
<td>-0.32%</td>
</tr>
</tbody>
</table>
Commercial Real Estate

- $4.8 billion outstanding and $1.8 billion unfunded commitments at December 31, 2018.
- Over two-thirds of outstanding collateral within BOKF footprint.
- BOKF allocates 175% of Tier 1 capital plus reserves to CRE.
- Further controls and limitations by product type and geography. Concentration guidelines are analyzed and adjusted quarterly as needed.
- Extensive, granular loan underwriting guideline standards reviewed and adjusted semi-annually.
- Strong relationship between the front line production/bankers and credit concurrence officers. Bi-weekly vetting and discussion of potential opportunities in loan pipeline.
- Minimal exposure to residential construction and land development (highest risk, most cyclical sector in CRE)

CRE Portfolio by Product Type
- Multifamily
- Retail
- Office
- Industrial
- Residential Cons
- Other CRE

CRE Portfolio by Collateral Location
- Oklahoma
- Texas
- NM
- Colorado
- Arizona
- KS/MO
- Other
Wealth Management

- Four primary lines of business:
  - The Private Bank
  - BOK Financial Advisors
  - Institutional Wealth Management
  - Cavanal Hill Investment Management
- Clients include high net worth individuals, corporations, pensions, foundations, government entities, etc.
- Wealth Management by the numbers:
  - Assets under management or custody: $76 billion
  - Fiduciary assets: $45 billion
  - Loans: Over $1.4 billion
  - Deposits: Over $5.5 billion
  - More than $1 trillion in traded securities annually

Awards, Recognition, and Rankings:
- 19 “Best in Class” awards for Retirement Plans group
- Seventh largest corporate trustee bank ranked by number of issues and dollar amount
- Two five-star ratings from Morningstar for Cavanal Hill
- Three #1 Lipper awards in 2016 for Cavanal Hill
- Five top-ten rankings for investment banking underwriting services
- One of the top 25 firms that fulfills the hedging needs of the mortgage banking industry.
**Transaction Processing**

**Debit Processing & ATM Network**
- Among the top 10 networks in the US
- Operates nationally with customers based in 26 states and the Virgin Islands; more than 65% of clients outside Oklahoma
- Clients: Banks / Credit Unions / C-Store Chains
- In 2018, processed 657 million EFT transactions

**Merchant Payment Processing**
- Process payments for 6,042 merchant and cash advance locations
- In 2018, processed $2.4 billion in merchant sales
Mortgage Banking

- Top 50 U.S. mortgage originator
- Three lines of business:
  - Direct mortgage origination through BOKF retail network
  - Growing online sales channel – HomeDirect Mortgage
  - Mortgage Servicing
- Annual origination volume in 2018 ~ $2.5 billion
- Servicing nearly $22 billion of mortgages at December 31, 2018
4Q 2018 Financial Results
Fourth Quarter and FY2018 Summary

Noteworthy items impacting FY 2018 profitability:

- Strong growth in net interest margin and net interest income
- Outstanding loan growth
- Diligent expense management
- Benign credit environment

Noteworthy items impacting Q4 2018 profitability:

- CoBiz integration expense of $14.5 million realized this quarter
- $9.0 million in loan loss provision due to continued loan growth
- Broad-based loan growth continues
## Loan Portfolio

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>$3,590.3</td>
<td>$3,570.2</td>
<td>$3,294.9</td>
<td>$2,930.2</td>
<td>8.4%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Services</td>
<td>3,252.1</td>
<td>2,647.8</td>
<td>2,597.7</td>
<td>2,522.0</td>
<td>1.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>2,733.5</td>
<td>2,417.8</td>
<td>2,370.5</td>
<td>2,243.5</td>
<td>2.0%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>1,621.2</td>
<td>1,468.3</td>
<td>1,650.7</td>
<td>1,471.3</td>
<td>(11.0)%</td>
<td>(0.2%)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>730.5</td>
<td>578.7</td>
<td>660.6</td>
<td>496.8</td>
<td>(12.4)%</td>
<td>16.5%</td>
</tr>
<tr>
<td>State and Municipal</td>
<td>876.3</td>
<td>488.0</td>
<td>491.6</td>
<td>541.8</td>
<td>(0.7)%</td>
<td>(9.9)%</td>
</tr>
<tr>
<td>Other</td>
<td>832.0</td>
<td>635.5</td>
<td>510.2</td>
<td>528.5</td>
<td>24.6%</td>
<td>20.2%</td>
</tr>
<tr>
<td><strong>Total C&amp;I</strong></td>
<td><strong>$13,636.1</strong></td>
<td><strong>$11,806.3</strong></td>
<td><strong>$11,576.1</strong></td>
<td><strong>$10,734.0</strong></td>
<td><strong>2.0%</strong></td>
<td><strong>10.0%</strong></td>
</tr>
<tr>
<td>Commercial Real Estate</td>
<td>4,764.8</td>
<td>3,926.6</td>
<td>3,804.7</td>
<td>3,480.0</td>
<td>3.2%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Residential Mortgage</td>
<td>2,230.0</td>
<td>2,006.4</td>
<td>1,971.7</td>
<td>1,973.7</td>
<td>1.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Personal</td>
<td>1,025.8</td>
<td>1,003.4</td>
<td>996.9</td>
<td>965.8</td>
<td>0.7%</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Total Loans</strong></td>
<td><strong>$21,656.7</strong></td>
<td><strong>$18,742.7</strong></td>
<td><strong>$18,349.5</strong></td>
<td><strong>$17,153.4</strong></td>
<td><strong>2.1%</strong></td>
<td><strong>9.3%</strong></td>
</tr>
</tbody>
</table>

- Continued loan growth in the legacy BOKF portfolio led to the best year in recent memory, posting over 9% year-over-year growth.
- Strong growth in energy, healthcare, and commercial real estate.
Net Interest Revenue and Margin

<table>
<thead>
<tr>
<th></th>
<th>Q4 2018</th>
<th>Q3 2018</th>
<th>Q2 2018</th>
<th>Q1 2018</th>
<th>Q4 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net interest revenue</td>
<td>$285.7</td>
<td>$240.9</td>
<td>$238.6</td>
<td>$219.7</td>
<td>$216.9</td>
</tr>
<tr>
<td>Provision for credit losses</td>
<td>$9.0</td>
<td>$4.0</td>
<td>$—</td>
<td>$(5.0)</td>
<td>$(7.0)</td>
</tr>
<tr>
<td>NIR after provision</td>
<td>$276.7</td>
<td>$236.9</td>
<td>$238.6</td>
<td>$224.7</td>
<td>$223.9</td>
</tr>
<tr>
<td>Net interest margin</td>
<td>3.40%</td>
<td>3.21%</td>
<td>3.17%</td>
<td>2.99%</td>
<td>2.97%</td>
</tr>
</tbody>
</table>

- Net interest revenue continues to climb due to strong loan growth.
  - Yield on available for sale securities was 2.51 percent, an increase of 14 basis points sequentially, and up 30 basis points year over year.
  - Loan yields were 5.09 percent, up 29 basis point sequentially largely due to slightly higher yield on the CoBiz loan portfolio, $6.4 million in net purchase accounting accretion, and short-term market interest rates.
  - Interest-bearing deposits increased 10 basis points sequentially.

- Net interest margin continues to expand. 16 basis points from CoBiz and remaining 3 basis points from legacy BOKF.

- A provision of $9.0 million was taken this quarter due to large growth in our loan portfolio the past few quarters.
## Fees and Commissions

<table>
<thead>
<tr>
<th></th>
<th>Revenue, $mil</th>
<th>Growth:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q4 2018</td>
<td>Quarterly, Sequential</td>
</tr>
<tr>
<td>Brokerage and Trading</td>
<td>$28.1</td>
<td>21.7%</td>
</tr>
<tr>
<td>Transaction Card</td>
<td>20.7</td>
<td>(3.4)%</td>
</tr>
<tr>
<td>Fiduciary and Asset Management</td>
<td>43.7</td>
<td>(24.1)%</td>
</tr>
<tr>
<td>Deposit Service Charges and Fees</td>
<td>29.4</td>
<td>5.9%</td>
</tr>
<tr>
<td>Mortgage Banking</td>
<td>21.9</td>
<td>(7.0)%</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>16.4</td>
<td>26.7%</td>
</tr>
<tr>
<td>Total Fees and Commissions</td>
<td>$160.1</td>
<td>(3.7)%</td>
</tr>
</tbody>
</table>

- Brokerage and Trading: Up largely due to CoBiz impact and increases in customer risk management products.
- Transaction Card: Up 3.2 percent year over year.
- Fiduciary and Asset Management: A large $15 million fee earned on the sale of client assets in Q3 impacted quarterly comparison.
- Mortgage Banking: Interest rate pressures and seasonality has impacted origination volume and margins.
CoBiz acquisition and integration expense totaled $14.5 million in the quarter.

It should be noted that CoBiz personnel expense was $19.3 million, as run rate efficiencies are not yet realized. Once normalized for CoBiz operation related expenses, legacy BOKF personnel expense decreased by $7.8 million in Q4.

Once normalized for $10.4 million in CoBiz operation related expenses, non-personnel expense decreased by $3.6 million, primarily due to decreases in data processing and insurance related expenses. The fourth quarter also included a $2.8 million contribution to the BOKF Foundation.

Tax rate in Q4 was 15.7%, nearly 7 percentage points lower than usual. This will be a single-quarter impact.

$45 million in share repurchases in Q4.
Key Credit Quality Metrics

- No material signs of stress in any loan portfolio.
- Nonaccrual loans down 1.4 percent sequentially on a legacy BOKF basis.
- Appropriately reserved with a combined allowance of 0.97 percent with CoBiz portfolio included. Reserve of legacy portfolio is 1.12 percent.
- Net charge-offs were 0.18 percent of average loans over the last four quarters.
Forecast and Assumptions

- Mid single digit loan growth for the consolidated BOKF and COBZ entity.
- Provision levels moving forward will be influenced by loan growth, but are expected to be at similar dollar levels to the past couple of quarters.
- We now expect no rate hikes in 2019, providing no ability to improve net interest margin.
- Revenue from fee-generating businesses slightly up with CoBiz embedded on a linked quarter basis.
- We expect to meet the 60 percent efficiency ratio mark in 2019.
- Blended federal and state effective tax rate 22-23% going forward.
- CoBiz integration and closing charges expected to total $40 million, with $23 million largely in the first quarter of 2019.
- We plan to meet or exceed the 6 percent EPS accretion mark previously quoted.
- Conversion is still expected late in the first quarter of 2019, with run rate efficiencies realized in Q2, Q3, and Q4.