BANKS AND THE COMMUNITY REINVESTMENT ACT

Rachel Shipley
To be covered:

- Hypothesis
- The Community Reinvestment Act
  - Definition
  - Intended purpose
  - How it works
  - Issues
- Research/Data
- Results
Hypothesis

- Is there a relationship between CRA ratings and percentage of loan losses?
  - What kind of relationship?

- Do banks with high CRA ratings show high loan losses?
Community Reinvestment Act

- **What is it?**
  - Community Reinvestment Act of 1977
    - Discourage lending institutions from discrimination
    - Assist community members in low- to moderate-income neighborhoods, small businesses or small farms
  - Credit Unions not affected/regulated
  - “Institutions have an obligation to serve their communities” (Spong, 2000).
CRA, contd.

1980’s
- “Redlining” caused implementation of the CRA
- People affected by redlining were tired of depositing their money into institutions which would not loan them money.
- “Many people felt that the visible economic decline of urban areas was aggravated by financial institutions” (Thomas, 1993).
Intended Purposes

- Eliminate “redlining”
- Extend credit to community members in low- to moderate-income category

“Increased lender sensitivity to such lending needs can help preserve, rehabilitate, and revitalize such neighborhoods” (Thomas, 1993).
Banks’ Requirements

- CRA requires banks to:
  - Make community members aware of policies
    - Availability of the Community Reinvestment Act Statement
  - Keep file of comments from the public
    - “CRA Public File”
  - Receive evaluations periodically
Requirements, contd.

- Make public their CRA evaluations
- Report data for:
  - Small business loans
  - Farm loans
  - Specific community development loans
Evaluations

- Based on:
  - Size of institution
  - Expertise
  - Financial strength
  - Type of community
  - Local economic conditions
  - Nature of institution’s competition and business strategy
Evaluations, contd.

- **Four Levels**
  - Outstanding, Satisfactory, Needs to Improve, Substantial Noncompliance

- **Small banks**
  - Evaluated every 4-5 years

- **Large banks**
  - Evaluated in lending, investments, and services
Enforcement

- Regulatory agencies cannot legally enforce compliance
  - Give instruction on meeting community needs

- Lenders receive pressure to comply in order to please regulators
Issues

- **Bankers:**
  - believe they are being told where and to whom they will lend money
    - “credit allocation”
  - Evaluations dependent on regulators
  - Riskier loans
  - Unfair compared to Credit Unions
Issues, contd.

- Community members:
  - Not enough regulation and enforcement
  - Ratings not public enough
Issues, contd.

- **Regulators:**
  - A more proven evaluation system with more purpose
  - Agree with the need of more public records
  - Wanted confidentiality for individual regulators
1989 Amendment

- Financial Institutions Reform, Recovery, and Enforcement Act of 1989
  - Made new rating system
  - Required ratings to be publicly available
Research

- Federal Reserve
  - CRA Rating Data

- Federal Deposit Insurance Corporation
  - Bank Financial Statements
Assumptions and variables

- Date range: 1992—2000
- Net charge offs due to CRA losses
- Three asset sizes
  - 1: $100M-$1B
  - 2: $1B-$10B
  - 3: $10B-$100B
Compared:

- Outstanding rated banks to Substantial Noncompliance and Needs to Improve banks combined.
  - Combined these two to increase noncompliant data size

- Eliminated asset size 3
  - No data for noncompliant banks
<table>
<thead>
<tr>
<th>Year</th>
<th>Asset Size 1</th>
<th>Asset Size 2</th>
<th>Asset Size 3</th>
</tr>
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<tbody>
<tr>
<td>1992</td>
<td>0.73%</td>
<td>0.30%</td>
<td>0.22%</td>
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<td>0.23%</td>
<td>0.62%</td>
<td>0.42%</td>
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<td>0.42%</td>
<td>1.23%</td>
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<td>0.52%</td>
<td>0.21%</td>
<td>0.32%</td>
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<td>0.20%</td>
<td>0.11%</td>
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<tr>
<td>1993</td>
<td>0.41%</td>
<td>0.25%</td>
<td>0.48%</td>
</tr>
<tr>
<td>1993</td>
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<td>1993</td>
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<td>0.33%</td>
<td></td>
</tr>
<tr>
<td>1994</td>
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<td>0.62%</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>0.27%</td>
<td>0.72%</td>
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<tr>
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<td>0.14%</td>
<td>0.29%</td>
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<tr>
<td>1994</td>
<td>0.41%</td>
<td>0.24%</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>0.27%</td>
<td>0.21%</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td>0.14%</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>0.26%</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>0.21%</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>0.44%</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>0.22%</td>
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</table>

Averages: 0.44% 0.34% 0.49%

Total Averages, all asset sizes: 0.38%
## Substantial Noncompliance

<table>
<thead>
<tr>
<th>Year</th>
<th>Asset Size 1</th>
<th>Asset Size 2</th>
<th>Asset Size 3</th>
</tr>
</thead>
<tbody>
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<td>0.01%</td>
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<tr>
<td>1998</td>
<td>1.42%</td>
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</tr>
<tr>
<td>1993</td>
<td>0.09%</td>
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**Averages:**

<table>
<thead>
<tr>
<th></th>
<th>Asset Size 1</th>
<th>Asset Size 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total averages, all asset sizes:</strong></td>
<td><strong>0.29%</strong></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Asset Size 1</td>
<td>Asset Size 2</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1997</td>
<td>0.32%</td>
<td>1995</td>
</tr>
<tr>
<td>1992</td>
<td>0.13%</td>
<td>1994</td>
</tr>
<tr>
<td>1998</td>
<td>0.65%</td>
<td>1993</td>
</tr>
<tr>
<td>1995</td>
<td>1.97%</td>
<td>1992</td>
</tr>
<tr>
<td>1996</td>
<td>0.86%</td>
<td>1992</td>
</tr>
<tr>
<td>1992</td>
<td>0.81%</td>
<td>1992</td>
</tr>
<tr>
<td>1994</td>
<td>0.77%</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>0.20%</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>0.04%</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>0.10%</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>0.04%</td>
<td></td>
</tr>
</tbody>
</table>

Averages:

- Asset Size 1: 0.49%
- Asset Size 2: 0.77%

Total Averages, all asset sizes: 0.58%
Loan loss percentages for each CRA category and asset size:

<table>
<thead>
<tr>
<th>Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial Noncompliance</td>
<td>0.57%</td>
<td>0.01%</td>
<td>N/A</td>
<td>0.29%</td>
</tr>
<tr>
<td>Needs to Improve</td>
<td>0.46%</td>
<td>0.68%</td>
<td>N/A</td>
<td>0.58%</td>
</tr>
<tr>
<td>Substantial Noncompliance + Needs to Improve</td>
<td>0.51%</td>
<td>0.66%</td>
<td></td>
<td>0.56%</td>
</tr>
<tr>
<td>Outstanding</td>
<td>0.44%</td>
<td>0.34%</td>
<td>0.49%</td>
<td>0.38%</td>
</tr>
</tbody>
</table>
Results

- Raw data
  - Loan loss percentages of non-compliant banks higher than compliant banks
    - Combining Substantial Noncompliant banks with Needs to Improve banks
Means Difference Test

- **Statistical T-test:**
  - To see if there is a statistical difference between the two means
  - What level of confidence the difference is

- Difference between group means/variability of groups
T-Test

where:

\[
t = \frac{(\bar{y}_1 - \bar{y}_2) - 0}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}
\]

\[
s^2 = \frac{\Sigma_{t=1}^{n_1} (y_t - \bar{y}_1)^2 + \Sigma_{t=1}^{n_2} (y_t - \bar{y}_2)^2}{n_1 + n_2 - 2}
\]

(Mendenhall & Reinmuth, 1982)
T-Test Results

- **T-value of 1.6325**
  - Critical t-values for different means are:
    - 1.282 at the 0.90 confidence level
    - 1.645 at the 0.95 confidence level
  - This data shows there is a distinct difference in the means of loan losses between the two CRA rating categories.
T-Test Analysis

- Therefore, from 1992-2000, compliance with the CRA appears to have reduced bank loan losses.
  - At the statistical confidence level of 0.90 but not at 0.95.
  - The statistical analysis show a strong difference in the means of the two groups.
Research Results

- There is a relationship between different CRA ratings and their loan loss averages
  - Not the relationship I had hypothesized

- My research does not support the theory that compliance weakens bank performance.
  - It may indicate that compliance strengthens bank performance.
Explanations

- Why are loan losses low for compliant banks?
  - The majority of CRA loans are not bad loans
    - CRA regulations are consistent with safe lending practices
  - CRA regulations encourage diversification of investments
  - Something besides the CRA is causing loan losses
Conclusion

- There is a relationship
  - There is a distinct, statistical difference between the two means
- The CRA does not harm financial institution’s performance ratios
- Further research should be done for current years when data becomes available
Bibliography