Better Bank Stock Analysis
Ross Meredith, Director, Rocky Mountain Chapter, BetterInvesting

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Our Agenda

• An Introduction to the business of banking
• The banking industry today
• Characteristics of high quality banks
• Introducing SSGPlus updates to help analyze banks
• Putting it all together to evaluate investment opportunities in banks

Business of Banking

• Banking is a simple business
  – Banks make money from loans
  – Loans are funded primarily from customer deposits
• Deposits
  – May represent 80% of funding liabilities
  – A low cost source of funding
  – Depositors accept low interest rates in exchange for the safety net of deposit insurance
• Low cost of funding is a key competitive advantage
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**Loans**
- Primary asset class in community banks
  - Loans may represent 80% of assets
- Generate interest income – primary revenue source for banks
- Banks are dependent on interest rates
  - Net Interest Spread (AKA net interest margin): difference between the interest rate the bank earns from loans and interest rate the bank pays for funding
- **PRICING IS A KEY MANAGEMENT SKILL**

**Overhead Expenses**
Overhead expenses include all the costs incurred other than the cost of funding
- Efficiency Ratio: % of revenue represented by overhead expenses
- Best banks maintain efficiency ratio < 60%

**Turning Loans into Profits**
- Bank must earn enough to cover overhead and cost of funding
  - Today, approximately 3% of the interest rate earned is overhead
  - Funding costs are about 1% in the current market
  - Banker must charge more than 4% to make a profit
  - Average interest rate is currently 4.78% on loans
  - Average net interest spread is 3.78% (4.78% - 1%)
- When interest rates rise, banks’ earnings go up
  - 10 years ago rates were higher and net interest spread was 4.76%

**Loan Quality**
- The QUALITY of loans is primary.
- Maintaining a high quality portfolio of bank loans is a KEY MANAGEMENT SKILL.
- A bad loan is expensive.
  - Entire loan amount is lost, not just the interest!
- Banks that lose less than 1% of loans are preferable.
Loan Growth

- Loans are assets.
- A portion of a bank's loans are paid off every year. This is known as loan runoff.
  - Average bank has 10% of loans paid off per year.
- To increase revenue and income, a bank must increase its loans.
  - A well-run bank will grow assets about 4-5% per year.
  - Actual growth, including replacement of paid-off loans, is 14-15% per year.
- The best bankers are also good marketers.

Recap

So far we know that the best bankers:

- Make good use of their deposits, a low cost source of funding
- Control their costs well
- Make good loans and price them well
- Achieve consistent growth of assets - loans are a large portion of a bank's assets
Focus on the Best Banks

- The future for banking is likely pretty good and probably for a long time to come.
  - Long-term treasury bond rates:
    - 2.25% in 1946; 15% in 1981; 2.1% in 2016; ??? In 2051
- We want banks that make good loans and maintain the best profitability.
- Two numbers to pinpoint good banks:
  - Loan Loss Provision expense ratio
  - Return on Average Assets (ROAA)

Measuring Loan Quality

- Loan Loss Provision expense ratio
  - Provision for Loan Losses expense (income statement)
  - Total loans (balance sheet)
- Calculate the ratio
  - Loan loss provision expense / Total loans
- If loan losses are well below 1% of loans for 8-10 years, we have a good lender.
- Value Line provides a shortcut to the data

Value Line Data for BBT

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Assets (Smil)</th>
<th>Loans (Smil)</th>
<th>Net Interest Inc (Smil)</th>
<th>Noninterest Inc (Smil)</th>
<th>Noninterest Exp (Smil)</th>
<th>Earnings per sh</th>
<th>Div's Decl'd per sh</th>
<th>Book Value per sh</th>
<th>Common Stock Outst'd</th>
<th>Basic EPS</th>
<th>Diluted EPS</th>
<th>Stock Price</th>
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<tr>
<td>2008</td>
<td>152,015</td>
<td>165,764</td>
<td>57,371</td>
<td>11,935</td>
<td>42,383</td>
<td>2.71</td>
<td>1.15</td>
<td>1.16</td>
<td>1.83</td>
<td>2.00</td>
<td>3.00</td>
<td>13.7</td>
</tr>
<tr>
<td>2009</td>
<td>160,056</td>
<td>169,089</td>
<td>56,789</td>
<td>11,935</td>
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<td>2.89</td>
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<tr>
<td>2010</td>
<td>152,213</td>
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<td>3.00</td>
<td>13.7</td>
</tr>
</tbody>
</table>

BB&T had high Loan Loss Provision expense ratios in 2009-2010 (see tables below).

The higher loan losses had a negative effect on EPS as seen on the SSG.
Eagle Bancorp had less fluctuation in the Loan Loss Provision expense ratio (see tables below). The historical EPS on the SSG reflects a well managed bank.

<table>
<thead>
<tr>
<th>EGBN</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Net loans</td>
<td>2203</td>
<td>2683</td>
<td>2946</td>
<td>4311</td>
<td>4993</td>
</tr>
<tr>
<td>Provisions for credit losses</td>
<td>11</td>
<td>16</td>
<td>10</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Loss provision / Net loans (want this to be &lt; 1)</td>
<td>0.50%</td>
<td>0.60%</td>
<td>0.44%</td>
<td>0.76%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>1.04</td>
<td>1.46</td>
<td>1.76</td>
<td>1.95</td>
<td>2.5</td>
</tr>
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</table>

Return on Average Assets (ROAA)

- A good measure of profitability for a bank
- ROAA is defined as Net Income / Average Assets
  - Average Assets = (Beginning year assets + Ending year assets) / 2
- Quantifies management’s ability to control expenses and to maximize earnings from the assets
- We want banks that consistently exceed over 1% earned on assets
- Defined by Value Line as earnings divided by total assets (ROA)

ROAA is Included for Banks in SSGPlus!

- Evaluate Management

<table>
<thead>
<tr>
<th>Evaluate Management</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Pre-Tax Profit on Sales</td>
<td>38.6%</td>
<td>27.8%</td>
<td>11.1%</td>
<td>10.4%</td>
<td>18.0%</td>
<td>25%</td>
</tr>
<tr>
<td>% Return on Equity</td>
<td>13.6%</td>
<td>11.6%</td>
<td>4.9%</td>
<td>4.9%</td>
<td>7.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>% Debt to Capital</td>
<td>59.7%</td>
<td>61.2%</td>
<td>61.5%</td>
<td>64.1%</td>
<td>56.7%</td>
<td>48%</td>
</tr>
<tr>
<td>% Return on Avg Assets</td>
<td>1.37%</td>
<td>1.00%</td>
<td>0.46%</td>
<td>0.51%</td>
<td>0.79%</td>
<td>0.79%</td>
</tr>
</tbody>
</table>

Return on Average Assets

- Today, the average bank earns a return on assets of about 0.79%.
- Over 1.25% is good, only 9% of banks do that.
- Over 1.5% is VERY good, less than 4% of banks do that.
- A high ROAA is indicative of good management.
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BB&T Falls Short

<table>
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<tr>
<th>Evaluate Management</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
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<tbody>
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<td>38.6%</td>
<td>27.8%</td>
<td>11.8%</td>
<td>10.4%</td>
<td>18.0%</td>
<td>21%</td>
</tr>
<tr>
<td>% Return on Equity</td>
<td>13.6%</td>
<td>11.6%</td>
<td>9.9%</td>
<td>4.9%</td>
<td>7.3%</td>
<td>8%</td>
</tr>
<tr>
<td>% Debt To Capital</td>
<td>59.7%</td>
<td>61.2%</td>
<td>61.5%</td>
<td>61.4%</td>
<td>56.7%</td>
<td>45%</td>
</tr>
<tr>
<td>% Return on Avg Assets</td>
<td>1.37%</td>
<td>1.05%</td>
<td>0.86%</td>
<td>0.51%</td>
<td>0.79%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Eagle Bancorp Shows Steady Improvement

<table>
<thead>
<tr>
<th>Evaluate Management</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Pre-Tax Profit on Sales</td>
<td>31.1%</td>
<td>24.9%</td>
<td>24.5%</td>
<td>26.9%</td>
<td>34.0%</td>
<td>28%</td>
</tr>
<tr>
<td>% Return on Equity</td>
<td>9.3%</td>
<td>7.4%</td>
<td>6.5%</td>
<td>6.3%</td>
<td>11.3%</td>
<td>8%</td>
</tr>
<tr>
<td>% Debt To Capital</td>
<td>39.0%</td>
<td>45.1%</td>
<td>23.9%</td>
<td>19.4%</td>
<td>15.6%</td>
<td>17%</td>
</tr>
<tr>
<td>% Return on Avg Assets</td>
<td>0.95%</td>
<td>0.82%</td>
<td>0.49%</td>
<td>0.79%</td>
<td>0.94%</td>
<td>0.67%</td>
</tr>
</tbody>
</table>

Recap

- A bank with consistently high returns on assets and low loan losses can be deemed well managed.
- Such a bank can sustain good earnings over time.
- Banks, especially well managed ones, may well benefit from improving industry conditions.

Putting It All Together

1. Verify the quality of the bank.
2. Make growth and P/E projections in much the same way as any other high quality company.
3. Evaluate the completed SSG to determine when it is time to buy, hold or sell.
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Quality Review

- Calculate the Loan Loss Provision Expense ratio for several years (10 is best)
  - Top quality banks consistently have loan losses that are less than 1% of their total loans.
- Look for steady historical asset growth (SSG)
  - Bank assets are the primary source of bank revenue and earnings.
- Return on Average Assets is a great measure of a bank’s profitability
  - Good Banks consistently maintain ROAA > 1.25%
  - The Best Banks consistently have ROAA > 1.50%

Forecasting Future Growth

- Evaluate historical growth
- Gather estimates from analysts
- Review available research reports
- Read company reports and presentations to learn more about their own growth goals and strategies
- Based on your research, make a forecast that is reasonable and supportable

Forecasting Future P/Es

- P/Es for banks, in general, tend to be low.
- Historical averages are often a good reflection of future P/Es for a high quality bank.
- Evaluate 10 years of data to learn how the stock price performed in the Great Recession.
- Bank P/Es may be more sensitive to economic trends, including interest rates.
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Example 2: US Bancorp

Historical performance
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**Check the Loan Loss Provision expense ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loans</td>
<td>144831</td>
<td>156588</td>
<td>184993</td>
<td>195101</td>
<td>200122</td>
</tr>
<tr>
<td>Provisions for credit losses</td>
<td>544</td>
<td>792</td>
<td>3086</td>
<td>5557</td>
<td>4356</td>
</tr>
<tr>
<td>Loss provision / Net loans (want this to be &lt; 1)</td>
<td>0.38%</td>
<td>0.51%</td>
<td>1.67%</td>
<td>2.85%</td>
<td>2.18%</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>$2.61</td>
<td>$2.43</td>
<td>$1.61</td>
<td>$0.97</td>
<td>$1.73</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>$2212238</td>
<td>226881</td>
<td>234253</td>
<td>248804</td>
<td>260170</td>
<td></td>
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<tr>
<td>$2343</td>
<td>1882</td>
<td>1340</td>
<td>1229</td>
<td>1132</td>
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</tr>
</tbody>
</table>

- 1.10%
- 0.83%
- 0.57%
- 0.49%
- 0.44%

<table>
<thead>
<tr>
<th>Year</th>
<th>2016 (p)</th>
<th>5 Yr Avg</th>
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<tbody>
<tr>
<td>3</td>
<td>35.7%</td>
<td>40.1%</td>
</tr>
<tr>
<td>3</td>
<td>38.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>3</td>
<td>20.9%</td>
<td>15.5%</td>
</tr>
<tr>
<td>3</td>
<td>29.1%</td>
<td>30.6%</td>
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<td>3</td>
<td>26.2%</td>
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<td>19.9%</td>
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<tr>
<td>3</td>
<td>11.4%</td>
<td>19.9%</td>
</tr>
</tbody>
</table>

**5. PRICE EARNINGS HISTORY AS AN INDICATOR OF THE SHARE**

- 2012
- 2013
- 2014
- 2015
- 2016 (p)
- 5 Yr Avg

**Evaluate Management**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Pre-Tax Profit on Sales</td>
<td>44.8%</td>
<td>27.7%</td>
<td>16.0%</td>
<td>23.4%</td>
<td>35.1%</td>
<td>38.5%</td>
</tr>
<tr>
<td>% Return on Equity</td>
<td>21.0%</td>
<td>15.4%</td>
<td>7.6%</td>
<td>12.0%</td>
<td>15.3%</td>
<td>15.5%</td>
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<tr>
<td>% Debt To Capital</td>
<td>82.8%</td>
<td>73.3%</td>
<td>71.1%</td>
<td>68.5%</td>
<td>64.8%</td>
<td>57.1%</td>
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<tr>
<td>% Return on Avg Assets</td>
<td>1.97%</td>
<td>1.12%</td>
<td>0.60%</td>
<td>1.13%</td>
<td>1.46%</td>
<td>1.55%</td>
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**Company: USB (13M) Study Name: USB 20/17**

**Price Earnings Ratio**

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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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<tbody>
<tr>
<td>Sales</td>
<td>Earnings</td>
<td>PE</td>
<td>High</td>
<td>Low</td>
<td>Price</td>
<td>Change</td>
<td>% Period</td>
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<td>32.5%</td>
<td>27.7</td>
<td>2.04</td>
<td>13.3</td>
<td>8.3</td>
<td>0.16</td>
<td>27.0%</td>
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<tr>
<td>2013</td>
<td>40.5%</td>
<td>32.0</td>
<td>1.30</td>
<td>12.8</td>
<td>8.7</td>
<td>0.19</td>
<td>28.9%</td>
</tr>
<tr>
<td>2014</td>
<td>40.5%</td>
<td>38.3</td>
<td>1.06</td>
<td>18.0</td>
<td>12.4</td>
<td>0.67</td>
<td>31.3%</td>
</tr>
<tr>
<td>2015</td>
<td>40.5%</td>
<td>38.3</td>
<td>1.06</td>
<td>18.0</td>
<td>12.4</td>
<td>0.67</td>
<td>31.3%</td>
</tr>
<tr>
<td>2016</td>
<td>40.5%</td>
<td>38.3</td>
<td>1.06</td>
<td>18.0</td>
<td>12.4</td>
<td>0.67</td>
<td>31.3%</td>
</tr>
<tr>
<td>2017</td>
<td>40.5%</td>
<td>38.3</td>
<td>1.06</td>
<td>18.0</td>
<td>12.4</td>
<td>0.67</td>
<td>31.3%</td>
</tr>
</tbody>
</table>

**Average**

| 3.35 | 14.4 | 64.4 | 1.30 | 34.5% |

**Price Earnings Ratio - 10.0**

**Current Price Earnings Ratio - 16.2**
Better Bank Stock Analysis
Ross Meredith, Director, Rocky Mountain Chapter, BetterInvesting

Review

• Quality is Key!
  – Look for banks with consistently high returns on assets and low loan losses
• Only consider those banks that meet or exceed our quality criteria
• Make growth and P/E forecasts that are supported by your research to determine when it is time to buy and sell
Better Bank Stock Analysis
Ross Meredith, Director, Rocky Mountain Chapter, BetterInvesting

Resources to Learn More

- S&P Industry Survey - Banks
- The Five Rules for Successful Stock Investing by Pat Dorsey
- Khan Academy (KhanAcademy.org)
  - Subject: Finance and Capital Markets
  - Money, Banking and Central Banks
- Bank’s Investor Relations Website
- FDIC.gov

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Classic Stock Study of Priceline (PCLN)

Presented by Ken Kavula, Mid-Michigan Chapter, BetterInvesting

Wednesday, April 12, 2017
8:30 – 9:30 PM EDT

www.betterinvesting.org/StockUp

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Thank You!

Questions?
rossmeredithjr@msn.com

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