

Making CRA Work in Rural America: Finding "Outstanding" Financial Institutions



June 2016

Housing Assistance Council 1025 Vermont Avenue, N.W. Suite 606 Washington, DC 20005 202-842-8600 (voice) 202-347-3441 (fax) hac@ruralhome.org http://www.ruralhome.org

This report was prepared by Keith Wiley, Ph.D. of the Housing Assistance Council (HAC). The substance and findings of this work are dedicated to the public. HAC is solely responsible for the accuracy of the statements and interpretations contained in this publication.

HAC, founded in 1971, is a nonprofit corporation that supports affordable housing efforts in rural areas of the United States. HAC provides technical housing services, loans from a revolving fund, housing program and policy assistance, research and demonstration projects, and training and information services. HAC is an equal opportunity lender and employer.

# Table of Contents

Summary	1
Highlights and Findings	1
Discussion and Possible Implications of Findings	3
Introduction	4
Background	5
The CRA Examination Process in Brief	5
Financial Institutions Rated Outstanding	6
Research on Outstanding CRA Rated Lenders	8
Consistently Outstanding Rated CRA Lenders	10
Research Approach	14
Research Questions	14
Research Design	14
Rural and Small Town Lenders	15
Lender Characteristics	15
CRA Examination Characteristics	16
Statistical Approach	16
Data Sources	17
Descriptive Findings	18
Results	20
Discussion	23
Rural and Small Town Location Headquarters Not Related	23
CRA Examination Process is Important	24
Other Related Associations	25
Endnotes	26
References	28
Appendix	30
Table A1 CRA Ratings 2009 to 2014	31

Table A2. FDIC Insured Lenders 2014 by Last Three CRA Ratings	31
Table A3. Independent Variables	32
Table A4. Regression Models A, B, and C, CRA Consistently Outstanding and Satisfactory Lender	
Ratings	33

# **Summary**

The Community Reinvestment Act (CRA) requires federally insured lenders to make credit available in all areas where they do significant business or take deposits. The CRA charges federal bank regulators with evaluating depository institutions on a regular basis to ensure they are meeting this obligation. The evaluations, or "examinations," vary in rigor and frequency based on lender asset size, with smaller lenders having less frequent and less demanding reviews. The enforcement mechanism of CRA is applied when lenders request permission for mergers, acquisitions, and office openings and closings. A poor CRA rating can be used to deny such applications.

The overwhelming majority of financial intuitions earned Satisfactory ratings on their most recent CRA examinations. Regulators awarded Outstanding ratings to only 9 percent of lenders. Consistently Outstanding-rated lenders are important because they serve as examples of institutions that continually exceed CRA requirements in serving all portions of their service area. Of particular relevance for this study is rural and small town headquartered lenders and the degree to which location is related to consistently earning an outstanding rating. While making up a majority of all FDIC-insured depository institutions, little is known about rural lenders in general and even less about how they fulfill their CRA obligations.

Using time-series CRA ratings reports along with financial data from Summary of Deposit and Call Reports, the Housing Assistance Council (HAC) identified financial institutions that consistently receive Outstanding ratings and classified them based on the geographic location of their headquarters. This study then incorporated logistic regression analyses to help identify possible factors contributing to strong CRA performance.

# Highlights and Findings

Earning an Outstanding rating was uncommon, and being consistently Outstanding was even more rare. Annually, during the 2009 to 2014 period, an average of 8 percent of CRA examinations resulted in an outstanding rating. A clear majority of lenders, 75 percent, earned Satisfactory ratings on three consecutive examinations. Only 4 percent of lenders earned Outstanding CRA ratings consistently on their most recent three evaluations.

Urban headquartered lenders earned consistently Outstanding ratings more often than either rural or suburban headquartered lenders. While approximately 3 and 4 percent of rural and suburban headquartered lenders, respectively, were consistently rated Outstanding, roughly 9 percent of urban headquartered lenders were consistently rated Outstanding.

The comprehensive large bank CRA examinations resulted in consistently Outstanding ratings more often than the intermediate small and small bank examinations. Only 2 and a half percent of lenders experiencing exclusively small bank examinations were consistently rated Outstanding, but 16 percent of lenders receiving only large bank examinations consistently earning Outstanding ratings. Twenty percent of urban lenders, but only 3 percent of rural lenders, experienced only large bank examinations.

CRA examination type, bank regulator, and service area attributes had statistically significant associations with consistently Outstanding ratings.

#### Large Bank Exams

Large bank CRA examinations, after controlling for other factors, had a statistically significant and positive association with consistent Outstanding ratings. Lenders experiencing only large bank CRA examinations were twice as likely to be consistently rated Outstanding as lenders experiencing only small bank examinations. No association existed for lenders experiencing only intermediate small or small bank examinations, or a mix of examination types.

#### Regulators

Odds of being consistently rated outstanding varied, in one case dramatically, among regulators – the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Federal Reserve Board, the former Office of Thrift Supervision (OTS), or a mix of regulators. The odds of an OTS-rated lender being consistently rated Outstanding were eight times greater than the odds associated with an OCC-evaluated institution, holding other variables constant.

Differences associated with regulators might indicate lender characteristics that were not otherwise accounted for in the study. For example, the strong OTS-CRA rating association might, at least in part, reflect something unique about thrifts and savings institutions themselves rather than entirely regulator related differences.

#### Service Areas

Lender service area coverage, particularly the degree to which lender offices are located in census tracts identified under CRA as distressed and/or underserved, had a statistically significant association with consistently Outstanding ratings. Specifically, after holding other factors constant, lenders with a majority of bank branches located in designated distressed and/or underserved census tracts were about twice as likely to be consistently rated Outstanding as all other lenders.

Since designated distressed and/or underserved census tracts represent areas where financial services activities are most highly valued by regulators, increased presence in those places likely means increased opportunity to serve them and earn Outstanding ratings.

#### Geographic location of banks was not statistically significant.

There was no statistically significant relationship between lenders having headquarters in rural and small town census tracts and consistently earning Outstanding ratings. While a review of annual CRA ratings by lender headquarters location shows fewer rural-based institutions rated outstanding in comparison to urban based institutions, this difference is likely associated with other attributes. For example, lenders in rural areas often receive the small bank CRA

examination, which almost exclusively results in Satisfactory ratings. Lender size and bank examination type have a greater association with CRA ratings than institutional location.

## Discussion and Possible Implications of Findings

The more comprehensive large bank CRA examination is associated with being consistently rated Outstanding. This may indicate that such lenders are more likely to reach all parts of their service areas because large banks with more resources can do more. Alternatively, perhaps the more demanding test encourages lenders to more actively seek community reinvestment activities.

Communities and markets that are not served by these large lenders could use more scrutiny to ensure the banks receiving intermediate small and small CRA examinations are providing Outstanding level service to all parts of their service area. Local community development organizations and nonprofits may have to be more actively involved in small bank examinations to ensure a more thorough vetting of lender activities. Increased scrutiny could result in improved lender activities and possibly high quality service and CRA ratings. Interactions and relationships with small bank officials may also encourage them to increase CRA related activities in their markets.

While more assessment must be conducted to determine how much of the observed association between regulators and Outstanding ratings might be related to other bank attributes, CRA examinations should not be assumed to be identical regardless of the regulating agency. CRA examination reports should be reviewed and compared to other similar examinations to ensure consistency.

The possible lack of consistency across regulators also calls for more public disclosure of CRA ratings data to allow public review. More available data, combined with increased public involvement in the process, could help undercover potential problems and also help improve public impressions of the process. It is worth noting that large banks already are required to make more data available under CRA.

CRA data identifies financial institution service areas as being related to consistently earning Outstanding CRA ratings. The more underserved census tracts included in a lender's service area, the more likely the lender is to serve such communities consistently. With the increasing trend of lenders closing bank branches, particularly in rural areas, banks' ability to provide credit services to all parts of their communities may be limited. Other ways should be considered to encourage lenders to serve underserved communities. As online banking increasingly replaces bricks-and-mortar offices, the CRA should adapt to ensure all communities are being served.

#### Introduction

The Community Reinvestment Act (CRA), enacted in 1977, requires federally insured depository institutions to meet the credit needs of all their service areas, specifically low- and moderate-income areas that are often underserved. Federal regulators examine depository institutions at regular intervals (every two to five years) to assess the degree to which they are fulfilling this obligation. Upon conclusion of the examination, regulators award one of four CRA ratings: Outstanding, Satisfactory, Needs to Improve, and Substantial Noncompliance. The Outstanding rating identifies lenders that go beyond CRA requirements in meeting credit needs for all parts of their service area, and, as noted by the New York Federal Reserve Bank, these lenders are considered "leaders" in such efforts. Regulators classify relatively few lenders as Outstanding and even fewer earn such ratings consistently.

Beyond the debate about the role CRA plays in expanding credit to lower-income populations, discussions about CRA ratings focus on the high rates of passage and possible grade inflation. III This analysis, on the other hand, explores attributes associated with the relatively small number of lenders who consistently earn Outstanding ratings. The analysis emphasizes lenders headquartered in rural and small town communities. Rural areas often experience a dearth of CRA-related investment and community development support – the kind of activity that earns Outstanding ratings. IV

Using logistic regression, this research identified several lender and CRA examination characteristics that are associated with consistently earning Outstanding ratings: banks' regulating agencies, CRA examination types, stockholder ownership status, and the degrees to which lender service areas include CRA-defined distressed and underserved census tracts. No statistically significant association was found between lenders being headquartered in a rural location and being consistently rated Outstanding. While a review of annual CRA ratings by lender headquarters might lead one to conclude that being located in a rural community is negatively associated with earning outstanding CRA ratings, the pattern is likely attributable to lender and CRA examination characteristics such as lender asset size and examination method. Ultimately, policymakers, regulators, and especially community-based organizations should

consider these and other factors when they engage in CRA-related activities and improvements in their communities.

# Background

#### The CRA Examination Process in Brief

Under CRA, lenders have a responsibility to make credit available in all areas where they take deposits or engage in significant business. CRA charges federal bank regulators with evaluating depository institutions on a regular basis to ensure they are meeting this obligation. The evaluations, known as examinations, vary in rigor and frequency based largely on lender asset size, with smaller lenders having less frequent and less demanding reviews.<sup>1</sup>

CRA is not restricted by geography and the regulation is not limited to urban-based or urban-serving institutions. CRA applies to all federally insured depository institutions, a majority of which are headquartered in rural and small town communities. Federal regulators have encouraged more lender involvement in rural communities, especially in investment and community development activities. Advocates have raised concerns that bank consolidation, particularly asset concentration among large urban/suburban based lenders, and regulatory confusion have contributed to a lack of rural investment.

Three federal regulatory agencies perform CRA examinations: the Office of the Comptroller of the Currency (OCC), the Federal Reserve Board (FRB), and the Federal Deposit Insurance Corporation (FDIC).<sup>2</sup> CRA examinations explore, to varying degrees, an institution's retail lending, service provision, and investment/community development activity. Regulators' evaluations are based on activities occurring in a bank's service or assessment area, focusing on the degree to which a lender serves its distressed and underserved neighborhoods.<sup>3</sup> Evaluations

<sup>&</sup>lt;sup>1</sup> Large lender CRA examinations have three tests: retail lending, service provision, and community investment. Intermediate small bank examinations have two tests, a retailing lending test and a streamlined, combination service and community investment test known as community development. Finally, small bank lenders examinations involve just the retail lending test. There are six other exam types, but well over 90 percent of evaluations involve one of these three examinations. CRA examination thresholds are adjusted every year for inflation by the Federal Reserve Board. The 2015 thresholds were as follows: large bank - \$1.221 billion or more; intermediate small bank - \$305 million to less than \$1.221 billion, and small bank - less than \$305 million. Lenders must exceed an asset threshold for their two previous years to qualify for a particular type of exam.

<sup>&</sup>lt;sup>2</sup> There were four regulators until 2013 when the Office of Thrift Supervision was merged into the OCC. This study includes CRA examinations before 2013, so the OTS is included in the analysis.

<sup>&</sup>lt;sup>3</sup> Distressed census tracts include census tracts with a median family income defined as low or moderate based on area medians. Distressed census tracts also include census tracts located outside a metropolitan area with one of the following: 20 percent or more poverty; one and half times the nation's unemployment rate; or a population loss of greater than 5 or 10 percent over the

are performed every two to five years, depending on exam type and previous rating. Regulators evaluate lenders with larger assets or poor ratings more frequently.

Based on the results of these examinations, regulators award each financial institution one of four CRA ratings: Outstanding, Satisfactory, Needs to Improve, and Substantial Noncompliance. Lenders who receive either of the two latter ratings can be denied applications for bank acquisitions or mergers. An Outstanding rating, on the other hand, indicates a lender "has an outstanding record of helping to meet the credit needs of its assessment area, including low- and moderate-income neighborhoods, in a manner consistent with its resources and capabilities." The New York Federal Reserve Bank refers to Outstanding rated lenders as "leaders" in meeting the credits needs of all their service area residents. VII

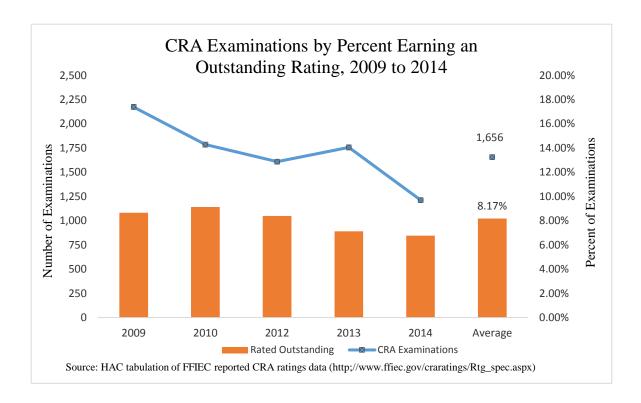
#### Financial Institutions Rated Outstanding

On average, approximately 8 percent of annual CRA examinations during the 2009 to 2014 period resulted in Outstanding ratings. The overwhelming majority of lenders (approximately 89 percent annually) earned Satisfactory ratings, indicating that they adequately satisfied their CRA obligations to serve all portions of their service areas. An average of 2.5 percent of lenders per year earned Needs to Improve or Substantial Noncompliance ratings.

While the number of examinations during the 2009 to 2014 period fluctuated from year to year, the percentage of lenders earning Outstanding ratings was relatively consistent, between 7 and 9 percent.<sup>4</sup> In the 1990s and early 2000s the percentage of lenders earning both Outstanding and poor CRA ratings was about twice as high as it is now. VIII Even when Outstanding ratings were more common; however, the percentage of lenders earning such a distinction was relatively small. For example, in the year 2000, 17 percent of lenders received an Outstanding rating.

last 5 or 10 years respectively. Underserved is defined as remote based on a USDA Economic Research Service Urban Influence Code of 7, 10, 11 or 12. More information about these codes is available at <a href="http://www.ers.usda.gov/data-products/urban-influence-codes.aspx">http://www.ers.usda.gov/data-products/urban-influence-codes.aspx</a>.

<sup>&</sup>lt;sup>4</sup> The decline in CRA activity for 2014 could be related to a lag in data reporting to the FFIEC since the data was collected at the end of 2014.



Approximately half of all lenders rated between 2009 and 2014 were headquartered in a rural or small town census tract.<sup>5</sup> This location factor was consistent for each year; rural and small town lenders represent 53 percent of all FDIC-insured lenders.<sup>6</sup> While rural and small town lenders earned 42 percent of all Outstanding ratings during the study period, Outstanding lenders represented, on average, just 7 percent of all rural examinations each year. Even for urban-headquartered institutions, which each year had a higher proportion of Outstanding ratings than rural and suburban lenders, annually regulators awarded only 13 percent the highest rating.

Large bank examinations, with their more extensive evaluations and requirements than intermediate small and small bank examinations, also more often resulted in Outstanding ratings. On average, 19 percent of all large bank examinations resulted in an Outstanding rating, compared to 9 and 5 percent for intermediate small and small bank examinations, respectively. Although large bank examinations made up approximately 11 percent of all CRA exams during

<sup>&</sup>lt;sup>5</sup> HAC downloaded a total of 9,933 CRA ratings, covering the 2009 to 2014 period, from the FFIEC's CRA website (<a href="www.ffiec.gov/craratings/default.aspx">www.ffiec.gov/craratings/default.aspx</a>). Using FDIC, publically provided information on depository institutions, HAC was able to identify and geographically locate the headquarters of lenders that experienced 8,537 (86%) of the 2009 to 2014 CRA examinations. The FDIC lender data represents depository institutions as they were on December 31, 2014 (<a href="www2.fdic.gov/idasp/warp\_download\_all.asp">www2.fdic.gov/idasp/warp\_download\_all.asp</a>).

<sup>&</sup>lt;sup>6</sup> There was a total of 6,656 FDIC-insured lenders as of December 2014. Rural and small town headquartered lenders made up 53 percent (3,538), suburban and exurban headquartered lenders represented 30 percent, and urban headquartered lenders made up the remaining 17 percent (1,099). The analysis found the three most recent ratings for 5,576 of these lenders.

the study period, they represented 24 percent of Outstanding ratings. Small banks, on the other hand, comprised 63 percent of all exams but only 42 percent of Outstanding evaluations.<sup>7</sup> These patterns were consistent across geographies with large bank lenders making up a disproportionate share of Outstanding ratings for urban, suburban and exurban, and rural and small town headquartered lenders.

# Research on Outstanding CRA Rated Lenders

The literature on CRA usually does not focus on either CRA ratings or rural CRA activity. Most research, particularly recently, has explored the CRA's ability to encourage lending in low- or moderate-income areas and the role it may have played in the 2007-2009 economic crisis. Nevertheless, several studies, particularly those that incorporate CRA ratings into their analysis, stand out as insightful for this research.

Researchers exploring bank and corporate responsibility occasionally include CRA ratings in their analysis as a measure of social performance. These studies view an Outstanding CRA rating as an indication of a socially responsible lender that exceeds government requirements in serving local communities. Matasar and Pavelka, for example, employed CRA ratings in their 2004 analysis of minority banks to assess the degree to which these lenders serve their local communities. Similarly, Simpson and Kohers used CRA ratings to evaluate the relationship between social and financial performance. In both studies, CRA ratings were used to compare lenders, indicating confidence in the rating as an accurate measure of lender community involvement. Notably, Simpson and Kohers found a positive link between profitability and CRA performance, supporting their hypothesis that more resources allow for more community investment. In research did not, however, specifically focus on the attributes of CRA-rated Outstanding lenders.

Campbell, Eden, and Miller's 2012 paper exploring corporate responsibility among multinational banks in host countries exclusively used CRA ratings and identified lenders rated Outstanding as exhibiting high social responsibility. The research assessed proximity of foreign banks to host countries on several dimensions, such as culture, administrative, and economics. This research found that a greater distance between foreign banks and host country

8

<sup>&</sup>lt;sup>7</sup> Lenders experiencing large bank examinations are over represented in the CRA ratings data because they are evaluated more frequently than intermediate small and small bank lenders. Regulators examine large bank examination lenders every two to three years while they evaluate intermediate small and small lenders every four to six years. This schedule assumes a passing rating, which is usually the case.

meant a lower likelihood of earning an Outstanding CRA rating. It also highlighted many potentially important attributes such as lender experience, asset size, and regulator. The study's use of an Outstanding CRA rating as a primary component and its overall approach provide helpful guidance for future research.

Although not directly evaluating CRA Outstanding lender attributes, several other studies assessed related issues. Vitaliano and Stella's 2004 study explored the costs large urban savings and loan (thrifts) incur when earning Outstanding CRA ratings. The authors estimated these costs, specifically for thrifts experiencing large institution CRA examinations, at an extra \$7.4 million – or 1.3 percent of total costs – per year per thrift when compared to earning a Satisfactory rating. The authors pointed to substantial costs as at least part of the reason few lenders earn Outstanding ratings. This research recognized that banks must consider many factors when deciding how to comply with the CRA. For example, smaller banks with limited assets may find it difficult to incur the costs associated with earning an Outstanding rating.

Studies exploring CRA ratings often take bank structure into account. Vitaliano and Stella, for example, identified lenders as either mutual or stock-owned to assess the impact of bank ownership structure on lender CRA compliance decisions. While their results did not identify a stock ownership-CRA ratings relationship, Dahl, et al.'s 2003 study of CRA examination and ratings during the 1990 to 1996 period did discover a similar type relationship. Dahl et al.'s study, which explored whether or not evaluators considered objective lender characteristics in both scheduling CRA examinations and awarding ratings, found that being part of a bank holding company had a statistically significant association related to more frequent CRA examinations and more rapid ratings recovery after a downgrade (drop one rating level). The finding suggest bank structure might be an important CRA ratings factor.<sup>XV</sup>

Other research exploring the issue of CRA grade inflation highlights the potential influence of the CRA process on ratings. As noted by Thomas in his 2000 study of CRA ratings, concern about grade inflation has been around as long as the CRA itself. Thomas's research, which involved multiple reviews of all small bank CRA examinations made public during the first nine months of 1996, representing a total of 1,407 lenders, estimated that CRA ratings were artificially inflated for almost half of all lenders reviewed, with the problem being most acute for lenders rated Outstanding or Needs to Improve. The degree to which ratings inflation occurred varied, but regulatory agency and region were important factors. The FDIC and Federal Reserve

inflated ratings an estimated 52 and 51 percent of the time respectively compared to a low of 30 percent for the OTS. Because of these findings, researchers have to be concerned about possible grade inflation and the effect of the CRA process on ratings.

Research exploring CRA in rural communities is extremely limited. Green and Cowell's 1994 study is one of the few academic papers that refers directly to rural CRA activity. The study explored how lenders identified their assessment areas and the problems lenders encounter dealing with data limitations associated with sparsely populated rural areas. The analysis did not address CRA-covered lenders' activities in rural areas or lender CRA ratings. While the quality of publically available CRA data has improved, information on rural areas is still much less plentiful than that for suburban and urban communities.

Regulatory agencies have performed analysis on how potential changes in CRA rules may impact rural areas. For example, a 2005 Federal Reserve Bank study evaluated the impact of proposed rule changes which included adding, as CRA eligible areas, census tracts located outside metropolitan areas that either were experiencing economic distress or were geographically remote. These types of studies generally evaluate policy changes, but do not directly assess the types of lenders serving rural areas or their CRA ratings.

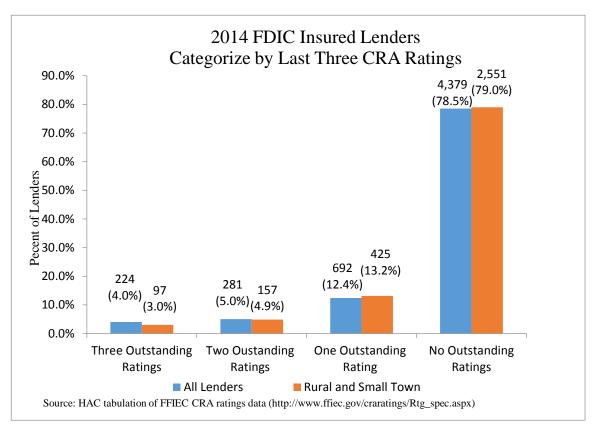
## Consistently Outstanding Rated CRA Lenders

A lender who earns an Outstanding CRA rating has exceeded the federal requirements in meeting its community's credit needs. While an isolated Outstanding rating could reflect a one-time activity or focus, such as the desire to improve an application to acquire another lender, consistently earning Outstanding ratings more likely represents a long-term commitment to community.

A small number of lenders earned Outstanding ratings over multiple examinations. Of all 5,576 depository institutions, only 9 percent earned Outstanding ratings on two or more of their last three CRA examinations. Only 4 percent of these lenders earned three straight Outstanding ratings – called "consistently Outstanding" in this study.<sup>8</sup> In comparison, approximately three-quarters of all lenders earned three straight Satisfactory ratings.

10

<sup>&</sup>lt;sup>8</sup> The initial list of lenders explored represents all FDIC-insured depository institutions classified as active on December 31, 2014. From this list, cases were restricted to lenders for which the most recent CRA examination occurred by 2009. This restriction ensured that the analysis looked at the most recent examinations and did not overlook an earlier examination. If the most recent rating was for 2007, that is a seven-year period since the last reported examination, which is longer than the general five to six years' maximum between evaluations. Those cases were removed from the analysis.



Rural and small town lenders exhibited a similar distribution. Only 3 percent of the 3,230 rural lenders were consistently rated Outstanding. In comparison, 77 percent of rural and small town lenders earned Satisfactory ratings on all three of their most recent evaluations and approximately 79 percent of rural and small town lenders did not earn a single Outstanding rating. Urban headquartered lenders stood out from rural and suburban lenders, with 17 percent receiving an Outstanding rating on two or more of their three most recent examinations and 9 percent being consistently rated outstanding.

Lenders undergoing only large bank CRA examinations for their three most recent reviews were more often, in comparison to intermediate small and small bank examination lenders, consistently rated Outstanding.<sup>9</sup> These large bank exams only lenders made up only 7 percent of all lenders, but they represented approximately 29 percent of all lenders earning three consecutive Outstanding ratings. In comparison, a majority (65 percent) of all lenders

-

<sup>&</sup>lt;sup>9</sup> Lenders can undergo different CRA examinations over the years. As a lender's total assets change, often increase, it can qualify for a different CRA examination type. In addition, a lender could opt for an alternative CRA examination type, such as Strategic Plan. Eight-one percent of all 2014 FDIC-insured lenders (4,510) experienced the same CRA exam type for their last three evaluations and 1,066 did not.

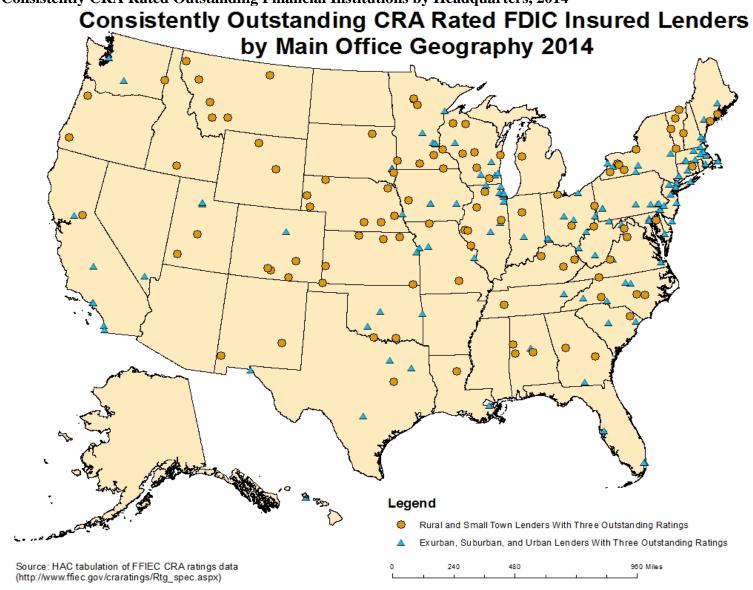
experienced only small bank CRA examinations, yet these lenders made up just 40 percent of all consistently Outstanding institutions.

Consistently Outstanding suburban and urban lenders were geographically concentrated in the Northeast, and consistently Outstanding rural and small town lenders in the Midwest. <sup>10</sup> These distributions reflect overall bank headquarters location patterns. For example, 50 percent of all rural and small town lenders are headquartered in the Midwest. The three states of Wisconsin, Minnesota, and Nebraska contain roughly 23 percent of all rural and small town lenders with three straight Outstanding ratings on their last three examinations. Several states – Arizona, Alaska, Arkansas, Mississippi, and North Dakota – registered no consistently CRA rated Outstanding lenders.

-

<sup>&</sup>lt;sup>10</sup> The Census Bureau's defined Northeast Region includes Connecticut, Maine, Massachusetts, New Jersey, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont. The Census Bureau's defined Midwestern Region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

**Consistently CRA Rated Outstanding Financial Institutions by Headquarters, 2014** 



# Research Approach

#### Research Questions

The analysis explored financial institutions and their CRA examination characteristics to identify attributes associated with consistently earning Outstanding ratings. The research included a focus on CRA ratings related to rural and small town headquarters location. The following two research questions guided this analysis:

- 1) Are there specific attributes associated with being consistently rated Outstanding in CRA examinations?
- 2) Are rural and small town headquartered institutions different, when it comes to being consistently rated Outstanding, than those based in urban or suburban areas?

Are lender characteristics, such as profitability and service area, related to being consistently Outstanding? Or, do components of the CRA examination itself – regulator, exam type, etc. – influence Outstanding ratings? Also, are rural and small town lenders different? Are rural and small town lenders more likely to be considered consistently Outstanding? Research has begun to explore this issue more closely, but much remains to be understood, particularly when it comes to rural and small town lenders.

This study serves as both an analysis of CRA Outstanding lender characteristics in general and an initial evaluation of the possible relationship between Outstanding CRA ratings and rural and small town lenders.

# Research Design

This research used logistic regression techniques to evaluate consistently CRA-rated Outstanding financial institutions. The analysis explored the attributes associated with FDIC-insured institutions with geographically locatable headquarters as of December 2014 that consistently earned Outstanding CRA ratings, defined as three Outstanding ratings earned on their last three CRA examinations. Receiving three consecutive Outstanding ratings was seen as a solid indicator of a lender's success in serving all service area communities and more rigorous than the outcome of a single rating cycle.

The dependent variable in the analysis was a dichotomous indicator of whether a lender received an Outstanding rating on its last three examinations. The sample consisted of financial institutions whose last three CRA examinations could be identified and was restricted to include only lenders who rated either Outstanding or Satisfactory on their last three examinations. Cases with a mix of CRA ratings were removed to ensure a clear difference existed between outstanding and average. The models included as independent variables lender and CRA examination characteristics that are likely to be associated with Outstanding CRA ratings.

### Rural and Small Town Lenders

Most discussion of CRA-related lender activity in rural areas focuses on general statements about the lack of CRA-related investments, with no research directly evaluating Outstanding ratings. Once other factors are accounted for, rural and small town lenders may be more attached to their local communities and regularly invest in them, thus consistently earning Outstanding CRA ratings. Alternatively, these lenders often have modest assets and may be unable to make substantial investments beyond compliance with general CRA requirements. Given that many rural markets suffer from a lack of access to services and a shortage of community development spending, better understanding the lenders that reside in these communities can be important.

This research specifically investigated rural-based institutions by including a variable that identified rural and small town lenders according to the census tract locations of their headquarters. The analysis used a census tract classification based on housing density and commuting patterns to categorize census tracts as urban, suburban, or rural and small town. The rural and small town indicator was interacted with other lender characteristics to evaluate how the results might vary specifically for rural lenders.

#### Lender Characteristics

For all analyses, independent variables included select financial institution and CRA examination characteristics that are hypothesized to influence CRA ratings. The variables accounted for the following lender characteristics: experience, resources, financial performance/profitability, structure, and activity concentration. The research used the following measures to capture these lender characteristics:

- Experience: years of operation since lender established
- Resources: total assets
- Profitability: return on assets (commonly used industry measure) XX

- Structure: stock-owned as opposed to mutual (depositor-owned) bank
- Activity Concentration: lenders with a majority of assets concentrated in mortgage lending activity

#### **CRA Examination Characteristics**

Independent variables included the following CRA examination characteristics: regulatory agency, examination type, and service area CRA eligibility coverage. The research model incorporated the following measures to capture these lender characteristics:

- Regulatory Agency: regulator performing CRA examination during last three evaluations (FDIC, Federal Reserve Board, OCC, OTS, or multiple regulators)
- Examination Type: examination methods used on last three evaluations (large, intermediate small, small, or multiple types)
- Service Area CRA distressed and/or underserved census tract coverage: regulators highly value activity occurring in CRA-defined distressed and underserved census tracts and award lenders credit, and eventually high ratings, for supporting such areas. The service area variable identifies lenders with a majority of their branch offices located in these CRA-designated distressed or underserved census tracts.<sup>11</sup>

Financial institution data, such as assets, return on assets, and service area coverage, were averaged over the 2009 to 2014 period to generate a more accurate picture of a lender's condition over the last few years as opposed to using a single point in time estimate.<sup>12</sup>

# Statistical Approach

#### Logistic Regression Model:

 $logit(p) = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12} + b_{13}X_{13} + b_{14}X_{14} + B_{15}(X_{14}*X_3) + B_{16}(X_{14}*X_4) + B_{17}(X_{14}*X_6)$ 

<sup>&</sup>lt;sup>11</sup> There are two classifications of CRA-designated distressed and underserved census tracts. The original classification is all census tracts with a median income that is less than 80 percent of the area median (known as low- and moderate-income census tracts). The second set of cases involve all census tracts located outside of metropolitan areas with one of the following three conditions: poverty rate of 20 percent or more, unemployment rate 1 and one-half times the national rate, and loss of 5 percent of population over the last five to ten years. Additionally, census tracts located outside of metropolitan areas that are considered low density, based on having UDSA Economic Research Services Urban Influence Codes 7, 10, 11, or 12, are included. The outside of metropolitan area classification was added in 2005 to ensure rural census tracts were not overlooked. For this analysis, any bank branch located in a census tract that meets any of the CRA criteria is considered to be located in a CRA designated area.

<sup>&</sup>lt;sup>12</sup> Please consult the appendix for details on process and more complete variable descriptions.

```
logit(p) = Consistently Rated Outstanding
```

 $X_1$  = Lender Experience

 $X_2 = Total Assets$ 

 $X_3 = Return on Assets$ 

 $X_4$  = Service Area - Majority of bank branches located in CRA designated distressed and/or underserved census tract

 $X_5$  = Lender Stockholder Owned

 $X_6$  = Majority of Assets involve Mortgage Lending Activities

 $X_7$  = Bank Regulator – FDIC Alone (Reference OCC)

 $X_8 = Bank Regulator - Federal Reserve Board Alone (Reference OCC)$ 

 $X_9 = Bank Regulator - OTS Alone (Reference OCC)$ 

 $X_{10}$  = Bank Regulator – Multiple Regulators (Reference OCC)

 $X_{11} = CRA Exam Type - Large Bank Alone (Reference Small Bank Exam)$ 

 $X_{12}$  = CRA Exam Type – Intermediate, Small Bank Alone (Reference Small Bank Exam)

 $X_{13}$  = CRA Exam Type – Multiple Exam Types (Reference Small Bank Exam)

 $X_{14}$  = Rural Headquarters

 $X_{15}$  = Interaction Term (X14\*X3)

 $X_{16}$  = Interaction Term (X14\*X4)

 $X_{17}$  = Interaction Term (X14\*X6)

The model results are presented in step-wise fashion. The initial model (A) included all lender and CRA examination variables. The second model (B) added the key rural variable. The final model (C) included interaction terms between the rural and bank structure variables. Due to issues of multi-collinearity, the number of interaction terms in the last analyses were limited. For ease of understanding, regression coefficients were converted to odds ratios. Odds ratios are easier to understand and compare associations. A table of coefficients is included in the appendix.

#### **Data Sources**

The Federal Financial Institutions Examination Council (FFIEC) provided all CRA ratings data. The FDIC provided all lender characteristics data generated from Summary of Deposit and Call Reports.

# **Descriptive Findings**

Descriptive data indicated that a relatively small percentage of sample lenders, approximately 5 percent, consistently earned Outstanding CRA ratings. This was as expected since only 8 percent of CRA evaluations each year result in Outstanding ratings and consistently earning such ratings is likely to be even rarer. The occurrence of consistently rated Outstanding lenders was even smaller when looking at rural and small town headquartered lenders, again to be expected since small bank lenders are more prevalent in these communities and they are less likely to earn Outstanding ratings in general. The low percentages of consistently Outstanding lenders underscore that this is an uncommon distinction, but their occurrence is common enough to use logistical regression techniques to study.<sup>13</sup>

The descriptive data depicted some unique characteristics of rural and small town lenders. Rural and small town lenders were older, had fewer assets, and had higher profitability than non-rural lenders. Rural lenders' relative longevity may reflect less dynamic financial service markets (fewer openings, closings, failures, acquisitions, mergers, etc.) in rural communities as opposed to suburban and/or urban areas. Other studies have noted the small asset size of rural lenders, with one analysis finding that rural and small town lenders make up a majority of all FDIC-insured institutions but hold only 6 percent of all assets. Finding that rural and small town headquartered lenders had an average total asset size that is seven times lower than the average for all lenders is to be expected. The relatively high return on assets for rural lenders, also identified by USDA research in the 1990s, XXII suggests that despite talk about declining rural communities, rural and small town-based banks are still quite profitable.

Rural and small town financial institutions had a higher proportion of branches located in CRA-eligible distressed and underserved census tracts than do all lenders in general. Over 40 percent of rural and small town lenders had a majority of their branches located in CRA distressed or underserved census tracts, 10 percentage points higher than the entire sample percentage. These differences, at least in part, reflect the relative isolation and poor economic conditions experienced in many rural areas; these conditions result in many census tracts

<sup>&</sup>lt;sup>13</sup> The limited number of positive or outstanding responses also limits the number of variables that can be used in this analysis. The general rule of thumb is to have no more than 10 variables for expected dependent variable or results become unstable. This means a maximum of 22 variables in the consistently Outstanding rated model.

achieving CRA distressed or underserved status. Also, unlike larger urban and suburban lenders, rural and small town banks often have a few branches that serve one or two rural counties as opposed to covering more jurisdictions.

Sample Descriptive Data Highlighting Rural and Small Town Cases

¥/	Consistently Outstanding and Satisfactory Rated Lenders						
Variable	All Cases	Rural and Small Town Cases					
Outstanding Lenders	224 (5.1%)	97 (3.7%)					
Years of Experience (Logged in Model)	85.0 Mean (39.5) Std.	93.9 Mean (31.7) Std.					
Total Assets – Thousands (Logged in Model)	\$1,757,243 Mean (\$35,000,000) Std.	\$235,766 Mean (\$629,321) Std.					
Return on Assets	0.8 Mean (0.9) Std.	0.9 Mean (0.6) Std.					
Stock Ownership	4,113 (93.1%)	2,484 (95.7%)					
50 Percent or More Branches in CRA Eligible Areas	1,330 (33.1%)	1,091 (42.0%)					
Asset Concentration Mortgages	274 (6.2%)	113 (4.4%)					
Regulators							
FDIC	2, 774 (62.8%)	1,662 (64.0%)					
FRB	467 (10.6%)	263 (10.1%)					
OCC	680 (15.4%)	428 (16.5%)					
OTS*	66 (1.5%)	24 (0.9%)					
Multiple Regulators	432 (9.8%)	219 (8.4%)					
Examination Type							
Large Bank	304 (6.9%)	61 (2.4%)					
Small Bank	2,931 (66.3%)	2,062 (79.4%)					
Intermediate Small Bank	376 (8.5%)	139 (5.4%)					
Multiple Examination Types	808 (17.8%)	334 (12.9%)					
Observations	4,419	2,596					

<sup>\*</sup>OTS case totals are small because the OTS merged with the OCC in July 21, 2011 and no longer exists.

The FDIC, regardless of lender geography, performed approximately two-thirds of all CRA examinations in the sample, essentially matching the overall percentage for the 2009 to 2014 period – 66 percent. The OTS, on the other hand, performed an extremely small percentage of examinations, which is to be expected since the OTS merged with the OCC in 2011. Approximately 10 percent of all cases involved lenders that were evaluated by more than one regulator over their last three exams. In about half of these cases, the OTS and OCC merger caused the regulator change.

A majority of sample lenders experienced only small bank examinations, approximately two-thirds of all cases. Over 84 percent of the rural and small town lenders experienced either only intermediate small or small bank examinations. The sample case distribution varied somewhat from the current annual makeup of CRA examinations; approximately 90 percent of examinations each of the last three years have involved either an intermediate small or small bank evaluation. These differences were largely related to both how the sample cases were selected and changes in the CRA in the middle 2000s when the intermediate small bank exam was established. Some institutions took nine years or longer to earn three consecutive Satisfactory or Outstanding ratings. As a result, one rating could have occurred before the intermediate small bank exam was available. These cases were among the more than 15 percent of lenders in the multiple examinations category.

The prevalence of stock ownership among the sample was clear, with over 93 percent of lenders' ownership structured in that manner. Mutual banks, which are structured like credit unions, are uncommon, with only 17 states authorizing them. Similarly, lenders with assets concentrated in mortgage lending activity represented less than 10 percent of all lenders and just 6 percent of sample institutions. Few banks concentrate activities primarily in the mortgage lending market.

### Results

Logistic regression model coefficients were converted into odds ratios for ease of interpretation and comparison. The odds ratios represent the odds of a lender being consistently rated Outstanding in comparison to the attribute of interest's reference group, after holding all other variables constant. For example, the odds that a stockholder-owned lender was consistently rated Outstanding were only 48 percent of the odds that a non-stockholder-owned lender

received that distinction. A ratio of less than one means the odds of the dependent variable occurring decreases, while a ratio above one means the odds increase.<sup>14</sup> For each odds ratio statistical significance was noted, from lowest level to highest level, for the .10, .05, and .001 level. Statistical significance represents the level at which one can be confident that the results are unlikely to have occurred by chance. The analysis performed tests exploring model specification, goodness of fit, and multi-collinearity to identify any problems.<sup>15</sup> The likelihood ratio (LR) chi-square test for each model was statistically significant, meaning there is a significant relationship between the independent and dependent variables in these models.

The model runs had consistent and similar results. Lender structure and CRA process variables generally performed as hypothesized and similar to other studies. For example, age of institution and asset size were both positively associated with earning an Outstanding rating, as Campbell et al.'s 2012 study found. The Campbell et al. study of multi-national banks generated an odds ratio for logged bank size (assets) ranged between 1.5 and 2.2, similar to the 1.5 and 1.6 ratios in this study. To further check results, which do differ somewhat from other studies, similar measures were used in the model and results were compared. For example, return on equity was substituted for return on assets (both are accepted measures of profitability) and both variables generated similar results, positive but not statistically significant.

The secondary variable of interest, rural and small town headquarters, was not associated with earning Outstanding ratings. In other words, the odds of consistently earning an Outstanding rating were no different for rural- and small town-based banks than for suburban/urban-based lenders, holding all other variables constant. The rural and small town interaction terms, employed to identify the possible nuances of the relationship, were not statistically significant either.

The model identified several other important relationships. A statistically significant association existed between being consistently rated Outstanding and lenders operating 50 percent or more of their deposit-taking offices in CRA-designated distressed or underserved census tracts. A lender with at least half its offices in these CRA-designated census tracts, holding other variables constant, had approximately 1.9 to 2.1 times the odds of consistently earning Outstanding ratings as a lender without such service area coverage. This finding was the

-

<sup>&</sup>lt;sup>14</sup> A value of one would mean no difference in odds exists.

<sup>&</sup>lt;sup>15</sup> For all models, tests evaluating model specification (linktest), goodness of fit (Hosmer and Lemeshow's test), and multicollinearity (explore VIFs) did not identify any problems.

same across all three models. Given that lenders define their service or assessment areas based primarily on the location of deposit-taking branches, this measure captured the degree to which a service area that contains neighborhoods in need of financial services was related to providing service to all neighborhoods.

Odds Ratios for Consistently CRA Rated Outstanding Lenders, Models

•	Consistently Outstanding and Satisfactory Rated Lenders							
Variables	Model A	Model B	Model C					
Years of Experience (Logged)	1.60***	1.66***	1.68***					
Assets - in Thousands (Logged)	1.56***	1.53***	1.53***					
Return on Assets (ROA)	1.04	1.05	1.06					
50% or more of bank branches in	1.98***	2.10***	1.93***					
CRA distress and underserved census								
tracts (Service Area)								
Stockholder Ownership	0.48***	0.50***	0.52**					
Mortgage asset concentration	0.78	0.77	0.65					
FDIC regulator	0.69*	0.68*	0.69*					
FRB regulator	1.27	1.27	1.27					
OTS regulator	8.51***	8.32***	8.04***					
Multiple Regulator	1.68*	1.65*	1.65*					
Large Bank Exam	2.48***	2.44***	2.37**					
Intermediate Small Exam	1.43	1.41	1.39					
Multiple Exam	1.14	1.13	1.13					
Rural and Small Town (Rural)		0.82	0.78					
Rural *ROA			0.89					
Rural *Service Area			1.00					
Rural *Mortgage			1.65					
Constant (Coefficient Provided)	-10.28***	-10.15***	-10.21***					
LR Chi2	285.21***	286.49***	305.420***					
Pseudo R2	0.16	0.16	0.172					
Log Likelihood	-743.49	-742.85	-741.93					
Number of Observations	4,417	4,417	4,417					

Statistical Significance Levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

There was variation in the association between consistently earning Outstanding CRA ratings and bank regulator. In particular, lenders regulated by only the OTS for their last three examinations were approximately eight times as likely as OCC only-regulated lenders to be consistently rated Outstanding. While the OTS no longer exists and the number of observations for this category was limited, statistically significant differences, albeit at the lowest .10 level, also existed between the FDIC only and multiple regulator lenders and the OCC. For example,

<sup>&</sup>lt;sup>16</sup> For OTS results, the small number of observations might be partially responsible for the dramatic increase in odds ratio.

the odds of an FDIC-examined lender consistently earning an Outstanding rating were approximately one-third less than for an OCC-evaluated bank, holding other variables constant. Lenders that had more than one regulator for their last three CRA examinations, however, were associated with increased odds of being consistently rated Outstanding. The results were similar across all three model runs.

Lenders with assets concentrated in mortgage lending activity did not have a statistically significant association with being consistently rated Outstanding after controlling for other attributes. There appeared to be no benefit or burden from having considerable mortgage-related holdings. Being a stockholder-owned institution, however, did have a statistically significant association with being consistently rated Outstanding. A stockholder-owned lender had approximately 48 percent of a mutual bank's estimated odds of consistently earning an Outstanding rating, holding other variables constant.

#### Discussion

The analyses produced relatively similar results across all model iterations. While many structural and CRA examination variables were statistically significant, the findings did not include a statistically significant association between lenders headquartered in rural and small town areas and being consistently rated Outstanding, after controlling for other factors.

## Rural and Small Town Location Headquarters Not Related

Associations if they do exist between rural and small town lenders and earning Outstanding ratings are likely attributable to other lender or examination factors such as examination method and asset size. For example, as the literature suggests, in this analysis bank examination type – particularly the large bank examination method – was found to be an important factor in CRA ratings. The odds of consistently earning Outstanding ratings were approximately 2.5 times larger for lenders undergoing the large bank examination than those undergoing the small bank exam. Intermediate small bank examinations, on the other hand, did not have a statistical significance difference in odds when compared to small bank exams. Rural and small town headquartered lenders overwhelmingly experience intermediate small or small bank examinations – only 2.4 percent of rural and small town lenders in the sample experienced CRA large examinations compared to 14.9 percent of the suburban and urban lenders.

Additional research should closely explore the specific factors associated with large banks (those with high assets) and large bank examinations that might promote consistently earning Outstanding ratings. While this analysis did not find profitability to have a statistically significant relationship with Outstanding ratings in any of the models, total assets was a significant factor, which may mean resources in general are a key factor. A lender with considerable resources, which would be a large bank by CRA examination standards, can probably afford to fund more community development or investment projects which are the types of activities a lender needs to support to earn an Outstanding rating. Large bank exam lenders may also be more publically well-known, giving them incentive to maintain a good public image. Regardless of the reason, many factors could be involved in the determination of ratings and more analysis is required.

#### CRA Examination Process is Important

Highlighting the importance of assessment and service areas – which are primarily determined by bank office location – the analysis found a statistically significant positive association between lenders operating over 50 percent of their branches/offices in CRA-designated distressed or underserved census tracts and consistently earning Outstanding ratings. Intuitively, increased opportunities to provide services in distressed and underserved areas may promote more service provision. Many rural areas, due to limited populations, fail to be included in lender service areas because large lenders often lack a branch presence there. How lenders define service areas and what it means to reach distressed areas becomes a complex issue, especially with the ever changing face of banking, where bricks and mortar offices are less and less important. How will changes in the regulations ensure the nexus between banks and credit access to the underserved exists?

The findings, similar to other studies on the subject, suggest there are some differences in the odds of earning an Outstanding CRA rating based on the regulator performing the evaluation. While the biggest differences in odds involve OTS, which no longer exists, the fact that statistically significant differences were identified necessitates further inspection. Such differences may reflect actual bank differences not accounted for in the model. For instance, the OTS provided oversight mainly to thrifts and something about those lenders could make them more likely to be consistently rated Outstanding. On the other hand, differences in regulator odds ratios may simply represent a lack of consistency in the evaluation process across agencies.

These findings, in general, point to the importance of the CRA examination process. Regulators and policymakers need to fully understand these dynamics and use them to assist with policy efforts around financial service provision. Having a better understanding of the roles played by attributes such as service area definition, examination type, and regulator could help in addressing concerns about regulator shopping and inconsistencies in general. XXIV

#### Other Related Associations

A stockholder-owned institution had about 45 percent of the estimated odds of earning an Outstanding rating as a mutual bank, holding other model variables constant. This suggests bank ownership structure can be important in CRA compliance. The challenge is to explore why certain ownership structures, not just stock-owned and mutual banks, may impact lender actions. Some researchers hypothesize that mutual banks, due to their unusual structure, are viewed favorably by regulators, while others suggest mutual bank managers are not as worried about profits and can more freely engage in CRA-prized community investments. \*\*XXV\*\* Better understanding of lender operations and incentives may help policymakers.

A potential area of increased research focus is leadership dynamics and how they relate to community service. Anecdotal accounts indicate that bank leadership is important, particularly if bank leaders believe they have an obligation to support their local communities, with the end result benefiting everybody.<sup>17</sup> Good leaders may be inclined to support CRA eligible efforts even if they would receive no credit for having done so. How good leadership can be encouraged by bank regulators and regulations such as CRA should be further investigated.

\_

<sup>&</sup>lt;sup>17</sup> In researching examples where lender supported CRA eligible community investments in rural communities, the author came across cases where the lender involved in the project saw its efforts as fulfilling a responsibility to the community. Fulfilling that responsibility was seen not only as the right thing to do, but also as good business since improving local communities helps everyone including the bank. These lenders appeared to have a leadership philosophy that promoted such efforts.

### **Endnotes**

<sup>1</sup> Chaudhuri, Saabira. 2014. U.S Banks Prune More Branches. The Wall Street Journal, January 27, 2014 issue, Money section. Article accessed 8/15/15 at the following url: <a href="http://www.wsj.com/articles/SB10001424052702303277704579347223157745640">http://www.wsj.com/articles/SB10001424052702303277704579347223157745640</a>
<sup>II</sup> Federal Reserve Bank of New York. Definitions of CRA Ratings. Webpage accessed 6/18/15 at the following url:

http://www.newyorkfed.org/banking/cra/defcra.html

III Kenneth H. Thomas. 2000. *CRA Grade Inflation*. Working Paper No. 313, Presented as the 10<sup>th</sup> Annual Hyman P. Minsky Conference on Financial Structure. The Liberalization of Financial markets (http://www.levyinstitute.org/publications/cra-grade-

inflation). The author explains how CRA grade inflation claims have been debated since the CRA was enacted in 1977.

IV Remarks by Thomas J. Curry, Comptroller of the Currency, before the National Community Reinvestment Coalition, March 12 2014. As of 2/24/15 the speech transcripts can be found at the following url: <a href="http://www.occ.gov/news-issuances/speeches/2014/pub-speech-2014-38.pdf">http://www.occ.gov/news-issuances/speeches/2014/pub-speech-2014-38.pdf</a>

issuances/speeches/2014/pub-speech-2014-38.pdf

V Remarks by Office of Comptroller of Currency Before the National Community Reinvestment Act Coalition, March 12, 2014 (http://www.occ.gov/news-issuances/speeches/2014/pub-speech-2014-38.pdf)

VI FDIC Compliance Examination Manual for the CRA. The quote came from Section XI-7.1 entitled "CRA Ratings System," specifically the definition of an outstanding rating. This section was last updated on 01/2014. The FDIC compliance manual was accessed 7/12/15 at the following url: <a href="https://www.fdic.gov/regulations/compliance/manual/">https://www.fdic.gov/regulations/compliance/manual/</a>

VII Federal Reserve Bank of New York. Definitions of CRA Ratings. Webpage accessed 6/18/15 at the following url: <a href="http://www.newyorkfed.org/banking/cra/defcra.html">http://www.newyorkfed.org/banking/cra/defcra.html</a>

VIII Kenneth H. Thomas. 2014. Comptroller Curry: How About Some Real CRA Reform? American Banker, April, 9, 2014. Article accessed 2/14/15 at the following url: <a href="www.americanbanker.com/bankthink/comptroller-curry-how-about-some-real-cra-reform-1066745-1.html">www.americanbanker.com/bankthink/comptroller-curry-how-about-some-real-cra-reform-1066745-1.html</a>

IX Sumit Agarwal, Effi Benmelech, Nittai Bergman, and Amit Seru. 2012. Did the Community Reinvestment Act (CRA) Lead to

<sup>IX</sup> Sumit Agarwal, Effi Benmelech, Nittai Bergman, and Amit Seru. 2012. *Did the Community Reinvestment Act (CRA) Lead to Risky Lending?* National Bureau of Economic Research, Working Paper No. 18609 (December 2012). Apgar, William C. and Mark Duda. 2003. The Twenty-Fifth Anniversary of the Community Reinvestment Act: Past Accomplishments and Future Regulatory Challenges. Federal Reserve Bank of New York, *Economic Policy Review* (June 2003): 169-191. Haag Susan White. 2000. *Community Reinvestment and Cities: A Literature Review of CRA's Impact and Future*. Brookings Institute Discussion Paper. Paper Accessed 1/5/14 at the following url:

http://www.brookings.edu/~/media/research/files/reports/2000/4/cra%20haag/haag1.pdf

<sup>X</sup> Ann B. Matasar and Deborah. D. Pavelka. 2004. Minority Banks and Minority Communities: Are Minority Banks Good Neighborhoods? *International Advances in Economic Research*, 10(1):43-58

XI Gary W. Simpson and Theodor Kohers. 2002. The Link Between Corporate Social and Financial Performance: evidence from the banking industry. *Journal of Business Ethics*, 35(2):97-109

XII Simpson and Kohers.

XIII Joanna Tochman Campbell, Lorraine Eden, and Stewart R. Miller. 2012. Multinationals and Corporate Social Responsibility in Host Countries: Does Distance Matter? Research Paper No. 2012-51

XIV Donald F. Vitaliano and Gregory P. Stella. 2004. The Cost of Corporate Social Responsibility: The Case of Community Reinvestment Act. Rensselaer Polytechnic Institute Working Papers on Economics. Article accessed 1-15-15 at the following url: <a href="https://www.economics.rpi.edu/workingpapers/rpi0412.pdf">www.economics.rpi.edu/workingpapers/rpi0412.pdf</a>

XV Drew Dahl, Douglas D. Evanoff and Michael F. Spivey. 2003. The Timing and Persistence of CRA Compliance Ratings, *Journal of Financial Services* Research, 23:2, 113-132.

XVI Thomas.

<sup>XVII</sup> Gary P. Green and Deborah Klinko Cowell. 1994. Community Development and Local Economic Development in Rural Areas. *Journal of Community Development Society*, (25)2:229-245

Robert B. Avery, Glenn B. Canner, Shannon C. Mok, Dan S. Sokolov, and Onka L Tenkean. 2005. Community Banks and Rural Development: Research Relating to Proposals to Revise the Regulations that Implemented the Community Reinvestment Act. *Federal Reserve Bulletin*, 91:202-235

XIX For more information on the Housing Assistance Council's rural and small town definition see the following publication (page 113) *Taking Stock, Rural People, Poverty and Housing in the 21st Century*, 2012. As of 2/15/15, the report was available at the following url: <a href="http://www.ruralhome.org/component/content/article/587-taking-stock-2010">http://www.ruralhome.org/component/content/article/587-taking-stock-2010</a>
XX Simpson and Kohers.

XXI Housing Assistance Council. (2015). The Community Reinvestment Act and Mortgage Lending in Rural Communities. XXIIRobert Collender. 1997. Would More Rural Bank Access to Nonlocal Funds Provide Public Benefits? USDA, Economic Research Services, Agriculture Information Bulletin No 724-10, December 1997. Article accessed 2/15/15 at the following url: <a href="http://www.ers.usda.gov/media/564740/aib72410">http://www.ers.usda.gov/media/564740/aib72410</a> 1 .pdf

Kenneth H. Thomas. 2014. Comptroller Curry: How About Some Real CRA Reform? American Banker, April, 9, 2014. Article accessed 2/14/15 at the following url: <a href="www.americanbanker.com/bankthink/comptroller-curry-how-about-some-real-reform-1066745-1.html">www.americanbanker.com/bankthink/comptroller-curry-how-about-some-real-reform-1066745-1.html</a>

XXIV Jessica Silver-Greenberg. 2012. Small Banks Shift Charters to Avoid U.S. as Regulator. *The New York Times*, April 2, 2

XXIV Jessica Silver-Greenberg. 2012. Small Banks Shift Charters to Avoid U.S. as Regulator. *The New York Times*, April 2, 2 Article accessed 2/15/15 at the following url: http://www.nytimes.com/2012/04/03/business/small-banks-shift-charters-to-avus-as-regulator.html

XXV Eric Rasmusen. 1988. Mutual Banks and Stock Banks. *Journal of Law and Economics*, 31: 395 - 421.

## References

- Agarwal, Sumit, Effi Benmelech, Nittai Bergman, and Amit Seru. 2012. *Did the Community Reinvestment Act (CRA) Lead to Risky Lending?* National Bureau of Economic Research, Working Paper No. 18609 (December 2012).
- Apgar, William C. and Mark Duda. 2003. The Twenty-Fifth Anniversary of the Community Reinvestment Act: Past Accomplishments and Future Regulatory Challenges., Federal Reserve Bank of New York, *Economic Policy Review* (June 2003): 169-191.
- Avery, Robert B. Glenn B. Canner, Shannon C. Mok, Dan S. Sokolov, and Onka L Tenkean. 2005. Community Banks and Rural Development: Research Relating to Proposals to Revise the Regulations that Implemented the Community Reinvestment Act. *Federal Reserve Bulletin*, 91:202-235
- Campbell, Joanna Tochman, Lorraine Eden, and Stewart R. Miller. 2012. *Multinationals and Corporate Social Responsibility in Host Countries: Does Distance Matter?* Research Paper No. 2012-51
- Center for Rural Strategies. 2004. *Debunking CRA Myths*-web article located at the following url: <a href="http://www.ruralstrategies.org/debunking-cra-myths">http://www.ruralstrategies.org/debunking-cra-myths</a>
- Collender, Robert. 1997. Would More Rural Bank Access to Nonlocal Funds Provide Public Benefits? *United States Department of Agriculture: Economic Research Services, Agriculture Information Bulletin No 724-10*, December 1997. Article accessed 2/15/15 at the following url: <a href="http://www.ers.usda.gov/media/564740/aib72410\_1">http://www.ers.usda.gov/media/564740/aib72410\_1</a>. <a href="http://www.ers.usda.gov/media/564740/aib72410\_1">http://www.ers.usda.gov/media/564740/aib72410\_1</a>.
- Curry, Thomas J. 2014. *Remarks by Thomas J. Curry, Comptroller of Currency, Before the National Community Reinvestment Coalition*, March 12, 2014. AS of 4-24-14, this speech can be found at the following url: <a href="http://www.occ.gov/news-issuances/speeches/2014/pub-speech-2014-38.pdf">http://www.occ.gov/news-issuances/speeches/2014/pub-speech-2014-38.pdf</a>
- Dahl, Drew, Douglas D. Evanoff and Michael F. Spivey. 2003. The Timing and Persistence of CRA Compliance Ratings, *Journal of Financial Services* Research, 23:2, 113-132.
- Green, Gary P. and Deborah Klinko Cowell. 1994. Community Development and Local Economic Development in Rural Areas. *Journal of Community Development Society*, (25)2:229-245
- Haag Susan White. 2000. Community Reinvestment and Cities: A Literature Review of CRA's Impact and Future. Brookings Institute Discussion Paper. Paper Accessed 1/5/14 at the following url: http://www.brookings.edu/~/media/research/files/reports/2000/4/cra%20haag/haag1.pdf

- Housing Assistance Council. 2015. The Community Reinvestment Act and Mortgage Lending in Rural Communities
- Housing Assistance Council. 2012. *Taking Stock, Rural People, Poverty and Housing in the* 21<sup>st</sup> Century, 2012 as of 2/15/15, the report was available at the following url: <a href="http://www.ruralhome.org/component/content/article/587-taking-stock-2010">http://www.ruralhome.org/component/content/article/587-taking-stock-2010</a>
- Leckrone, J. Wesley. 2013. *State and Political Culture*. The American Partnership Blog. 12/13/14 http://theamericanpartnership.com/2013/12/18/state-and-local-political-culture/
- Matasar, Ann B. and Deborah. D. Pavelka. 2004. Minority Banks and Minority Communities: Are Minority Banks Good Neighborhoods? *International Advances in Economic Research*, 10(1):43-58
- Rasmusen Eric. 1988. Mutual Banks and Stock Banks. *Journal of Law and Economics*, 31: 395 421.
- Silver-Greenberg, Jessica. 2012. Small Banks Shift Charters to Avoid, U.S. as Regulator. *The New York Times*, April 2, 2012.
- Simpson, Gary W. and Theodor Kohers. 2002. The Link between Corporate Social and Financial Performance: Evidence from the Banking Industry. *Journal of Business Ethics*, 35(2):97-109.
- Thomas, Kenneth H. 2014. Comptroller Curry: How About Some Real CRA Reform? *American Banker*, April, 9, 2014. Article accessed 2/14/15 at the following url: <a href="https://www.americanbanker.com/bankthink/comptroller-curry-how-about-some-real-cra-reform-1066745-1.html">www.americanbanker.com/bankthink/comptroller-curry-how-about-some-real-cra-reform-1066745-1.html</a>
- Thomas, Kenneth H. 2000. *CRA Grade Inflation*. Working Paper. Paper Presented at the Tenth Annual Hyman P. Minsky Conference on Financial Markets: National and International Perspectives, Levy Institute. Bard College, Annandale-on-Hudson, New York.
- Vitaliano, Donald F. and Gregory P. Stella. 2004. The Cost of Corporate Social Responsibility: The Case of Community Reinvestment Act. Rensselaer Polytechnic Institute Working Papers on Economics. Article accessed 1-15-15 at the following url: <a href="https://www.economics.rpi.edu/workingpapers/rpi0412.pdf">www.economics.rpi.edu/workingpapers/rpi0412.pdf</a>
- Woessner, Paula. 2007. *Community Dividend: CRA Exam Basics and 9th District Breakdown*. <a href="http://www.minneapolisfed.org/publications\_papers/pub\_display.cfm?id=1927">http://www.minneapolisfed.org/publications\_papers/pub\_display.cfm?id=1927</a>

# Appendix

Table A1. CRA Ratings 2009 to 2014

	Year										Average			
Rating	2009		2010		2011 2012 2013 2014									
	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.
Outstanding	188	8.65%	163	9.13%	119	8.52%	135	8.39%	125	7.12%	82	6.76%	135	8.17%
Satisfactory	1,936	89.09%	1,561	87.40%	1,230	88.11%	1,441	89.56%	1,596	90.89%	1,110	91.51%	1,479	89.34%
Needs to Improve	43	1.98%	60	3.36%	43	3.08%	29	1.80%	32	1.82%	19	1.57%	38	2.28%
Substantial Noncompliance	6	0.28%	2	0.11%	4	0.29%	4	0.25%	3	0.17%	2	0.16%	4	0.21%
Total	2,173	100.00%	1,786	100.00%	1,396	100.00%	1,609	100.00%	1,756	100.00%	1,213	100.00%	1,656	100.00%

Source: FFIEC, CRA Ratings Search Website: <a href="http://www.ffiec.gov/craratings/default.aspx">http://www.ffiec.gov/craratings/default.aspx</a>

Table A2. FDIC Insured Lenders 2014 by Last Three CRA Ratings\*

Number of Ratings-Last Three Reviewed	All Lenders		Rural and Small Town		Suburban and Exurban		Urban	
Reviewed	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Three Outstanding Ratings Alone	224	4.02%	97	3.00%	54	3.53%	73	8.96%
Two Outstanding Ratings Alone	281	5.04%	157	4.86%	60	3.92%	64	7.85%
One Outstanding Rating Alone	692	12.41%	425	13.16%	167	10.91%	100	12.27%
No Outstanding Ratings	4,379	78.53%	2,551	78.98%	1,250	81.65%	578	70.92%
Total	5,576	100.00%	3,230	100.00%	1,531	100.00%	815	100.00%

\*Most recent rating found occurred within the 2009 to 2014 period.

Source: FFIEC, CRA Ratings Search Website: <a href="http://www.ffiec.gov/craratings/default.aspx">http://www.ffiec.gov/craratings/default.aspx</a>

Table A3. Independent Variables

Variable	Description	Coding
Experience	The difference between the year of the CRA examination and the year	Logged. Use age as of 2014.
	a bank was established	
Total Assets	Total assets listed in thousands.	Logged. Use average over the 2009 to 2014 period.
Return on Assets	Measure of profitability representing a bank's net income after taxes	Ratio format. Use an average of return on assets over the 2009 to 2014 period.
	and extraordinary items (annualized) as a ratio of average total assets	
	(income/assets). As return on assets increase (higher number) a	
	bank's profitability increases.	
Lender Service	Percent of deposit taking lender offices located in CRA eligible	Dummy variable: 1 = over 50 percent of bank offices in CRA eligible census
Area Coverage	census tract.	tract, and $0 = $ all others. The variable is based on annual average over the 2009
		to 2014 period.
Lender Classified	FDIC classification of lender as "mortgage" asset concentration	Dummy variable: $1 = mortgage$ asset concentration, and $0 = all$ others. The
Mortgage Asset	represents bank with residential mortgage loans, plus mortgage-	mortgage category represents all lenders classified as mortgage asset
Concentration	backed securities, in excess of 50 percent of total assets	concentration in both 2009 and 2014. *
Stock Ownership	Banks which are stock owned as opposed to depositor owned.	Dummy variable: $1 = \text{stock}$ , and $0 = \text{all others}$ . The stock category represents
		all cases where a lender had outstanding stock in both 2009 and 2014. *
Examination Type	Bank CRA examination method	If a lender experiences the same examination on their last three evaluations,
		they were coded as that examination method. When more than one
		examination type was involved, the case was coded as multiple regulators. **
		The categories are Large Bank Exam, Intermediate Small Bank Exam,
		Multiple Exam Types and Small Bank Exam (reference group).
Regulators	Bank regulator performing CRA examination	If a single regulator performed the last three examinations the case is coded as
		that regulator. When more than one regulator was involved, the case is coded
		as multiple regulators. The categories are FDIC, Federal Reserve Board, Office
		of Thrift Savings, Multiple Regulators and OCC (reference group).

<sup>\*</sup>The analysis used lender classifications from the first and last year of the 2009 to 2014 period as proof of long-term mortgage lending and stockholder status. \*\*Lenders experiencing one of the other CRA exam types was extremely small, and, as a result, they were dropped from all models.

Table A4. Regression Models A, B, and C, CRA Consistently Outstanding and Satisfactory Lender Ratings\*

Variables	R	egression A		R	egression E		Regression C			
	Coefficient	Standar d Error	Odds Ratio	Coefficien t	Standar d Error	Odds Ratio	Coefficient	Standar d Error	Odds Ratio	
Age Logged	0.47***	0.128	1.60***	0.50***	0.13	1.66***	0.52***	0.132	1.68***	
Assets Logged	0.44***	0.077	1.56***	0.42***	0.08	1.53***	0.42***	0.079	1.53***	
Return on Assets (ROA)	0.040	0.058	1.04	0.040	0.06	1.05	0.06	0.059	1.06	
At least half bank branches	0.68***	0.172	1.98***	0.74***	0.18	2.10***	0.66***	0.248	1.93***	
located in CRA designated census										
tracts										
Stock	-0.73***	0.256	0.48***	-0.69***	0.26	0.50***	-0.66**	0.259	0.52***	
Mortgage	-0.250	0.285	0.78	-0.260	0.29	0.77	-0.43	0.343	0.65	
FDIC Regulator	-0.37*	0.214	0.69*	-0.38*	0.21	0.68*	-0.38*	0.214	0.69*	
Federal Reserve Board Regulator	0.240	0.263	1.27	0.24	0.26	1.27	0.24	0.264	1.27	
OTS Regulator	2.14***	0.360	8.51***	2.12***	0.36	8.32***	2.08***	0.362	8.04***	
Multiple Regulators	0.52*	0.268	1.68*	0.50*	0.27	1.65*	0.51*	0.268	1.65*	
Large Bank Exam	0.91***	0.326	2.48***	0.89***	0.33	2.44***	0.86**	0.329	2.37**	
Intermediate Small Bank Exam	0.360	0.276	1.43	0.34	0.28	1.41	0.33	0.277	1.39	
Multiple Exam Types	0.131	0.233	1.14	0.13	0.23	1.13	0.12	0.234	1.13	
Rural				-0.20	0.18	0.82	-0.25	0.284	0.78	
Interaction (Rural*ROA)							-0.12	0.184	0.89	
Interaction (Rural*Service Area)							0.00	0.004	1.00	
Interaction (Rural*Mortgage)							0.50	0.487	1.65	
Constant	-10.28***	1.159		-10.15***	1.162		-10.21***	1.167		
LR chi2	285.21***			285.21***			288.33***			
Pseudo R2	0.16			0.16			0.16			
Log likelihood	-743.48			-743.49	_		-741.93			
Observations	4,417			4,417			4,417			

Statistical Significance Levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>\*</sup>Classified as lenders with their three most recent ratings all either Outstanding or Satisfactory