COMMUNITY BANK PROFITABILITY

16th R&C Conference
November 16, 2017

The views expressed here are those of the speaker and do not necessarily represent the views of the Federal Reserve Bank of Boston or the Federal Reserve System.
Community Bank ROAA

Source: Call Report

FD CBOs
US CBOs

Source: Federal Reserve Bank of Boston
Net Interest Margin

Source: Call Report

FD CBOs
US CBOs
Interest Income and Expense

Interest Income

- FD CBOs
- US CBOs

Interest Expense

% of Average Assets

Source: Call Report
First District Characteristics

• Depository Type
• Density
• Asset Size
• Customer
Depository Types

- **First District**
  - Commercial & Savings Banks: 28%
  - Credit Unions: 9%
  - Mutuals & Cooperatives: 73%
  - Thrifts: 1%

- **National**
  - Commercial & Savings Banks: 43%
  - Credit Unions: 51%
  - Mutuals & Cooperatives: 3%
  - Thrifts: 9%

Source: Call Report
Branch Density

<table>
<thead>
<tr>
<th>MSA Type</th>
<th>First Dist.</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>86%</td>
<td>53%</td>
</tr>
<tr>
<td>Rural (Non-MSA &amp; Bin 1)</td>
<td>14%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: FDIC Summary of Deposits, US Census
Asset Size

Source: Call Report
Percentage of the population* with bachelor degree or higher

- Massachusetts
- Connecticut
- New Hampshire
- Vermont
- Rhode Island
- National
- Maine

*Population aged between 18 and 65
Source: US Census Bureau 2013 American Community Survey
In the Numbers

• Balance Sheet Composition

• Yields
Loan Yield and Composition

FD Yield: 4.07%
US Yield: 4.96%

Source: Call Report
Earning Asset Attribution: FD vs. Nation

- U.S. Weighted Avg. Yield: 4.29%
- Loans vs. Investments Allocation: +0.18%
- Loan Yield: -0.68%
- Investment Yield: +0.02%
- Interaction Effect: -0.06%
- FD Weighted Avg. Yield: 3.75%

Source: Call Report
Loan Composition & Yield: FD vs. Nation

Source: Call Report

FD Loan Proportion (LHS Columns)  US Loan Proportion (LHS Columns)
FD Yields (RHS Dots)  US Yields (RHS Dots)

<table>
<thead>
<tr>
<th>Category</th>
<th>FD Proportion</th>
<th>FD Yield (%)</th>
<th>US Proportion</th>
<th>US Yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4 Resi.</td>
<td>45.0%</td>
<td>4.50%</td>
<td>30.0%</td>
<td>3.72%</td>
</tr>
<tr>
<td>CRE</td>
<td>40.0%</td>
<td>4.80%</td>
<td>40.0%</td>
<td>4.28%</td>
</tr>
<tr>
<td>Agri.</td>
<td>15.0%</td>
<td>4.84%</td>
<td>5.0%</td>
<td>4.65%</td>
</tr>
<tr>
<td>C&amp;I</td>
<td>5.0%</td>
<td>5.24%</td>
<td>5.0%</td>
<td>4.81%</td>
</tr>
<tr>
<td>Consumer</td>
<td>5.0%</td>
<td>7.81%</td>
<td>5.0%</td>
<td>4.08%</td>
</tr>
</tbody>
</table>
Residential Yield Factors

- Historical
- Maturity
- Rate type
- Size
- Type

- Density and Assets
1-4 Family Residential RE Loan Yields

Source: Call Reports
Mortgages by Maturity
First District vs. Nation, March 2017

Source: Residential Mortgage Servicing Database
Mortgages by Interest Type
First District vs. Nation, March 2017

Source: Residential Mortgage Servicing Database
Jumbo Mortgages
First District vs. Nation, March 2017

Source: Residential Mortgage Servicing Database
Mortgage Type Composition
First District vs. Nation, March 2017

Source: Residential Mortgage Servicing Database
Residential Loans in the FD and Nation

Source: Call Reports

- First District
- Nation

1st Lien Closed-End Mortgages: 86% (FD) vs. 85% (Nation)
2nd Lien Closed-End Mortgages: 2% (FD) vs. 3% (Nation)
HELOCs: 13% (FD) vs. 12% (Nation)
Median Residential Real Estate Loan Yield
Q2 2017 YTD

Average Branch Density Bin
FD: 3.53  US: 1.73

Source: US Census, Call Report
Boston and New York MSAs
Central and Outlying Boundaries

Counties in Boston MSA

MA: Norfolk, Plymouth, Suffolk, Essex, Middlesex

NH: Rockingham, Strafford

Counties in New York MSA

NJ: Essex, Hunterdon, Morris, Somerset, Sussex, Union, Bergen, Hudson, Middlesex, Monmouth, Ocean, Passaic

NY: Dutchess, Putnam, Nassau, Suffolk, Bronx, Kings, New York, Orange, Queens, Richmond, Rockland

PA: Pike

(Green = Outlying)
Median Residential Real Estate Yield
Central Portion of MSA, Q2 2017 YTD

Source: US Census, Call Report
Average Residential Real Estate Loan Yield Q2 2017 YTD

Source: Call Report
Funding
Core Funding*

FD Cost: 0.43%
US Cost: 0.38%

*Transaction accounts (including brokered deposits), savings accounts, MMDAs and Time Deposits <$250M

Source: Call Report
Median CBO Funding Cost, Q2 2017 YTD

Source: US Census, Call Report
Median CBO Funding Cost
Central Portion of MSA, Q2 2017 YTD

Source: US Census, Call Report
Median Funding Costs by Asset Size
Q2 2017 YTD

Source: US Census, Call Report
Elements of Overhead
Non-Interest Expense / Average Assets

Source: Call Report
Median Overhead / Average Assets
Q3’16 – Q2’17

Source: US Census, Call Report
Median Overhead / Average Assets
Central Portion of MSA, Q3’16 – Q2’17

Source: US Census, Call Report
Average Overhead / Average Assets by Asset Bin, Q3 2016 – Q2 2017

Source: Call Report
Median CBO Salary & Benefit Expense by Central Portion of MSA, Q3’16 – Q2’17

Source: US Census, Call Report
Median CBO Premises Expense by Central Portion of MSA, Q3’16 – Q2’17

Source: US Census, Call Report
Summary