SCHOOL OF BUSINESS INVESTMENT PROGRAM

Bank of America Corporation
BAC
September 21, 2017

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Investment Thesis
Investment Thesis

- Company:
  - Leading industry positions across every segment
  - Pivoting business to address demographic shifts
  - Solid expense management
  - High asset quality
  - Asset growth (deposits & loans/leases)
  - Significant growth in EPS
  - Well-capitalized & exceeds regulatory requirements
  - Share repurchases & increasing dividends

- Macro:
  - Rising interest rate environment
  - Financials to benefit from higher spreads
  - Potential de-regulation
    - Repeal of Dodd-Frank
Company Overview & History
Company History

1904 – Bank of Italy in San Francisco founded by Amadeo Giannini

1922 – Bank of America and Italy

1928 – Merged with Bank of America, Los Angeles

1958 – Issued the first bank credit card: BankAmeriCard

1998 - Acquired by NationsBank

2004 - BAC merged with FleetBoston Financial

2008 - BAC acquired Countrywide Financial and Merrill Lynch & Co. during crisis
● BAC is a financial institution that provides a range of banking, investing, asset management and other financial and risk management products and services

● Consumer Banking, Global Wealth and Investment Management, Global Banking and Global Markets

● BAC serves People, Companies and Institutions
Operations in 35+ countries
2nd largest bank in the U.S.
80% of the 2016 Global Fortune 500

Global accolades:
- European trading house of the year
- Best bank for Markets in Asia
- #1 global research firm (6 yrs in a row)
- U.S. fixed income leader in Emerging Markets
- #1 U.S. retail deposit market share
Business Mix

Bank of America Corporation

<table>
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<tr>
<th>Segment</th>
<th>1H17 Net Revenues by Segment ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Banking</td>
<td>$16.8</td>
</tr>
<tr>
<td>Global Wealth &amp; Investment Management</td>
<td>$8.7</td>
</tr>
<tr>
<td>Global Banking</td>
<td>$10.0</td>
</tr>
<tr>
<td>Global Markets</td>
<td>$9.3</td>
</tr>
</tbody>
</table>

- Consumer Deposits
- Merrill Lynch Global Wealth Management
- U.S. Trust, Bank of America Private Wealth Management
- Investment Banking
- Global Corporate Banking
- Global Commercial Banking
- Business Banking
- Fixed Income Markets
- Equity Markets
- ALM Activities
- Non-U.S. Consumer Credit
- Non-Core Mortgage Loans
- Other Liquidating Businesses
- Equity Investments
- Corporate Activities and Residual Expense Allocations
- Accounting Reclassifications and Eliminations

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Governance
Governance

PAUL M. DONOFRIO  
Chief Financial Officer  
$5,010,000 salary + bonus  
$5,491,312 stock options  
$10,501,312 total

BRIAN MOYNIHAN  
Chairman of the Board  
Chief Executive Officer  
$1,500,000 salary  
$13,752,000 stock options  
$15,252,000 total

THOMAS K. MONTAG  
Chief Operating Officer  
$7,400,000 salary + bonus  
$2,102,216 stock options  
$9,502,216 Total
Market
- XLF has returned ~30% last 1 yr
  - BAC is 8% of XLF portfolio
- In 2016, the financial sector represented 7.2% ($1.293 trillion) of US GDP
- US exported $119.6B in financial services and insurance
Recent News
• Warren Buffett recently became largest shareholder in BAC
  ○ Converted preferred stock into 700m shares of common stock
  ○ Made $11m on the transaction
  ○ Annual dividends of $336m
• CFRA thinks regulatory reform could lead major banks to increase market making activity, boost trading revenue and realize higher returns on capital
• Since financial crisis, BAC has closed 1600 branches - trying to rekindle sagging profits by focusing on metropolitan areas - rare move for big banks in recent years
• Metropolitan openings emphasizing big ticket loans (mortgage loans etc…)
• Despite changes, continued to add consumer deposits - $55B in last year
• Revenue has been falling in recent years but profits are highest they’ve been since 2006
Technical Analysis
Technical Analysis

- Rising centerline crossover
- MA's are converging, potential near term downward pressure
- Signal line & centerline crossover
Competitors
Competitors

MS:US / 51.07% 
C:US / 53.55% 
WFC:US / 15.44% 

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

0.00 20.00 40.00

09/20 60.64%
# Multiples Analysis

<table>
<thead>
<tr>
<th></th>
<th>BAC</th>
<th>MS</th>
<th>C</th>
<th>WFC</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/BV</td>
<td>1.0x</td>
<td>1.2x</td>
<td>0.9x</td>
<td>1.4x</td>
<td>1.2x</td>
</tr>
<tr>
<td>P/E</td>
<td>14.4x</td>
<td>13.2x</td>
<td>13.9x</td>
<td>12.7x</td>
<td>16.5x</td>
</tr>
<tr>
<td>ROA</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>1.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>ROE</td>
<td>7.4%</td>
<td>9.2%</td>
<td>6.6%</td>
<td>11.6%</td>
<td>7.1%</td>
</tr>
<tr>
<td>D/E</td>
<td>0.9</td>
<td>2.6</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>DY</td>
<td>1.90%</td>
<td>1.82%</td>
<td>1.16%</td>
<td>2.96%</td>
<td>~2.0%</td>
</tr>
</tbody>
</table>
Fundamental Analysis
Financial Highlights

Significantly Improved Expense Base ($B) ¹

- 2011: $77.1 billion
- 2012: $72.1 billion
- 2013: $69.2 billion
- 2014: $75.7 billion
- 2015: $57.7 billion
- 2016: $55.0 billion
- Last 12 months: $55.2 billion
- Target 2018: $53.0 billion

Legend:
- Noninterest expense excluding litigation
- Litigation expense

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Financial Highlights
Financial Highlights

**Consumer Net Charge-Offs ($B)**

- 2010: $29.4, 4.51%
- 2011: $18.5, 2.94%
- 2012: $13.6, 2.36%
- 2013: $7.2, 1.34%
- 2014: $4.1, 0.80%
- 2015: $3.9, 0.84%
- 2016: $3.3, 0.74%
- 1H17: $1.6, 0.71%

**Commercial Net Charge-Offs ($B)**

- 2010: $5.0, 1.64%
- 2011: $2.3, 0.77%
- 2012: $1.3, 0.43%
- 2013: $0.7, 0.18%
- 2014: $0.3, 0.08%
- 2015: $0.4, 0.10%
- 2016: $0.5, 0.11%
- 1H17: $0.3, 0.14%
Financial Highlights
Financial Highlights

**Book Value and Tangible Book Value per Share**

- 2012: $20.24
- 2013: $20.69
- 2014: $21.32
- 2015: $22.53
- 2016: $24.04
- 2Q17: $24.88

**Net Capital Returned to Common Shareholders ($B)**

- 2012: $0.4
- 2013: $3.3
- 2014: $3.1
- 2015: $4.5
- 2016: $6.6
- 2017 Estimate: $14.2

**Legend**
- Blue: Common Share Repurchases
- Dark Blue: Dividends
Regulatory Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Estimated fully phased-in minimum requirements</th>
<th>BAC as of June 30, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Equity Tier 1 Ratio ²</td>
<td>9.5%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Supplementary Leverage Ratio</td>
<td>5%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Liquidity Coverage Ratio ³</td>
<td>100%</td>
<td>125%</td>
</tr>
<tr>
<td>Net Stable Funding Ratio ⁴</td>
<td>100%</td>
<td>&gt;100%</td>
</tr>
<tr>
<td>Total Loss Absorbing Capacity</td>
<td>22.5%</td>
<td>&gt;22.5%</td>
</tr>
</tbody>
</table>

- Well-capitalized
- Not over-levered in relation to Tier 1
- High quality liquid assets
- Long term, stable funding
- Prevent too big to fail
## Sensitivity Analysis

<table>
<thead>
<tr>
<th>WACC</th>
<th>2.25%</th>
<th>2.30%</th>
<th>2.35%</th>
<th>2.40%</th>
<th>2.45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.19%</td>
<td>$43.67</td>
<td>$44.04</td>
<td>$44.40</td>
<td>$44.77</td>
<td>$45.14</td>
</tr>
<tr>
<td>8.19%</td>
<td>$35.78</td>
<td>$36.06</td>
<td>$36.33</td>
<td>$36.51</td>
<td>$36.79</td>
</tr>
<tr>
<td>9.19%</td>
<td>$30.28</td>
<td>$30.46</td>
<td><strong>$30.64</strong></td>
<td>$30.83</td>
<td>$30.92</td>
</tr>
<tr>
<td>11.19%</td>
<td>$22.94</td>
<td>$23.03</td>
<td>$23.12</td>
<td>$23.21</td>
<td>$23.30</td>
</tr>
</tbody>
</table>
SWOT Analysis
SWOT Analysis

**Strengths:**
- Industry leading positions
- Strong capital & liquidity levels
- Strong brand name
- Much leaner organization

**Weaknesses:**
- Consumer credit controversy affecting brand image
- Relatively higher interest rates
- Lower income globally

**Opportunities:**
- Mergers & acquisitions
- Internet Banking
- Expansion abroad
- Expansion into metropolitan areas

**Threats:**
- Changing government regulations and financial crisis-like recessions
- Competition from other banks can reduce market share
- Tightening of the yield curve
Recommendation
Purchase 390 shares at $24.86
Total investment of $9,695.40
Thank you for your time. We would now like to open the presentation to any questions.