PENN IUR **WORKING PAPER**

Quantitative Performance Metrics for CRA

How Much “Reinvestment” is Enough?

CAROLINA REID
Assistant Professor, Department of City and Regional Planning
Faculty Research Advisor, Terner Center for Housing Innovation, University of California, Berkeley
Contact Information: c_reid@berkeley.edu

SEPTEMBER 2019

Photo by NCinDC, via Flickr.

Contents

1. INTRODUCTION

"With more than 13,000 banks and thrifts in this country spread over this huge nation, with different needs and different economic times, to use simply a bright line or formulas or quotas or credit allocation doesn't work, and it creates unintended bad results. So we are not doing that." — Eugene Ludwig, Comptroller of the Currency, December 8, 1993

Since the passage of the Community Reinvestment Act (CRA) in 1977, regulators have grappled with the question of how to best evaluate a bank's performance in meeting the credit needs of its communities. In part, this has to do with the lack of concrete definitions for key concepts in the original statute: What is the best empirical definition of community? What is meant by community needs? But it also stems from the difficulty of setting objective benchmarks that could equally apply to banks with different asset levels and business models, and in diverse communities with distinct reinvestment needs. Former Comptroller of the Currency Eugene Ludwig emphasized this point in 1993 during the last significant rulemaking on CRA, highlighting that defining a bright line for an institution's CRA rating could lead to unintended consequences, particularly when issues of bank safety and soundness remain paramount. As a result, CRA performance evaluations and a bank's rating have always been a blend of art and science, with subjective assessments often holding sway over hard numbers.

This may be changing. In its 2018 Advance Notice of Proposed Rulemaking (ANPR), the Office of the Comptroller of the Currency (OCC) raised the question of whether it was time for a more "transformational" approach to CRA, one that would institute "a metric-based framework designed to bring clarity to the determination of CRA ratings." The ANPR notes:

"The benchmarks representing the dollar value of CRA-qualified activity could be compared to readily available and objective criteria, such as, a percentage of domestic assets, deposits, or capital from the bank's balance sheet, to calculate a ratio that could correspond to the benchmark established for each rating category. For example, a bank with $1 billion in total assets that conducted $100 million of CRA-qualifying activities in the aggregate would achieve a 10-percent ratio, if total assets were used for the denominator."[1]

There are potential benefits to moving toward quantitative metrics for evaluating CRA. CRA has long been criticized for the lack of objective standards, leading to claims of grade inflation and regulatory capture across the agencies (Barr 2005; Thomas 2000; Grant 2018). More objective standards could also reduce the regulatory burden of CRA by minimizing a bank's uncertainty about what counts or how many loans or investments are needed for a Satisfactory rating. However, a shift toward a metric based system also poses risks: A rating based on dollar values may be at odds with the complexity of CRA activities. It may also undervalue the role of partnerships, or minimize the qualitative aspects of CRA that may not show up on a balance sheet but that are critical for making reinvestment projects happen. There is also the question of how to set the right target level of activities. Setting the benchmark too high could lead banks to weigh CRA goals against those of safety and soundness, while setting the benchmark too low could lead to dramatic reductions in bank funding for critical community development activities, such as affordable housing, small business development, and neighborhood revitalization.

In this article, I contribute to the debate on how to measure CRA activities by presenting an analysis of what banks are actually doing under CRA. The question motivating this research was, "what would a metric look like if we quantitatively measured banks' current CRA lending, investment, and service activities?" Seemingly straightforward, this turns out to be a surprisingly difficult question to answer. Data on CRA activities are buried deep within each bank's performance evaluation (PE). In addition, each regulator—indeed, each examiner—collects and reports on different information in varying formats.[2] This makes it difficult to know what and how much banks are really doing to meet their CRA obligations. To address this gap, I extracted all data on mortgage, small business, and community development lending, investments, and service activities from PEs released in 2011 and 2016 for all banks in California. While not designed to be representative, this sampling procedure allows me to explore variation in bank CRA activities across strong and weak markets in California, as well as during periods of economic recession (the 2011 PEs) and recovery (the 2016 PEs). I also conducted 23 interviews with community organizations that received either CRA community development loans or investments to better understand the role that CRA plays in their efforts to revitalize low-income neighborhoods.

Using these data, I answer three questions. First, what are the inconsistencies in what is reported across PEs, and how do those inconsistencies complicate efforts to develop a single metric of CRA activities? Second, what do current metrics relating all CRA activities to bank asset size in California look like, and how do these vary by markets and economic cycles? Third, to what extent are current CRA activities aligned with the intent of CRA, and how might a metric either strengthen or weaken CRA's impact on community reinvestment?

The results point to three critical points regulators should consider as they debate the merits of a metric-based approach. First, the sheer scale of inconsistencies across PEs thwarts any effort to consistently measure and compare the scale of CRA activities across banks. Developing a metric-based system would at a minimum require reconciling bank exam periods, improved reporting of community development (CD) investments and donations, clarifying what is meant by "services," and standardizing metrics across regulators and PEs. Second, I show that while CRA ratings are correlated with a bank's dollar volume of activities relative to their size, these metrics are sensitive to the time period of evaluation, the type of activity, and the market in which the bank is operating. Third, CRA exams have not kept up the shifting geography of poverty (Kneebone & Berube, 2013; Kneebone & Holmes, 2016), nor with rising concerns over displacement in gentrifying markets. In appreciating markets, CRA may be leading to outcomes that are not well aligned with the statute's intent. In addition, I find that while some banks are satisfying their CRA obligation with rote purchases of mortgage backed securities or loans they would make anyway, others are helping to move the field of community development towards innovative and impactful programs that leverage private capital to tackle difficult challenges such as homelessness and the educational achievement gap. As regulators work to modernize CRA, they should focus on re-orienting the exam to ensure that these efforts are rewarded and that the original intent to meet the needs of low-income communities is maintained, rather than on constructing simplified metrics that could incentivize banks to do less, or even worse, to do harm.

The paper proceeds as follows. Section 2 briefly reviews background information on CRA and the performance evaluation process. Section 3 describes the data and methodology. Section 4 presents the empirical results for each of the three questions highlighted above. Section 5 concludes the paper and discusses the policy implications of the analysis.

2. BACKGROUND ON CRA AND THE PERFORMANCE EVALUATION

Congress enacted the CRA in 1977, requiring federal regulators to assess depository institutions' records in meeting the credit and banking needs in the communities in which they are located. The statute itself is short, and lawmakers largely left the interpretation and implementation of CRA to the regulators. The statute language simply states that federal regulators must "(1) assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods."[3] The statute does not explain what is meant by "community," what activities should count toward "meeting" community credit needs (or what those needs might be), or what regulators should "assess" as part of a CRA evaluation. One of the key concerns on the part of banks and regulators was that CRA would lead to "credit allocation," and would force banks to make unsustainable loans that would undermine the viability of the financial sector. As a result, the CRA imposed no quantitative targets or quotas, and explicitly established the condition that CRA activities be "consistent with the safe and sound operation of such institutions."

In its early days, CRA was largely seen as ineffectual (Immergluck, 2004; Marsico, 2005; Zinman, 2002). Regulators were largely opposed to the purposes of CRA, and did little to enforce it (Art, 1986). Early CRA compliance exams focused primarily on whether the bank was making efforts to extend access to credit, for example, by distributing marketing materials in low- and moderate-income communities (Marsico, 2005). Banks almost uniformly passed their CRA exams with flying colors: prior to 1990, 98 percent of banks received at least a satisfactory CRA rating. A Senate report on CRA noted that "[t]he supervisory agencies' record of inconsistent and lax enforcement has engendered indifference and disinterest by the financial institutions" (Marsico, 2005, p. 56). CRA thus had very little teeth, and most banks simply ignored it (Art, 1986).

During the 1990s, however, several legal developments strengthened CRA. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 required regulators to publicly disclose an institution's CRA rating and performance evaluation.[4] The 1994 Riegle-Neal Interstate Branching and Efficiency Act allowed interstate branching for the first time, increasing mergers and acquisitions, and the Gramm-Leach-Bliley "Financial Modernization" Act of 1999 allowed banks to expand their business into securities and insurance markets, contingent on a satisfactory CRA record. These regulatory changes enhanced public engagement and bolstered the ability of advocacy groups to hold banks accountable for their CRA activities (Barr, 2005; Immergluck, 2004; Squires, 1992).

In addition, in 1993, President Clinton enjoined the federal agencies to begin the process of reforming CRA "to increase investment in communities that need it" (Clinton, 1993, n.p.). A key motivation driving the reform effort was to improve the evaluation of CRA activities: the initial proposal for CRA reform included measurable lending benchmarks based on an institution's deposit ratio. However, the proposal to advance quantitative targets as part of CRA was broadly criticized for inducing credit allocation. As Mark Willis (1994, 170), the founding president of the Chase Community Development Corporation, argued, hard targets would mean that "competing institutions will be tempted to 'buy' market share through aggressively low lending standards, thereby potentially undermining safety and soundness and jeopardizing the very neighborhoods and people we seek to serve."

While quantitative targets did not survive the regulatory writing process, the final rule did significantly strengthen CRA, and moved the exams away from process-oriented factors towards more objective criteria (Haag, 2000; Willis, 2009). The 1995 final rule promulgated four important changes to CRA: it created the performance context, it defined "assessment areas", it added small business lending as a "credit need", and it expanded CRA-eligible mortgage lending to include not only low- and moderate-income (LMI) neighborhoods but also low- and moderate-income borrowers.

The 1995 regulations continue to guide CRA evaluations today, as do guidance and exam procedures developed by the regulatory agencies.[5] While the exact rules guiding a CRA evaluation are too detailed to review in their entirety here, there are a few key aspects to CRA implementation that are important to highlight. First, CRA evaluations are tailored by bank size and purpose. Large banks[6] are evaluated through a three-part test that considers their lending, investments, and service activities. The lending test, which counts for half of the bank's overall CRA rating, assesses the bank's performance in home mortgage, small-business[7], small-farm, and community-development lending.[8] The investment test, which counts for twenty-five percent of the bank's CRA rating, evaluates the dollar amount of the bank's investments, including charitable donations. The service test, which counts for the remaining twenty-five percent of the bank's evaluation, focuses largely on the location and number of bank branches, as well as staff volunteer activities. Intermediate small banks are evaluated under two tests: the small bank lending test and a community development test. Small and limited purpose banks (e.g., credit card banks) undergo a more streamlined CRA review (Barr, 2005).

Second, CRA exams focus on a bank's assessment area. The assessment area formalizes the original intent of CRA to focus on community needs. Banks set their own assessment areas, which comprise of "one or more [metropolitan statistical areas] . . . or one or more contiguous political subdivisions, such as counties, cities, or towns" that include the census tracts "in which the bank has its main office, its branches, and its deposit-taking ATMs, as well as the surrounding [census tracts] in which the bank has originated or purchased a substantial portion of its loans." A bank may adjust its assessment area boundary, but it must contain whole geographies and cannot arbitrarily exclude LMI neighborhoods. CRA activities in a bank's assessment areas are subject to the most detailed CRA review (Avery, Courchane, & Zorn, 2009). The largest banks may have hundreds of assessment areas nationwide, whereas smaller banks may only have one assessment area if most of their activities are confined to one metropolitan area. Within these assessment areas, CRA eligible activities are those targeted to low- and moderate-income (LMI) households and/or census tracts, which are defined as with an income 80 percent or below of the area median income.[9]

Third, the 1995 regulations refined how CRA defines the "needs" of a community through the performance context. The performance context is a narrative that delineates the conditions and needs of a community, including information about the institution, its business strategy and product lines, the demographic and socio-economic characteristics of its assessment area, the needs of the community (e.g. the percent of households that are housing cost burdened), and the performance of peer lending institutions operating in the same market (Choi & Dowling, 2014).

Although the regulators issue examination guidelines,[10] it is difficult to describe a "typical" exam given the differences related to bank size and purpose. However, for large banks, CRA evaluations take place every 2-3 years, while for small banks, the period between examinations can be as long as six years; Banks that receive a "needs to improve" will undergo more frequent examinations than banks with stronger ratings. Exams can be quite extensive, with large bank exams taking 18 months or longer (Willis, 2009). Large banks that operate in multiple markets will also undergo both "full scope" and "limited scope" reviews, with the full scope exams going into more detail on CRA lending, investment, and service activities. In addition to reviewing data on a bank's CRA activities, examiners conduct interviews with community stakeholders to gather qualitative information about the bank's performance in relation to other banks.

The examiner then assigns the bank activity and assessment area specific ratings, as well as an overall rating. The exam review procedures are vague about what is required to receive a higher rating. For example, the exam matrix for small intermediate banks says that an "Outstanding" rating on the lending test should be given if a bank's "distribution of borrowers reflects, given the demographics of the assessment area(s), excellent penetration among individuals of different income levels (including low- and moderate-income) and businesses of different sizes."[11] Yet what counts as "excellent penetration" is never explicitly defined. Despite the fact that the rule does not express targets, there is evidence that regulators do calculate quantitative measures. In large bank exams, the Office of the Comptroller of the Currency regularly reports the share of "tier 1 capital" allocated to community development loans and investments. Indeed, Willis (2009) has argued that since the 1995 revisions, exams have become more of a rote "quantitative checklist", with market parity ratios or the total value of CRA commitments a key determinant of CRA ratings.

Still, it is difficult to draw a clear line between a bank's CRA rating and the dollar value of the associated activities. Data on the full extent of a bank's CRA activities are not readily available. Data on a bank's mortgage lending activities can be assessed by looking at the Home Mortgage Disclosure Act (HMDA) data, and small business lending is available through the FFIEC. But these don't always align with CRA exams in either the time period or the assessment area that is receiving a full scope examination. Research often have to make assumptions about which loans are counted toward CRA credit based on assessment area proxies, for example, assuming that the county or MSA in which a bank has a branch is part of their assessment area (Apgar & Calder, 2005; Reid & Laderman, 2011). In addition, there are no systematically compiled data on a bank's CRA investments, and only limited information on community development loans. The majority of information on these activities are presented only as part of the bank's public performance evaluation (PE). In this paper, I take advantage of the data contained in the public PE's to paint a more complete picture of what banks are doing as part of their CRA obligations. Understanding what is being done as part of CRA can provide guidance to regulators as they consider what quantitative metrics could be adopted to modernize CRA, without incurring the unintended consequences that more objective criteria might introduce.

3. METHODOLOGY

To build the database used in this paper, I hired a research team of 2 undergraduate and 3 graduate students to manually extract the relevant data from each of the PDFs.[12] The sample consists of PEs that were released in 2011 and 2016 for banks whose headquarters are based in California. While not necessarily representative of the country as a whole (I am only reviewing approximately 4 percent of all PEs released in 2011 and 2016), the sample mirrors the national distribution of CRA evaluations in the share of Intermediate Small banks reviewed as well as the CRA ratings, and oversamples Large versus Small banks.[13] In addition, California represents approximately 12 percent of the United States population and contains both stronger (e.g., San Francisco and San Jose) and weaker (e.g., the Central Valley) market areas. California also has a strong community development industry, especially in San Francisco and Los Angeles, suggesting that banks should be able to avail themselves of more innovative lending and investment opportunities.[14] I chose the 2011 and 2016 years to represent periods of economic recession and recovery. In total, students extracted data from 112 PEs, including 64 in 2011 and 48 in 2016 (Figure 1). The distribution of bank sizes changed substantially between 2011 and 2016, with Intermediated Small exams becoming more prevalent, though Large banks constituted approximately 20 percent of the PEs in both years.

Students reviewed each page of the PEs, and extracted all the information about mortgage and small business lending (inside and outside the assessment area), community development loans, investments, and services, including the count (e.g., number of loans or investments) and dollar value. For community development loans and investments, we also recorded qualitative information about what the activity entailed. For example, students would enter whether the investment entailed the purchase of a Mortgage Backed Security (MBS), participation in a Low Income Housing Tax Credit (LIHTC) deal, or the donation of 15 foreclosed homes to a nonprofit, and whether the community development loan was for a charter school or affordable housing. When possible, students also recorded the county in which the CRA activities took place, allowing me to assess which parts of the state were benefitting most from banks' CRA activities. Each PE was reviewed by me and at least two students. Differences in interpretation or data entry inconsistencies were highlighted for group discussion and resolution. These data were then merged with data from the FDIC on the bank's value of deposits in California using the bank ID number and the year of the PE. For banks covering multiple states, the CRA rating reported is for the bank's activities in California, not for its overall performance.

In addition, when the PE contained more detailed information about the CRA activity, students also Googled a combination of the data (e.g., "bank name" + "affordable housing" + "124 units" + "Santa Barbara" + "homeless individuals") to see if it was possible to identify the specific project or initiative that was supported through the bank's loan or investment. For projects where we could identify the community partner (for example, the community development financial institution (CDFI) that had funded and developed the charter school or affordable housing developer that had built the LIHTC project), I contacted the organization and asked if they would be willing to participate in an interview about the bank's involvement in the project.[15] I conducted 23 interviews. The interviews focused on the ways in which CRA activities support the original intent of the legislation to stimulate community reinvestment in low-income neighborhoods, as well as the organization's experience with CRA-motivated bank activities and their perceptions of the law's strengths and weaknesses.

It is important to note that this case study approach is not meant to be taken as representative of banks' CRA activities across the country. Instead, the case study approach allows me to illustrate the issues associated with measuring CRA activities, as well as to highlight the importance of local context in shaping both "what" and "how much" banks do as part of CRA. Precisely because there is so much variation across bank sizes and business models, geographies, time periods, examiners, and PEs, the point of this paper isn't to generalize about the specific nature about CRA activities, but rather to reveal critical questions that regulators should keep in mind as they seek to reform how banks are evaluated under CRA.

4. FINDINGS

In this section, I present the results of my research, focusing on the three key questions that motivated the paper: What are the inconsistencies in what is reported across PEs, and how do those inconsistencies complicate efforts to develop a metric of CRA activities? Second, what do current metrics relating CRA activities to a bank's deposits in California look like, and how do these vary by markets and across economic cycles? And third, to what extent are current CRA activities aligned with the intent of CRA?

WHAT ARE THE INCONSISTENCIES IN WHAT IS REPORTED ACROSS PES?

Perhaps the most important finding from this project was the sheer difficulty of constructing a single metric of CRA activities based on what is reported in the PEs. Leaving aside the substantive decisions related to a CRA metric—e.g., should loans or investments or services should be weighted differently?—I confronted some more fundamental challenges to measuring CRA activity that regulators need to resolve if they want to move toward a more metric-based evaluation of CRA activities. I group these challenges into three main categories: the time period of the evaluation, the recording of the assessment area designation, and inconsistencies in how the data are reported.

TIME PERIOD OF EVALUATIONS

Developing a metric for CRA activities requires establishing a common time frame on which that metric is based. As described above, the schedule for bank exams is dependent on bank size, prior CRA rating, and regulator capacity. While the majority of the PEs I evaluated covered 24 months of bank activities, there was considerable inconsistencies in the time period over which the bank was being evaluated for its CRA performance. Some banks' PEs covered a period of 12 months, while others covered four or five years of lending and investment activity. (Figure 2) Mortgage and small bank landing was generally assessed for full calendar years (to align with data collected under the Home Mortgage Disclosure Act (HMDA)). However, it was common for community development loans and investments to be assessed for the period between the last exam up until the start of the current review process, meaning that data covered partial years, for example, recording activities through July or ending in November. As a result, PEs often covered different time periods within the same bank evaluation, for example, covering two years for mortgage and small business loans, but three and half years for community development activities.

This variance in time periods greatly complicates the formulation of a standardized metric. Should banks be evaluated for the total volume of activities for the period covered by the PE, regardless of how long that is, or should the metric be based on an annualized rate? If a bank does a community development investment in year one of the performance period, is it fair to spread that dollar value over a five year annualized period, and should regulators adjust the dollar value for inflation using a stepped or weighted approach, or bring it all into current dollars? Although the period under study is characterized by relatively low levels of inflation, this may not always be true, which could influence when a bank chooses to meet its CRA obligation. What happens if a bank's PE spans both recessionary and expansionary economic cycles – is it appropriate to average activities over the entire time period, or should the two periods be treated differently, given that the demand for loans or investments may vary substantially over the period of review?

To account for the different time periods, in the analysis presented below, I construct a CRA metric standardized for the number of months over which those activities were assessed. I total the dollar values of the CRA activities reported in the PE (mortgage, small business, CD lending and investments), and then divide that total by the number of months that the review covers.[16] I then take that average value and multiple it by 24 to calculate an "average 2 year" value of CRA loans and investments. I do not adjust the values for inflation.

ASSESSMENT AREAS

The second challenge I faced in calculating a metric for the volume of a bank's CRA activities was inconsistencies in how assessment areas were reported. One challenge I did not anticipate in starting this project is that for large banks, PEs often cover multiple states. So while I wanted to focus on a bank's activities in California, the California PE for First Republic Bank in 2015, for example, also includes the bank's activities in Connecticut, Florida, Massachusetts, New York, and Oregon.

This raises the question of whether a metric would be calculated for the bank's total CRA activities anywhere in the country, or if there would be standards for each state or assessment area. Evaluating First Republic Bank only on its activities in California would undervalue its total CRA portfolio – what if they emphasized lending and investments in Florida instead? On the other hand, allowing a bank to count all activities across all states as part of one CRA metric risks that regulators move away from the original intent of CRA to focus on community needs: Could a bank with assessment areas in six states get a "Satisfactory" rating if all of their activities were concentrated in just two states, but the total of the metric passed the established threshold? If not, how should regulators set state-level targets, especially given different market needs and demand for credit?

For the purposes of this paper, I focus on two core principles in measuring CRA activities. First, I only consider bank activities in California, and do not include the value of their loans or investments in other states. To account for this in the metric, I scale CRA dollar volumes based on the value of the bank's deposits in California. The CRA activity ratio thus reflects the balance between a bank's CRA activities and its deposits within the California market. While this treats all banks in the sample in the same way, it is important to acknowledge that the measures presented below are only a partial representation of a bank's total CRA activities, especially for large banks that often operate in more than one state. Second, where possible, I allocated loans and investments to the specific county in which they were made. This allows me to assess geographic differences in where banks conduct CRA activities within California.

REPORTING INCONSISTENCIES

Perhaps the biggest challenge in developing a single metric for CRA was the number of inconsistencies in how data were reported across PEs. In some cases, data for loans and investments were reported in tables, sometimes they were buried in narrative sentences, and sometimes they were missing altogether. We also found instances where the data within the PE were inconsistent from one section to the next (for example, two conflicting amounts reported for the same number of investments). While some degree of error within PEs may be unavoidable given their length and detailed nature, there were three other systematic irregularities across PEs that made it difficult to account for the full volume of CRA activities.

The first was in the area of CRA services: there was no consistency in how services were reported: Some PEs reported the number of hours that staff spent in volunteer activities, whereas others reported the number of organizations helped or the number of staff who participated. Almost no PEs discussed the types of products or financial services the bank provided for lower-income customers. In addition, the lack of dollar "valuation" on service activities made it impossible to integrate these activities into a dollar metric for CRA. For these reasons, in the data presented below, I do not include service activities in the calculations.

A second significant inconsistency was how investments were treated. In some PEs, donations were bundled with investments, despite the fact that these are two very different types of CRA activities. For example, a PE might include "bank made 12 donations and investments for $280,000" – was this one larger investment and 11 small donations? 12 small donations? In some cases, the PE seemed to intentionally inflate activities, for example, one bank's PE noted that the bank made over 2,000 qualified investments, yet these investments were all relatively small scholarships to low-income students (an average of $1,000). In other cases, the PEs reported donations separately from investments. In the data below, I added donations to the investments metric.

Third, I was unable to calculate a dollar value of CRA activities for small banks, which undergo a more streamlined review. During the small bank exam, examiners review only the bank's mortgage and small business lending, reporting on the bank's loan to deposit ratio, the share of lending conducted within its assessment area, and the distribution of lending to LMI borrowers and tracts and/or small businesses. However, these assessments are often based on a sample of loans, not the total number or dollar value of the bank's lending activity. For this reason, the quantitative analysis below focuses only on the CRA activities of Large and Intermediate Small banks.

WHAT DO CURRENT METRICS RELATING CRA ACTIVITIES TO BANK SIZE LOOK LIKE, AND HOW DO THESE VARY BY MARKET AND ACROSS PERIODS OF RECESSION AND RECOVERY?

Despite the challenges in developing a method for measuring CRA activities consistently across banks and markets, in this section, I present several charts that raise important considerations for regulators seeking to bring more objective based rules to CRA ratings. As a reminder, these charts are based on a two-year adjusted measure of a bank's dollar volume of CRA loans and investments relative to the value of their deposits in California (which I refer to throughout as the "CRA activity ratio"), excluding any consideration of the service test. The terms "Large" and "Intermediate Small" refer to the regulator's classification of the institution and the exam type.

The first finding—and one that went against my *a priori* expectations—was that in the aggregate, CRA ratings are based on a bank's dollar volume of loans and investments (relative to the value of their deposits). The data show that on average, banks with higher CRA ratings tend to have a higher CRA activity ratio, even if the distribution of activities may vary based on a bank's strategic business lines. Figures 3a and 3b illustrate this for Intermediate Small and Large banks, respectively. Overall, Intermediate Small banks with an Outstanding rating had a CRA activity ratio of almost twice that of banks with a Needs to Improve rating. Similarly, Large banks with an Outstanding rating did a higher volume of dollar activity in loans and investments relative to their deposits in California than did those who received a Satisfactory rating, though the absolute difference between the CRA activity ratio for the two ratings is small. The analysis also shows that banks differ substantially in the distribution of activities they receive credit for on their CRA exams. For Intermediate Small banks, the banks with the highest ratings tended to do a larger share of small business lending. In contrast, Large banks with an Outstanding rating appeared to generate a higher value of community development loans than those that received a Satisfactory rating. Overall, for both Intermediate Small and Large banks, the ratio for community development investments is small, especially in relation to lending activities.

Despite the correlation between dollar volumes (in relation to a bank's CA deposits) and the CRA rating, the qualitative analysis of the PEs reveals the relatively arbitrary nature of what constitutes the difference between a Satisfactory rating and a Needs to Improve. The majority of banks in the sample received a Satisfactory rating: only two Intermediate Small banks received a Needs to Improve on one or more of the tests. (No Large banks in the sample received a Needs to Improve.) However, in the bank PE narratives, examiners for nine Small Intermediate banks and three Large banks included a qualitative assessment that the bank "does not meet the standard for satisfactory performance and reflects poor penetration."[17] Nevertheless, examiners gave these banks a Satisfactory for both the lending test and the overall CRA rating.[18]

In addition, the aggregate relationship between rating and activities does not mean that there is not variation in examination ratings among individual banks. Figure 4 shows the total CRA activity ratio (which includes mortgage, small business, and community development loans as well as investments) for three Intermediate Small banks all operating in California's inland areas (to control for varying levels of market demand), for which the sample includes PEs for both time periods under study. Bank A's CRA activity ratio dropped slightly over the two time periods, and it received a "Satisfactory" rating for both time periods. In contrast, Bank B had a demonstrably lower CRA activity ratio in the period assessed by its 2011 PE, and received a rating of Needs to Improve. The CRA rating appears to have motivated significant CRA lending and investments in the following time period, with its CRA activity ratio rising substantially, and for which they received an Outstanding rating in 2016. Bank C, in contrast, received a Satisfactory rating for both years, despite doing less than Bank A (a similar sized bank in the same geography), yet it significantly increased its volume of loans and investments in the following period with no change in rating. This example shows one of the challenges of tying CRA ratings to a benchmark based on dollar volumes – if Bank C's volume of loans and investments had been used as the benchmark for a Satisfactory rating, then Bank B may not have extended themselves to do significantly more. If the goal is to incentivize banks to overcome market failures in these areas and "do more" than they would otherwise, shouldn't a doubling of activity result in a higher rating? If so, should Bank C have received an Outstanding rating in the second period, despite doing less in absolute terms than Bank A or B? There is no clear answer to these questions, but point to the challenge of establishing an empirical threshold for CRA ratings.

Figure 5 further complicates the question of how to establish a metric based on the dollar volume of CRA activities. For the Large and Intermediate Small banks in the sample, I calculated the CRA activity ratio for PEs conducted during the recessionary period (2011) and the recovery (2016). The analysis shows that economic cycles have a significant impact on banks' activities, and that the sectors impacted by macroeconomic trends will influence demand for financial products in varying ways. The 2009 recession, which was largely driven by the housing crisis, depressed demand for mortgages, leading to very low levels of mortgage lending in the 2011 PEs. However, the rise in house prices during the recovery (particularly in California's coastal markets) has resulted in a significant expansion in the dollar volume of mortgage lending relative to a bank's CA deposits. In contrast, small business lending has not recovered at the same pace. As a result, banks with a greater focus on small business lending have a much lower CRA activity ratio than do banks with a larger mortgage lending emphasis. This suggests that any threshold needs to take into account how different business lines are performing in general, otherwise, banks could be penalized for lower CRA performance in markets where demand for those products is indeed suppressed.

Indeed, one of the key findings from this analysis is that volume of CRA is greatly influenced by the markets in which the banks do business, and the resulting dollar amount of loan originations. I find that approximately 78 percent of CRA loans and investments (in dollar volume) within banks' assessment areas come from small business and mortgage loans. CD loans and investments comprise a much lower share of banks' CRA activities (19.5 and 2.4 percent respectively), and are also less volatile from year to year. This means that any CRA metric will be largely driven by mortgage and small business lending activity, and as a result, banks that work in more expensive markets will have a larger dollar value of mortgage and small business loans than those that work in weaker markets. The bank in this sample with the highest dollar volume of mortgage loans (as well as the second highest CRA activity ratio) originated four times as much in mortgage loans as the other banks in terms of total dollar volume, but this was driven by loans to high-income borrowers in their assessment areas in San Francisco and Los Angeles, with an average loan amount of $1.2 million. Banks in lower cost markets should not be penalized based on dollar volume metrics, since the origination of a lower value loan may be just as important (if not more so) as the origination of a higher value loan in an appreciating market. In addition, as I discuss further in the next section, it is questionable whether these mortgages are in line with the intent of the CRA.

Indeed, the vast majority of CRA activities are concentrated in California's large coastal markets. (Figure 6) This is not surprising given the bank concentration in these cities, which represent not only the largest share of the state's population, but also serve as global financial centers. However, California's Central Valley has intense community development needs, including much higher rates of poverty and unemployment, highlighting that CRA may not be reaching those areas that need capital for economic and community development activities. The recession appears to have intensified the concentration of capital in the higher cost coastal areas of the state, again, in part due to the high value of mortgage loans.

TO WHAT EXTENT ARE CURRENT CRA ACTIVITIES ALIGNED WITH THE GOALS OF COMMUNITY REINVESTMENT?

The quantitative analysis presented above highlight some of the challenges regulators will need to grapple with if they seek to move toward more quantitative benchmarks for CRA. However, if the rule is being opened for revision, it is also worth asking whether a metric-based system—especially if it is based on dollar volumes—is the best way to ensure that the intent of CRA is achieved. The combination of quantitative analysis and qualitative interviews shows how even now, the way CRA exams are conducted can lead to perverse outcomes, particularly when regulators focus more on checking boxes then on the intent of the CRA.

First, it is important for regulators to consider how changing patterns of urban development may intersect with CRA. When CRA was passed in 1977, and certainly throughout the 1980s and the early 1990s, the challenge facing city urban cores was disinvestment and increasing concentrations of poverty. As such, any capital—including loans to higher-income individuals—directed towards inner city, lower-income neighborhoods was considered to be a sign of community reinvestment. However, today's landscape of urban decline and renaissance is much more complicated. While some cities still struggle with disinvestment in their urban core, others are seeing significant gentrification and displacement of low-income households. This raises question as to whether banks should get credit for mortgage loans to high-income households in LMI tracts.

While causal evidence of the CRA's effect on gentrification is inconclusive (Fitzgerald & Vitello, 2014), in California, more than three-quarters of loans in LMI tracts—those that the banks are claiming as CRA activity—are going to middle- and upper-income households. This is amplified in high cost metros. For example, in San Francisco, in 2017, 92 percent of the loans in LMI tracts went to middle- and upper-income households.[19] This trend is further exacerbated by what borrowers and tracts count as LMI. Because CRA eligibility is based on a calculation that compares borrower or tract income relative to the area median, qualifying thresholds can be quite high. In San Francisco, for example, the Area Median Income in 2017 was $120,470, meaning that loans to households with incomes as high as $96,000 would count as LMI.

While this may not be the case in all markets across the country, it seems problematic to give banks credit for CRA when they are fulfilling that obligation by making high value loans to higher-income households in appreciating markets. In contrast, San Francisco's Below Market Rate Homeownership program has had difficulties attracting lender participation in originating loans for its low-income borrowers, despite the program's very low default rates. As one city staff noted, "I thought CRA would motivate [banks to make these loans] since it's the only way to get LMI households into homeownership, but it doesn't seem to matter. And it's not clear what the barriers are—the loans are still $350,000 to $400,000, they perform well." This is a clear case where a metric-based system fails to address a clear community development need, and one that does not pose undue safety or soundness risks.

Stakeholders also noted that in California, there is a self-reinforcing pattern of investment and disinvestment that distinguishes the Central Valley from the Coastal regions. The Executive Director of a nonprofit in the Central Valley explained his concern over how CRA exams are conducted. "It's a Catch-22 – the big banks have their assessments focused on the coastal markets, while the smaller banks don't have the capacity to do innovative community development work. So we can't get the support we need, despite the fact that there's real need here." Another interview respondent from the Central Valley said that as the government has pulled back its funding for community development, bank CRA dollars become even more important, but the Central Valley doesn't have the banks or the community development capacity to tap into or leverage that funding. He noted that "the idea of assessment areas is really important to the groups working in LMI neighborhoods in cities, but there needs to be some way to get more banks involved in areas outside of LA and San Francisco."

Second, the PEs and stakeholder interviews consistently raised the question of what share of activities are CRA-motivated, versus what share of a bank's regular "course of business" activities they count toward CRA. CRA products are increasingly being vetted for their "profitability," and interviews noted that since the recession, many banks have cut back on specialized CRA staff who have the knowledge and motivation to work on more complicated deals with multiple layers of subsidy. As one noted, "It's becoming rarer to find a bank partner willing to step into a complicated but impactful project. Banks seem less motivated to get the Outstanding rating, and tell me they can just buy MBS (mortgage backed securities) instead?"

A review of the PEs shows that approximately 30 percent of the total dollar volume of community development investments comprised of MBS purchases with the second largest investment activity being participation in a Low Income Housing Tax Credit deal. (Figure 7) A third of banks in the sample only made either MBS or LIHTC investments to meet their CRA investment test obligations. This did not influence their CRA rating on the investment or community development test. Other common investments included participation in a CRA investment fund (mostly for affordable housing) or CDFI, school or municipal bond purchases, or participation in a small business investment fund. Very few PEs made mention of participation in major community development initiatives. For example, only one PE mentioned participation in a New Markets Tax Credit deal, one PE referred to an investment to support public housing rehabilitation under the Rental Assistance Demonstration, and only two PEs referred to the work the bank was doing to modify loans for borrowers in distress. A metric-based CRA may exacerbate the trend towards more standardized investment deals, especially if the metric fails to provide additional consideration for hard to do projects. As the leader of a large CDFI noted, "Banks are critical to LIHTC's functioning. But there's a difference between just participating in a LIHTC fund and demonstrating leadership….An example is a bank we worked with during the crisis, this bank partnered with a LIHTC syndicator to create a vehicle to allow smaller investors into the LIHTC market. It really made a difference, and it was a lot harder than doing MBS."

Overall, I found two divergent approaches to CD lending and investments across banks. A significant share of banks just seem to "check the box"—making loans that have limited community development value (for example, making a loan to a dentist's office in an LMI neighborhood). Analysis of the narrative text relating to community development lending shows that a third of loans are made to for-profit companies (including gas stations, hotels, and wholesalers) that are either located in LMI tracts or that provide employment opportunities for low-income households. In these cases, it could be argued that the CD loan is merely supporting low-wage work, rather than promoting economic development. In addition, I found that two-thirds of CD loans for housing were made to for-profits to build or acquire buildings: they counted as CRA because they were located in an LMI tract and because market rents were below HUD's Fair Market Rents. However, they not contain any deed-restricted affordable housing units, meaning that this loan could just provide an opportunity for a private market investor to flip the property and raise rents.

While this "check the box" approach applied to the majority of banks, others demonstrate a real commitment to the intent of CRA and seek out innovative ways to leverage their capital for community development. Interviews with representatives of CDFIs emphasized their appreciation for the important and complex community development deals identified in the PEs, including the financing of grocery stores in food deserts, investing in early childhood education, tackling the problem of homelessness, as well providing more general support to "innovate and push the field forward." As one interview noted, "Banks with strong CRA officers who get it are amazing to watch – they're partners in problem solving some of society's biggest challenges." Across the interviews, stakeholders noted that there were three key dimensions of a strong bank CRA program: the willingness to do complex deals that leveraged a new policy (such as RAD, NMTC, or other new funds to promote transit oriented development), the development of new products that could reach borrowers who fall outside the traditional credit box, and the engagement of CRA officers with community development initiatives.

Indeed, a common theme throughout the interviews was that the number or total dollar volume of CRA activities weren't as important as the partnership with the bank and a bank's willingness to "do the hard work" of community development projects. The Executive Director of a CDFI in Los Angeles summarized a common sentiment across the interviews. "More capital is always better. But really, it's the CRA officer who is willing to work through the hard deals with us that makes the biggest difference. Sometimes it's a small loan, but its impact on the project is the difference between having it fail and succeed." Stakeholders were very concerned that the move to metrics would lead to a disfavoring of small or complex deals where the project might look low value on paper, but where the bank's role is much more meaningful than a straightforward construction loan on an affordable housing project. Importantly, these banks are also responding to innovations in community development—for example, by increasingly recognizing the importance of human capital investments alongside affordable housing or commercial development—by providing financial products that provide enterprise level, long-term, flexible financing. As one stakeholder noted, "As the federal government has pulled back from community development funding, it's these banks and CRA working in partnership with local organizations that drive much of the innovation in social policy. I don't think regulators understand the significance of that, because they still see CRA as being about redlining or a mortgage loan."

Third, interviews revealed that even now, banks "game the system" to receive the most credit for CRA activities, and that this may become an even larger problem under a metric-based system. As the PE analysis showed, there is already at least some objective standard that relates a bank's activities to its CRA rating, and examiners tend to reward the number and volume of loans or investments made in that CRA cycle over complexity (Willis, 2009). An example of this that was brought up often in the interviews was how banks treat CD lending. Currently, CD loans made in prior exam periods do not count. (Prior period investments do.) As a result, banks tend to be more likely to offer short-term loans—which are not necessarily consistent with the timeframe of the loan capital that CDFIs need to make meaningful investments in distressed communities—so that they can get credit for the issuance of a "renewal" on every exam. Analysis of the PEs shows that just over 37 percent of community development loans highlighted by examiners in the narrative text are renewals of past loans or lines of credit. "They're not actually doing anything new or different, and we have the added burden of having to renew the paperwork every few years." One interview also highlighted that this practice can create an asset liability mismatch, exposing the CDFI to both renewal and interest rate risk.

Finally, stakeholders also argued that often the performance context focuses on documenting the wrong set of "needs." As one Executive Director of a leading community development organization put it, "I appreciate that the regulators look at the share of housing cost burden or other economic conditions in situating the bank's CRA activities, but in my mind, it would be better if they focused on the needs of the groups working to end homelessness or unemployment....We can't necessarily move the needle on homelessness if the economy is in recession, but if the needs are identified as predevelopment capital or lower interest rates on construction loans, then there could be a stronger tie between what a bank can do and what we need as an organization."

Several respondents noted that the Federal Reserve Bank of San Francisco had been taking steps in this direction (Choi & Dowling, 2014), and that this stronger connection between the practice of community development and a bank's CRA exam had led to new partnerships that leveraged the local knowledge of CDFIs and community development corporations (CDCs) with bank's capital and financial products.

5. CONCLUSION

The challenge of how to credibly address the question "How much is enough?" has plagued CRA since its inception. Setting objective metrics for CRA is not an easy task, particularly when community reinvestment objectives need to be balanced with safety and soundness concerns. To date, CRA has taken a "standard" rather than a "rule" based approach: the rating is evaluated and guided by examination procedures as well as consideration of the bank's institutional and market context, but there is no fixed requirement for banks to undertake a specific level of activity (Barr, 2005). Critics of CRA have argued that this standards approach results in arbitrary and inefficient enforcement: Banks claim that the uncertainty over what counts creates undue regulatory burdens and costs, while advocates contend that the current system allows regulators to give the vast majority of banks a Satisfactory rating.

Recognizing the limits of the standard based system, however, doesn't necessarily mean that a rules based approach would be an improvement. At a minimum, the analysis presented above reveals the challenges to deriving objective metrics that can take into account the complex factors that influence how much CRA activities banks undertake. In addition, the lack of systematized information about what banks have done in the past—coupled with the extreme variation across banks in year to year dollar volumes of CRA loans and investments—makes it difficult to imagine how regulators could set *ex ante* quantitative ratios for CRA performance. The biggest danger is that regulators will set targets that might lead some recalcitrant banks to do more, but that at the same time will allow the most active and innovative banks to do significantly less. It is clear from the PEs that some banks do over-comply with CRA, suggesting that the existing standards approach serves a valuable role in pushing banks to continuously seek out more ways to reinvest.[20] And research does suggest that CRA is largely working: It reduces information costs in low-income areas, thereby generating larger volumes of lending from diverse sources and adding liquidity to the market (Avery, Bostic, & Canner, 2005; Belsky, Schill, & Yezer, 2001; Ding & Nakamura, 2017; Evanoff & Segal, 1996; Gabriel & Rosenthal, 2009; Ringo, 2017). A new study also suggests that CRA has reduced net branch closures in low-income areas, preventing them from becoming banking deserts (Ding and Reid, this volume).

That said, there is no doubt that CRA is in need of reform: the landscape of financial services has changed dramatically since the original statute was passed in 1977, as have the community development industry and the distribution of concentrated poverty. The world looks different than it did even in 1995, when the last substantial revisions to CRA were made. Rather than focus solely on metrics, however, regulators should use this opportunity to modernize CRA in a way that ensures greater accountability to the *intent* of the law, rather than potentially undermining its positive effects through more rigid quantitative targets. The results presented above suggest some core principles that regulators should bear in mind.

First, areas that need "community reinvestment" are shifting, and regulators should develop an approach that would retain CRA's commitment to local communities while at the same time incentivizing and rewarding banks to meet the credit needs of areas with new or persistent pockets of poverty. The data shows that the distribution of bank activities in California are skewed toward the financial hubs of Los Angeles and San Francisco, while the state's Central Valley and rural communities are, in effect, "CRA deserts." Metrics, particularly based on dollar volumes, could exacerbate this unequal distribution of CRA activity, as stronger markets will by definition lead to larger loan and investment volumes. In addition, these areas tend to have less community development infrastructure, meaning that deals are likely to take longer and require more technical assistance. The emphasis should be on how CRA encourages banks to overcome information asymmetries, collective action problems, and discrimination in underserved markets.

Second, CRA exams should focus on how banks are doing more to meet the needs of low-income communities, not rewarding them for what they're doing as part of everyday business practices. Mortgage lending to high-income households in gentrifying markets, the purchase of mortgage backed securities, or small business or community development loans that don't further economic revitalization goals comprise the bulk of many banks' current CRA activities. Again, these activities easily inflate the dollar volume of a bank's lending or investment portfolio, but are not nearly as meaningful as efforts to partner with CDFIs and other community organizations to solve intractable problems. Overall, interviews suggested that more weight be given to community development loans and investments that are aligned with contemporary policy initiatives. In addition, the mortgage and small business lending tests need to be better targeted to reaching borrowers who face barriers to credit access, especially Black and Hispanic homebuyers and minority- and women-owned businesses.

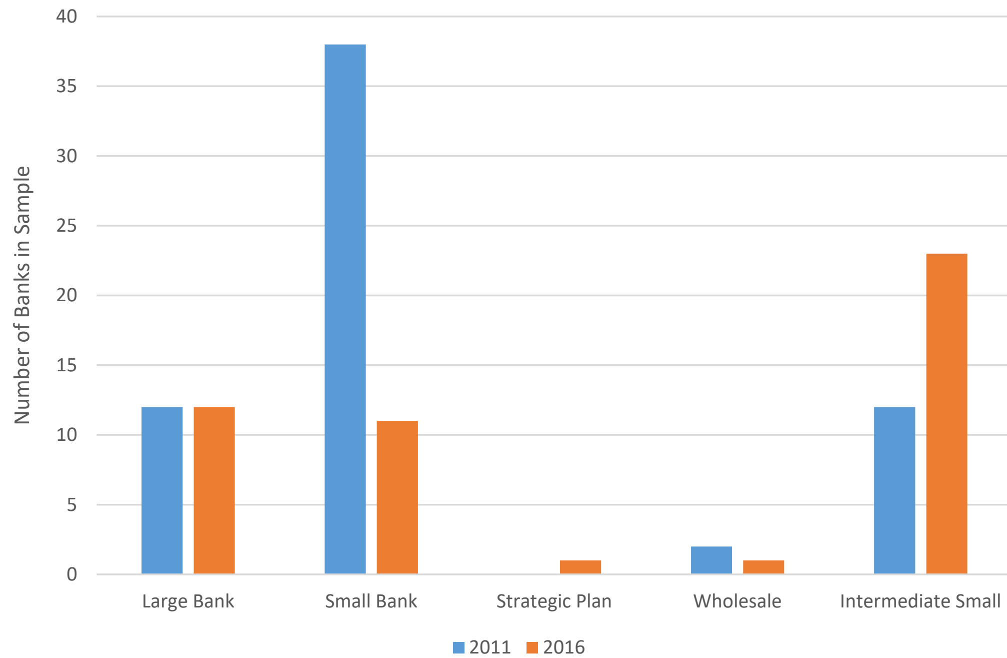
Third, there is a need to rethink the service test under CRA. As noted above, the inconsistency in reporting on service activities, coupled with the difficulty of assigning a dollar value to activities such as bank branching or low-cost savings and checking account offerings, made it impossible to develop a quantitative metric for the service test. This reliance on wholly subjective measures contributes to grade inflation (Stegman, Cochran & Faris 2002): Not a single PE in the sample indicated that a bank needed to improve in providing banking services in the community. However, there is ample evidence that in many communities, the need for basic financial services isn't being met by mainstream banks, and that in "banking deserts"—neighborhoods with inadequate or no mainstream financial services—payday lenders and other higher-cost financial service providers often step into the void (Quercia, Ratcliffe, & Stegman, 2009; Servon, 2017). In 2017, approximately 7.4 percent of households in California were unbanked, with another 17.6 percent underbanked, meaning that the household had an account but also obtained financial products or services outside of the banking system (FDIC, 2017). A revised CRA could reward banks that develop transaction accounts with services aligned with the needs of low-income households (including lower fees and minimum balances), as well as those that innovate with new technologies to help reach unbaked or underbanked households, encourage savings, and that work to build and improve credit records. For instance, in San Francisco, a large number of nonprofits are at the forefront of innovating in the area of financial services. For example, the Mission Asset Fund in San Francisco offers a lending circle/credit reporting platform for low-income households that has had demonstrated success (Wherry, Seefeldt, Alvarez, & Quinonez, 2019), while EARN offers an online banking platform that uses behavioral economics principles to encourage savings, yet only a handful of banks with CRA obligations in the city indicated any involvement with these local initiatives.

Fourth, regulators need to improve their data collection and reporting procedures. The key takeaway from this effort is that if regulators decide to move toward a single metric, or even metrics for different types of CRA-eligible activities, they will need to adjust the examination process accordingly to bring more rigor to the administration of the exams, as well as clearer mandates for what data are reported and how. At a minimum, standardizing the data that are collected across regulators and examiners, as well as providing those data in tabular and database format would allow for greater transparency and accountability in CRA exams. Particularly for CD loans and investments, providing data on the purpose of the project as well as the census tract the project is located in would make a significant difference in being able to assess the impact of CRA. In addition, training examiners—particularly those who do not specialize in CRA—about innovations in community development and what factors make for an impactful loan or investment can help to prevent a "check the boxes" approach to examination.

Finally, any efforts to modernize CRA need to take into account the critical role that banks now play in providing capital for community development activities. Although CRA's origins are in redlining and concerns over differential access to mortgage credit, the importance of CRA has evolved well beyond access to purchase or refinance loans for individual households. One of the most salient changes in public policy over the last fifty years has been the shift toward public-private partnerships for addressing social welfare goals. CRA is central to that shift, as former Comptroller of the Currency Eugene Ludwig noted: "We live in an age that is redefining – and quite properly so – the role of government in the lives of our people. CRA – a law that calls for no public expenditures, little bureaucratic intervention, and local control – has become a model for this new relationship (Haag 2000, 3)." The implications of this shift are that any reforms to CRA are likely to have a much larger ripple effect on the field of community development, and more broadly, on the scale and effectiveness of a host of anti-poverty programs. Conservatively, banks direct more than $125 billion dollars in small business and community development loans, investments, and grants to low- and moderate-income communities each year, funding areas as diverse as affordable housing, financial counseling, commercial corridor revitalization, transit oriented development, education (including funding pre-school and charter school facilities), and public health.[21] This far eclipses what is spent through traditional community development programs like the Community Development Block Grant.[22] Regulators should thus take caution in moving towards metrics that reduce the emphasis on local needs and partnerships, or that further remove banks' CRA activities from public scrutiny and accountability.

FIGURE 1:

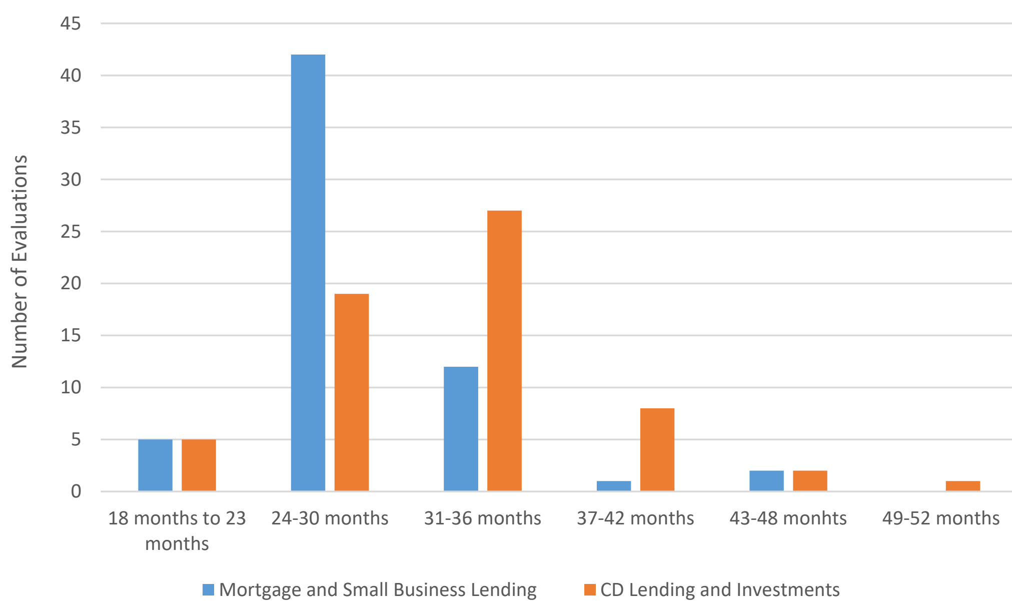
Distribution of Sample of Performance Evaluations by Exam Type, California



Source: Author's calculations of the FFIEC CRA Ratings Database

FIGURE 2:

Time Period of Review of CRA Evaluations



Source: Author's analysis of bank PEs. Includes only Large and Intermediate Small bank exams.

FIGURE 3A:

Intermediate Small Bank: Relationship Between CRA Rating and Activities

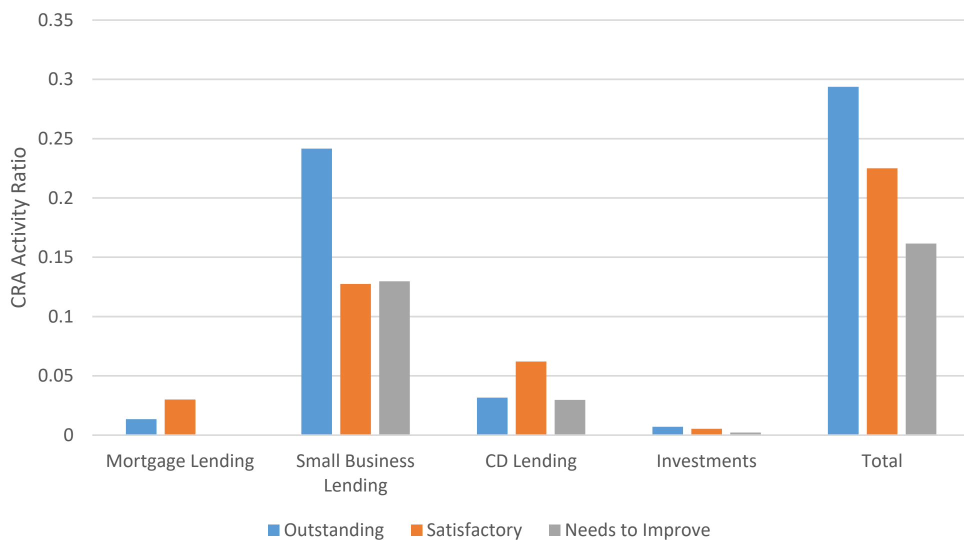
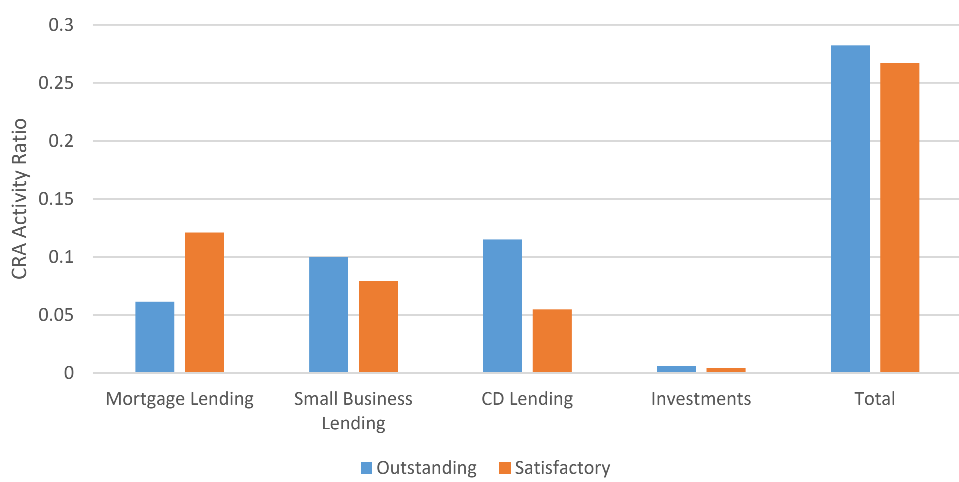


FIGURE 3B:

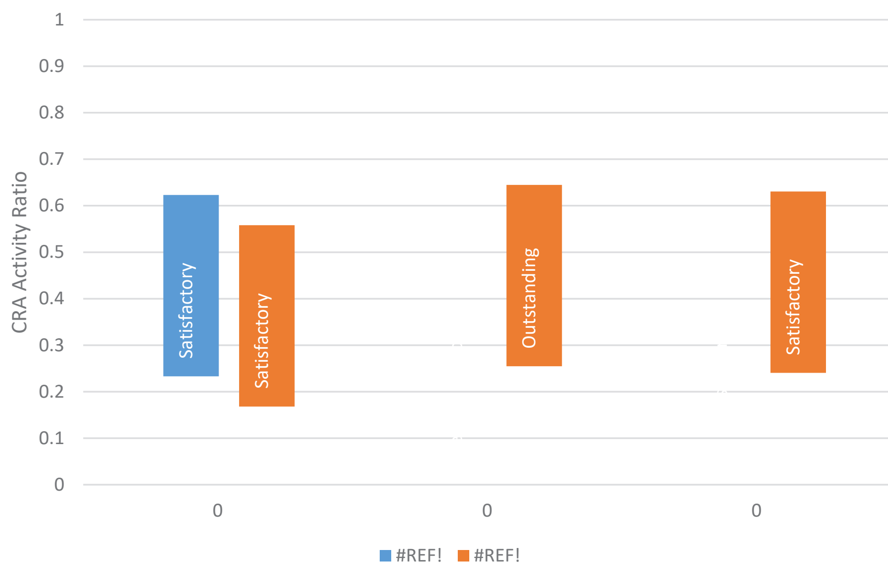
Large Bank: Relationship Between CRA Rating and Activities



Note: CRA Activity Ratio represents the total dollar value of the activity in its assessment areas in California adjusted to a 2-year average as a share of the bank's California deposits in the evaluation year. Investments include only the current period investments and not prior holdings.

FIGURE 4:

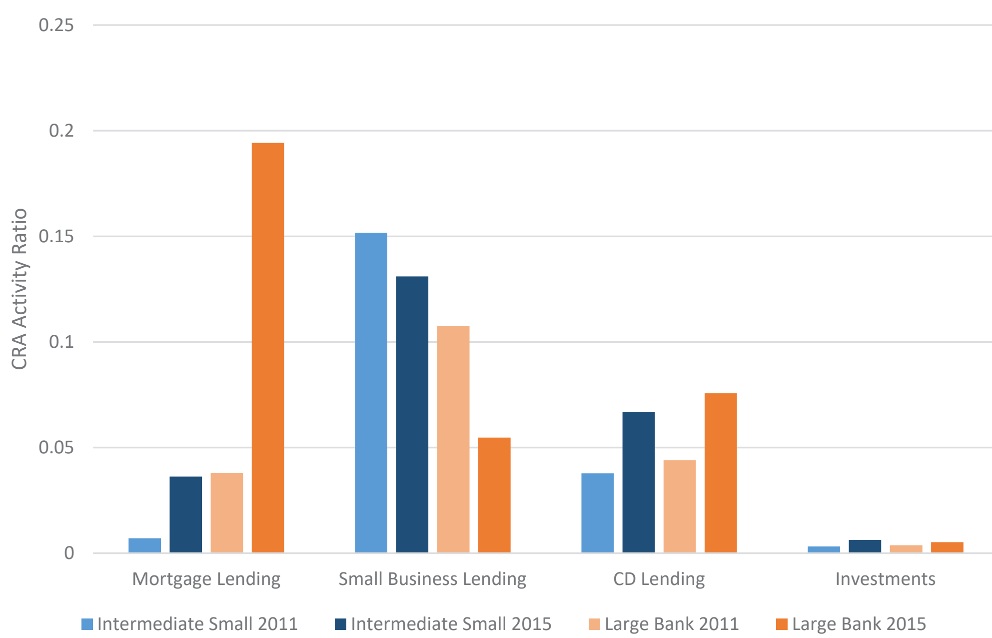
Intermediate Small Bank Community Development Test



Note: CRA Activity Ratio represents the total dollar value of CD lending and investments in the bank's assessment areas in California adjusted to a 2-year average as a share of the bank's California deposits in the evaluation year. Investments include only the current period investments and not prior holdings.

FIGURE 5:

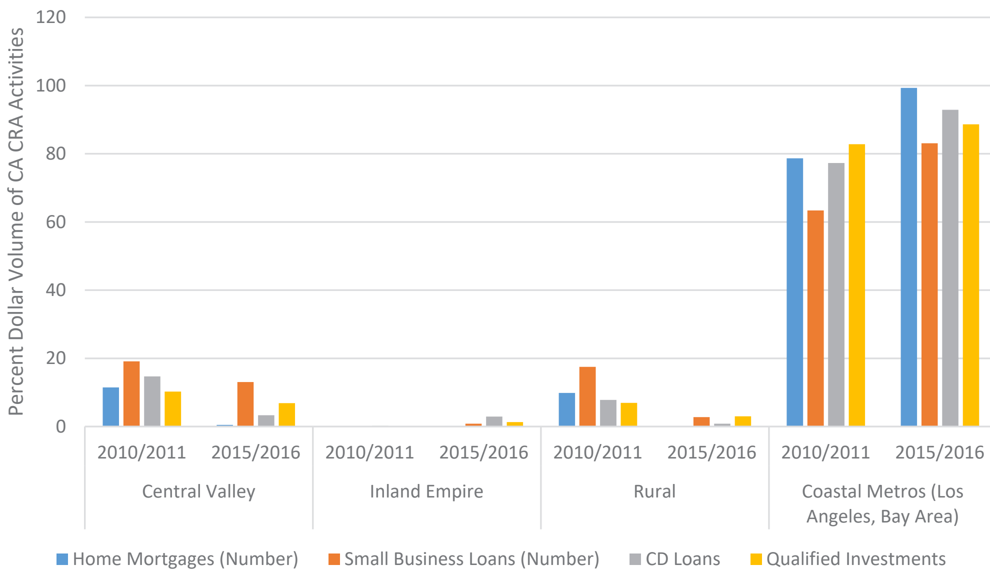
CRA Activities during the Recession versus the Recovery Periods



Note: CRA Activity Ratio represents the total dollar value of CD lending and investments in the bank's assessment areas in California adjusted to a 2-year average as a share of the bank's California deposits in the evaluation year. Investments include only the current period investments and not prior holdings.

FIGURE 6:

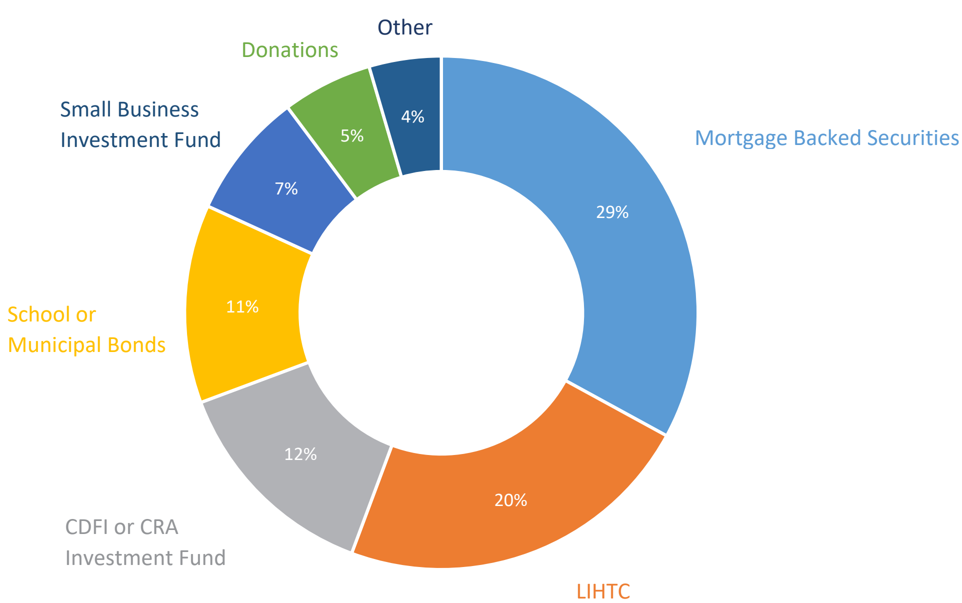
Geographic Distribution of CRA Activities in California, All Banks, 2011 and 2016



Note: Share is based on total dollar volume not adjusted for months reviewed. Investments include only the current period investments and not prior holdings.

FIGURE 7:

Distribution of CRA Investment Dollar Volumes



Source: Author's analysis of bank PEs. Includes only Large and Intermediate Small bank exams. Dollar volumes are not adjusted to account for differences in time period of evaluation.

NOTES

1. The full ANPR can be found at https://www.occ.gov/news-issuances/news-releases/2018/nr-occ-2018-87a.pdf.

2. Data on mortgage and small business lending are available through the Home Mortgage Disclosure Act (HMDA) and the Federal Financial Institutions Examination Council (FFIEC), but these comprise only a share of banks' activities under CRA.

3. The Community Reinvestment Act, Public Law 95-128, Title VIII.

4. The Federal Deposit Insurance Corporation Improvement Act of 1991 expanded the disclosure requirements by requiring the federal banking agencies to disclose the data that support their conclusions.

5. In general, the regulatory agencies jointly develop CRA regulations and guidance and exam procedures, promoting a uniform vision and minimizing the possibility that depository institutions modify their charters to "shop around" for a more permissive regulator. To ensure consistency in answering questions about CRA, the regulators also periodically issue Interagency Interpretive Letters that address policy issues related to the law's implementation.

6. Regulators adjust the thresholds for inflation, but as of 2018, large banks were those with assets over $1.284 billion, while intermediate small were those between $321 million and $1,284 billion.

7. Zinman (2002) notes that the addition of small business lending reflected an evolution of community development practice and a shift from focusing on housing to concerns over "economic development."

8. No bank can receive an overall rating of satisfactory or outstanding if it does not receive a rating of at least satisfactory on its lending test; conversely, any bank that obtains an outstanding rating on the lending test is guaranteed an overall rating of at least satisfactory.

9. For both neighborhoods and individuals, income categories are defined as follows: low-income is less than 50% of MSA median family income; moderate-income is at least 50% but less than 80% of MSA median income; middle-income is at least 80% but less than 120% of MSA median income; and upper-income is at least 120% of MSA median income.

10. All of the exam procedure guidelines for the different bank types can be found online at https://www.fdic.gov/news/news/financial/2006/8cep_otherexam.pdf.

11. Examination procedures for the intermediate small banks can be found at https://www.ffiec.gov/cra/pdf/isbank.pdf

12. Initially, I attempted to use data science techniques to "scrape" these PDFs for the desired data. Unfortunately, because the information was often presented differently in the PEs (e.g., sometimes as text in a narrative with the numbers written out, and then sometimes in a table) it was impossible to write a code that could process multiple PEs, and the level of error in the generated data was high.

13. Nationally, 54 percent of banks evaluated under CRA in 2011 and 2016 were Small banks, compared to 43.7 percent in California. In contrast, my sample is skewed towards Large banks (21 percent) compared to the national distribution (12.8 percent). The share of Intermediate Small banks are similar (31.6 percent nationally compared to 31.3 in California) as is the distribution of CRA grades (8 percent Outstanding, 89 percent Satisfactory, and just 2 percent Needs to Improve).

14. Because the presence of a community development partners is critical to a bank's CRA activities, I wanted choose a state with a significant number of community development corporations, community development financial institutions, and innovative community development initiatives underway. However, it would be very interesting to replicate this analysis in regions with less community development capacity to see how findings may vary.

15. I also spoke with 3 CRA examiners from the Federal Reserve to inform myself about the review process, however, I did not do so in a systematic way across regulators. Additional research is needed to understand how examiners are trained in CRA compliance as well as whether there are differences in how the three regulatory agencies treat the exams.

16. For example, if the mortgage lending evaluation covers 18 months, I divide the total value of mortgage loans by 18, and then convert it to a 2-year annualized value by multiplying by 24. If within the same PE the investments are evaluated over 36 months, I use 36 instead of 18 to calculate a monthly amount of CRA activity.

17. One bank also received a Satisfactory rating despite the PE indicating that examiners identified "Illegal credit practices inconsistent with helping to meet community credit needs..[including]substantive violations of Section 1024 of Regulation X, which implements Section 8 of Real Estate Settlement Procedures (RESPA).

18. Another example of this arbitrary benchmarking was the examiners evaluation of a bank's loan-to-deposit (LTD) ratio for small banks. Examiners compare a bank's LTD to peer institutions, but in the vast majority of PEs concluded that the ratio was "reasonable." However, the reported ratios varied widely. For example, a ratio of 72 was compared favorably to ratios of 76 and 78, while in another case, a ratio of 72 was compared favorably to a ratio of 89 and 105.

19. Further, although CRA does not specifically focus on the racial distribution of mortgage loans, in San Francisco, 45 percent of loans in LMI tracts went to non-Hispanic White borrowers, 33 percent to Asian borrowers, with only 3.2 percent going to Hispanic borrowers and less than 1 percent to Black borrowers. The overall population of San Francisco in 2017 was 41 percent non-Hispanic White, 34 percent Asian, 15 percent Hispanic, and 5 percent Black. The remaining share of HMDA loans does not include any information about the borrower race or ethnicity.

20. For an excellent discussion of the relative advantages of a standard over a rule-based approach for CRA, see Barr (2005).

21. Aggregate data on the total volume of CRA activities does not exist, but in 2015, the Federal Financial Institutions Examination Council reported that banks made $87 billion in community development loans and $54 billion in small business loans in low- and moderate-income neighborhoods. This does not include banks substantial investments in Low Income Housing Tax Credit or New Markets Tax Credits each year, nor the myriad of other programs that banks support as part of their CRA portfolio.

22. In 2015, the enacted budget allocated $3.1 billion to the CDBG Program. Data accessed online on May 3, 2017, at https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/about/budget/.

REFERENCES

Apgar, W. C., & Calder, A. (2005). The Dual Mortgage Market: The Persistence of Discrimination in Mortgage Lending. In X. de S. Briggs (Ed.), *The Geography of Opportunity: Race and Housing Choice in Metropolitan America* (pp. 101–126). Washington D.C: Brookings Institution Press.

Art, R. C. (1986). Social Responsibility in Bank Credit Decisions: The Community Reinvestment Act One Decade Later. *Pacific Law Journal, 18*, 1071.

Avery, R. B., Bostic, R. W., & Canner, G. B. (2005). Assessing the necessity and efficiency of the community reinvestment act. *Housing Policy Debate, 16*(1), 143–172. https://doi.org/10.1080/10511482.2005.9521537

Avery, R. B., Courchane, M. J., & Zorn, P. M. (2009). The CRA within a Changing Financial Landscape. In P. Chakrabarti, D. Erickson, R. S. Essene, I. Galloway, & J. Olson (Eds.), *Revisiting the CRA: Perspectives on the Future of the Community Reinvestment Act* (pp. 30–46). Boston, MA and San Francisco, CA: Federal Reserve Banks of Boston and San Francisco.

Barr, M. (2005). Credit Where It Counts: The Community Reinvestment Act and Its Critics. *New York University Law Review*, *75*(600), 101–233.

Belsky, E. S., Schill, M., & Yezer, A. (2001). *The Effect of the Community Reinvestment Act on Bank and Thrift Home Purchase Mortgage Lending* (Working Paper No. CRA01-1). Retrieved from Joint Center for Housing Studies of Harvard University website: http://www.jchs.harvard.edu/research/publications/effect-community-reinvestment-act-bank-and-thrift-home-purchase-mortgage

Choi, L., & Dowling, W. (2014). *Understanding Community Development Needs through the CRA Performance Context* [Community Development Working Paper 2014-02]. San Francisco, CA: Federal Reserve Bank of San Francisco.

Clinton, W. J. (1993, July 15). Clinton. Retrieved July 13, 2016, from Remarks Announcing the Community Development Banking and Finance Initiative website: http://www.presidency.ucsb.edu/ws/?pid=46854

Ding, L., & Nakamura, L. (2017). *"Don't Know What You Got Till It's Gone" - The Effects of the Community Reinvestment Act (CRA) on Mortgage Lending in the Philadelphia Market* [Working Paper Draft]. Philadelphia, PA: Federal Reserve Bank of Philadelphia.

Evanoff, D. D., & Segal, L. M. (1996). CRA and fair lending regulations: Resulting trends in mortgage lending. *Economic Perspectives*, *20*(6), 19–46.

Federal Deposit Insurance Corporation (2017). The 2017 National Survey of Unbanked and Underbanked Households. Accessed online on August 19, 2019 at https://www.economicinclusion.gov/surveys/2017household/.

Fitzgerald, J., & Vitello, S. P. (2014). Impacts of the Community Reinvestment Act on Neighborhood Change and Gentrification. *Housing Policy Debate*, *24*(2), 446–466. https://doi.org/10.1080/10511482.2013.858364Gabriel, S., & Rosenthal, S. S. (2009). The GSEs, CRA, and homeownership in targeted underserved neighborhoods. In *Housing Markets and the Economy: Risk, Regulation, and Policy* (pp. 202–229). Cambridge, MA: Lincoln Institute of Land Policy.

Grant, C. (2018). "The Greatest Law — in Theory — That No One's Ever Heard Of: The Community Reinvestment Act." *Medium.Com* (blog), July 9, 2018. https://medium.com/@grantgoals/the-greatest-law-in-theory-that-no-ones-ever-heard-of-the-community-reinvestment-act-1064ceba6567..

Haag, S. W. (2000). *Community Reinvestment and Cities: A Literature Review of CRAs Impact and Future*. Retrieved from Brookings Institution website: http://www.brookings.edu/research/reports/2000/04/cra-haag

Immergluck, D. (2004). *Credit to the Community: Community Reinvestment and Fair Lending Policy in the United States*. Armonk, N.Y: M.E. Sharpe.

Kneebone, E., & Berube, A. (2013). *Confronting suburban poverty in America*. Washington, D.C: Brookings Institution Press.

Kneebone, E., & Holmes, N. (2016, March 31). U.S. concentrated poverty in the wake of the Great Recession. Retrieved July 30, 2018, from Brookings website: https://www.brookings.edu/research/u-s-concentrated-poverty-in-the-wake-of-the-great-recession/

Marsico, R. (2005). *Democratizing Capital: The History, Law And Reform of the Community Reinvestment Act*. Durham, N.C: Carolina Academic Press.

Quercia, R. G., Ratcliffe, J., & Stegman, M. A. (2009). The Community Reinvestment Act: Outstanding, and Needs to Improve. In P. Chakrabarti, D. Erickson, R. S. Essene, I. Galloway, & J. Olson (Eds.), *Revisiting the CRA: Perspectives on the Future of the Community Reinvestment Act* (pp. 30–46). Boston, MA and San Francisco, CA: Federal Reserve Banks of Boston and San Francisco.

Reid, C. K., & Laderman, E. (2011). Constructive Credit: Revisiting the Performance of Community Reinvestment Act Lending During the Subprime Crisis. In M. M. Smith & S. M. Wachter (Eds.), *The American Mortgage System: Rethink, Recover, Rebuild*. Philadelphia, PA: University of Pennsylvania Press.

Ringo, D. (2017). *Mortgage Lending, Default, and the Community Reinvestment Act* (p. 26). Washington D.C.: Federal Reserve Board.

Rougeau, V. and P. McCoy (2018). "Comment of Legal Scholars on Docket ID OCC-2018-0008," submitted in response to the advance notice of proposed rulemaking (ANPR) "Reforming the Community Reinvestment Act Regulatory Framework," Docket ID OCC-2018-0008. Newton, MA: Boston College.

Servon, L. (2017). *The Unbanking of America: How the New Middle Class Survives* (1 edition). Houghton Mifflin Harcourt.Stegman, M., K. Cochran, and R. (2002). "Creating a Scorecard for the CRA Service Test." Policy Brief. Washington D.C.: The Brookings Institution, March 2002.

Squires, G. (1992). *From Redlining To Reinvestment: Community Responses to Disinvestment*. Temple University Press.

Thomas, K. H. (2000). "CRA Grade Inflation." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, April 1, 2000. https://papers.ssrn.com/abstract=246827

Wherry, F. F., Seefeldt, K. S., Alvarez, A. S., & Quinonez, J. (2019). *Credit Where It's Due: Rethinking Financial Citizenship* (1 edition). New York: Russell Sage Foundation.

Willis, M. (1994). "Community Reinvestment Act Reform," Statement before the Subcommittee on General Oversight, Investigations, and the Resolution of Failed Financial Institutions of the Community on Banking, Finance and Urban Affairs, House of Representatives, February 2, 1994, p. 170. 103rd Congress, Serial No. 103-113.

Willis, M. (2009). It's the Rating, Stupid: A Banker's Perspective on CRA. In P. Chakrabarti, D. Erickson, R. S. Essene, I. Galloway, & J. Olson (Eds.), *Revisiting the CRA: Perspectives on the Future of the Community Reinvestment Act* (pp. 59–70). Boston, MA and San Francisco, CA: Federal Reserve Banks of Boston and San Francisco.

Zinman, J. (2002). *The Efficacy and Efficiency of Credit Market Interventions: Evidence from the Community Reinvestment Act* (Working Paper No. CRA02-02). Cambridge, MA: Joint Center for Housing Studies of Harvard University.