Credit quality has improved dramatically, but the credit cycle could turn in the not-too-distant future.

Loan growth has improved and loan-to-deposit ratios are rebounding, placing greater importance on liquidity.

The low rate environment and competition continue to weigh on margins.

Deposit costs could begin creeping up even before rates move higher.
No Credit Leverage Left

Banks $1B-$10B in assets ($B)
- Provision for loan & lease losses ($B)
- Net charge-offs ($B)
- Provisions less charge-offs ($B)

Credit Leverage Ending

Banks below $1 billion in assets ($B)
- Provision for loan & lease losses ($B)
- Net charge-offs ($B)
- Provisions less charge-offs ($B)
Yields Under Pressure, Costs Hit a Nadir at CUs Too

Median yields, costs for credit unions under $10B in assets (%)

- Yield on securities
- Yield on loans
- Cost of funds
- 10-year Treasury yield

Loan Growth Slower at Small Banks, Credit Unions

- Loan growth since '15 - annualized
- Loan growth since '10
- Loan growth since '08
Credit Unions Producing Strong Share Growth

Deposit growth since '15 - annualized
Deposit growth since '10
Deposit growth since '08

Median credit unions below $10B
Median banks below $1B
Median banks $1B-$10B
Banking industry aggregate

Loan-To-Deposit Ratios Rebounding

Loan-to-deposit ratios at banks $1B-$10 (%)
Banking industry aggregate
Median at banks $1B-$10B
Loan-To-Deposit Ratios Rebounding

Loan-to-deposit ratios at banks below $1B (%)

Industry aggregate  Median small bank ratio

Loan-to-Share Ratios Trailing Banks

Median loan/shares at credit unions under $10B in assets
Margin Pressure Everywhere

Small bank margins have held up better (%)

- Banking industry aggregate
- Median at banks $1B-$10B
- Median at banks below $1B
- Median at credit unions below $10B

Small Bank Capital Ratios Stronger

Tangible equity/tangible assets ratio (%)

- Industry aggregate
- Median above $250B
- Median $10B-$250B
- Median $1B-$10B
- Median below $1B
Credit Unions Have Seen Net Worth Decline

Median net worth at credit unions below $10B in assets (%)

Smaller Institutions Less Efficient

Efficiency ratios (%)

- Banking industry aggregate
- Median at banks $1B-$10B
- Median at banks below $1B
- Median at credit unions below $10B
Mobile Banking Update

Who Are Mobile Bank App Users?

[Images of pie charts showing gender, age, and income distribution for mobile bank app users.]

S&P GLOBAL MARKET INTELLIGENCE
Who Are Mobile Bank App Users?

Mobile Bank App Users Weigh In On Services

How often do you use your primary checking account’s mobile bank app?

How many times in the last 30 days have you visited a branch of your primary bank? Visit ATM, talk to teller, drive through, etc.

Which of the following activities did you perform inside the branch of your primary bank?**
Regulatory Update

General Regulatory Issues

- Still lots of focus on compliance
- Heightened scrutiny on CRE lending – forcing strategic actions
- Cybersecurity
- Interest rate risk
- CECL — Looming on the horizon
- UDAAP & Fair lending
- BSA / AML
- Stress testing: Smaller banks beginning the exercise much earlier
Pres. candidates are showing no signs of backing off big banks. Both have talked about breaking up big banks.

But Republicans have talked about offering some relief for smaller banks.

Clinton: 'Way too many dreams die in the parking lots of banks'

VP candidate Tim Kaine has taken heat for pushing for lighter regulation of certain banks

Trump: Dodd-Frank is "the Democrats legislative Godzilla."
Wants to relieve community banks of "excessive" regulations.

He called the CFPB a "rouge agency" and believes it should be abolished.
Drivers of Bank M&A

- Challenging earnings environment - slow loan growth, low rates and heightened regulatory costs. Need for scale.
- Sellers seeing upside post deal in the right transactions.
- Board and management fatigue taking a toll.
- More banks seem to be improving regulatory standing, allowing for a few more buyers.
- Mostly smaller deals. Plenty of small banks — 5,340 institutions with less than $1B in assets at the end of the first quarter 2016.
- Shareholder activism is building. Banks that have struggled to earn cost of capital for years could be targets.

Bank M&A Activity

Bank deal activity since Q3’13
- Total deal value ($B)
- Number of deals

*Quarter-to-date through July 27.
Drivers of Credit Union M&A

### Number of credit union mergers by type

<table>
<thead>
<tr>
<th>Reason for merger</th>
<th>H1'16</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion to or merger with NFICU</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Conversion to or merger with FCU</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Conversion to or merger with FISCU</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Poor management</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Loss/declining field of membership</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Inability to obtain officials</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>12</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Lack of sponsor support</td>
<td>2</td>
<td>14</td>
<td>11</td>
<td>6</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Lack of growth</td>
<td>3</td>
<td>8</td>
<td>16</td>
<td>17</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Poor financial condition</td>
<td>16</td>
<td>24</td>
<td>40</td>
<td>39</td>
<td>52</td>
<td>36</td>
</tr>
<tr>
<td>Expanded services</td>
<td>70</td>
<td>168</td>
<td>180</td>
<td>166</td>
<td>120</td>
<td>139</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99</strong></td>
<td><strong>232</strong></td>
<td><strong>262</strong></td>
<td><strong>258</strong></td>
<td><strong>246</strong></td>
<td><strong>234</strong></td>
</tr>
</tbody>
</table>

Credit Union M&A

### Quarterly credit union merger statistics

- Merging credit union total assets ($B)
- Surviving credit union total assets ($B)
- Number of mergers

Data source: S&P Global Market Intelligence
Currently Operating Credit Unions by Region

**Number of credit unions**

- 1,771 (Midwest, 29.46%)
- 1,124 (Mid-Atlantic, 18.70%)
- 1,041 (Southeast, 17.33%)
- 928 (Southwest, 15.40%)
- 400 (West, 12.47%)
- 748 (Northeast, 6.63%)

Includes currently operating credit unions as of July 28.

**Outlook**
Lower For Longer Will Pressure Earnings

Earnings expected to remain under pressure as rates remain low.

As benefit of higher rates take hold, credit quality will emerge as a headwind.

Credit Leverage Over

Small bank provisions will exceed charge-offs over the next few years and by even greater amounts further down the road.
Credit Quality Should Revert To More Normal Levels

Credit quality will begin to normalize (%)

- Nonaccruals will hold fair steady in near term but credit will steadily decline.
- A number of warnings lie on the horizon.

Loan Growth Likely To Remain Weak

Small bank loan growth now expected to be weaker (%)

- Loan growth expectations have been decreased since March.
- Weaker growth expected, particularly further out the horizon.
Small Banks’ Loan-to-Deposit Ratios Will Rebound

Small banks’ loan-to-deposit ratios

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005A</td>
<td>83.66%</td>
</tr>
<tr>
<td>2006A</td>
<td>84.93%</td>
</tr>
<tr>
<td>2007A</td>
<td>87.48%</td>
</tr>
<tr>
<td>2008A</td>
<td>88.38%</td>
</tr>
<tr>
<td>2009A</td>
<td>82.24%</td>
</tr>
<tr>
<td>2010A</td>
<td>78.43%</td>
</tr>
<tr>
<td>2011A</td>
<td>75.07%</td>
</tr>
<tr>
<td>2012A</td>
<td>73.60%</td>
</tr>
<tr>
<td>2013A</td>
<td>70.04%</td>
</tr>
<tr>
<td>2014A</td>
<td>77.19%</td>
</tr>
<tr>
<td>2015A</td>
<td>78.86%</td>
</tr>
<tr>
<td>2016P</td>
<td>80.31%</td>
</tr>
<tr>
<td>2017P</td>
<td>81.96%</td>
</tr>
<tr>
<td>2018P</td>
<td>83.23%</td>
</tr>
<tr>
<td>2019P</td>
<td>82.80%</td>
</tr>
<tr>
<td>2020P</td>
<td>81.76%</td>
</tr>
</tbody>
</table>

Deposits Will Decline In The Near Term

YOY deposit growth at small banks, adjusted for consolidation (%)

- Deposits rose during the last rate tightening cycle, but many believe some deposits could leave the system.
- Rates have never been so low for so long.
Noninterest-Bearing Deposits Will Shrink

Depositors will demand at least some yield if rates move higher.

Deposit Costs Will Move Higher

Cost of interest-bearing deposits should rise only modestly this year.

Small banks more reliant on rural deposits, CDs.
Earning-Asset Yields Will Rebound

Yields, costs at small banks set to rebound (%)

- Loan yields, security yields will expand.
- Funding costs will not expand as much, allowing for margin expansion.

<table>
<thead>
<tr>
<th></th>
<th>Projected high point</th>
<th>Year</th>
<th>Projected low point</th>
<th>Year</th>
<th>Trough-to-peak increase (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan yield (%)</td>
<td>3.16</td>
<td>2018</td>
<td>2.49</td>
<td>2020</td>
<td>67</td>
</tr>
<tr>
<td>Security yield (%)</td>
<td>0.34</td>
<td>2019</td>
<td>-0.35</td>
<td>2020</td>
<td>69</td>
</tr>
<tr>
<td>Cost of funds (%)</td>
<td>-1.34</td>
<td>2018</td>
<td>-1.94</td>
<td>2020</td>
<td>60</td>
</tr>
</tbody>
</table>

Margins Will Expand

Small bank margins will fall before rebounding (%)

- Margins will fall in the interim, but should expand as rates rise and by greater amounts than larger banks.
- A lower for longer rate scenario is not good for any size institution.
Returns Should Remain Relatively Weak

- Lower for longer interest rates will weigh on profitability.
- Heightened regulatory costs, lackluster loan growth will temper benefit of rate increases, should they come to pass.
- Banks will need to differentiate their models to stand out. And some certainly have. Focus on specific strategies to buck the trend.

<table>
<thead>
<tr>
<th>Profitability metrics for banks below $1B in assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROAA (%)</td>
</tr>
<tr>
<td>ROAE (%)</td>
</tr>
<tr>
<td>Efficiency ratio (%)</td>
</tr>
</tbody>
</table>

Questions

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