

SECTION 3

THE EFFECT OF CRA ON MORTGAGE LENDING: A LITERATURE REVIEW

Despite the twenty-five year history of CRA, only a few studies have attempted to evaluate the impact of the Act on lending and the provision of financial services to lower-income people and areas. Many of these studies faltered because of limited data, while the usefulness of others was constrained by the fact that they were unable to properly control for the many factors - other than CRA - that influence mortgage lending patterns. This section briefly reviews existing research on CRA as well as closely related studies that evaluate changes in the pattern of mortgage lending to minorities and lower-income borrowers.

PREVIOUS STUDIES OF THE IMPACT OF CRA ON RESIDENTIAL MORTGAGE LENDING

Research on CRA-motivated lending faces the daunting challenge of disentangling CRA's effects from the other market and regulatory forces that influence capital flows and the provision of financial services. Most efforts to date have focused on mortgage lending since HMDA data are the most complete and widely available, and because the initial legislation and advocacy were concerned primarily with access to home mortgage credit.¹ Because HMDA data initially lacked borrower information on income and racial characteristics, early studies attempted to assess variations in the supply of mortgage credit across *areas* defined by income and race, to the extent possible controlling for anticipated variations in mortgage demand. Evanoff and Segal (1996) review a handful of studies that modeled these flows at the census tract level (Ahlbrant, 1977; Hutchinson, Ostay and Reed, 1977; Avery and Buynak, 1981; Bradbury, Case and Dunham, 1989; Shlay, 1988; Shlay, 1989; Holmes and Horvitz, 1994; Perle, Lynch, and Horner 1993).²

Most census tract level studies focused on a single metropolitan area. In these studies, the most common dependent variable is the level of mortgage lending, expressed as the number or dollar volume of loans, and in some cases standardized by the number of owner-occupied homes in the tract or metropolitan area to control for variations in the level of mortgage demand. The independent variables focus on economic (median household income), demographic (shares of population or households classified by race, family type, age of household head, and median household size), housing demand/supply (the number of building permits issued, vacancy rates, and the share of owner-occupiers), and mortgage supply (number of branch offices and total amount of deposits) indicators. These studies consistently found that each class of control variables influenced mortgage credit flows, and hence should be included in any models attempting to identify an independent CRA influence on these flows. This research did not produce conclusive results about CRA's impact on credit flows, however, with some studies finding negative disparities in credit flows to areas with lower median incomes and higher minority concentrations, and others indicating that there was insufficient evidence to support such a claim (Evanoff and Segal, 1996).

¹ An exception is Benston and Horsky's (1992) survey of unsuccessful home sellers in central cities of three MSAs. Respondents reported that their inability to sell their homes was not the result of potential buyers being unable to secure financing.

² Megbolugbe and Cho (1993) conducted a study into mortgage credit flows at the metropolitan level.

Beginning with the release of loan-level data on individual mortgage applicants' income and race in 1990, research on lending patterns shifted to studies of mortgage rejection rates, most often by race. In the so-called 'Boston Fed study' (Munnell *et al.*, 1992; Munnell, *et al.*, 1996), researchers used enhanced HMDA data to assess the extent to which mortgage rejection rates reflected discriminatory lending practices. The Boston Fed's researchers examined thousands of loan application files from the Boston area and concluded that race did indeed play an important, independent role in causing rejection rates for black applicants to be higher than for white applicants, even after controlling for the risk characteristics of the individual applicant. They argued that the likely mechanism for this effect was somewhat subtle, and grounded in a presumption of creditworthiness enjoyed by white applicants but not by blacks and Hispanics. The researchers speculated that this discrepancy surfaced in the context of borderline minority loan applicants, whose credit files could in many cases have been repaired if lending officers had informed minority applicants of the corrective action needed as often as they did for whites.

The initial Boston Fed results were subject to heated debate and critique, with some subsequent studies on the same data set purporting to reverse its findings (cf. Horne, 1997) and others upholding the initial result (cf. Carr and Megbolugbe, 1993). Several papers (Phillips and Yezer, 1996; Phillips, Trost, and Yezer, 1994; Rachlis and Yezer, 1993) critique the Boston Fed study at a fundamental methodological level, stating that rejection rate models cannot generate valid results that bear on the presence or absence of discrimination. They state that this is because property value, loan amount, loan-to-value ratio, term, downpayment, and use of cosigners, are endogenous in the sense that they are routinely the object of negotiation among the applicant, realtor, and lender in the process of determining the acceptability of the final mortgage application. Tootel (1996) dug deeper to investigate whether lending patterns in Boston resulted from discriminatory practices based on borrower or neighborhood characteristics (*i.e.*, 'redlining'). He found that lenders were "reluctant to make loans to minorities wherever they apply, and [the discrimination] is not reflective of a reluctance to extend credit in poor areas that happen to be minority" (1996:1078). Lacker (1995) summarized the debate by noting that: "A skeptic with a strong prior belief in the ability of market forces to restrain unprofitable discrimination could easily remain unconvinced by the Boston Fed Study. On the other hand, critics with a strong prior belief in the prevalence of discrimination will find striking confirmation in the Boston Fed study. Between these extremes lies a range of reasonable assessments."

From the perspective of CRA-related research, the Boston Fed study's primary legacy was to spark a debate over the appropriateness of using mortgage rejection models to assess lender behavior with respect to both income and race. The inability to resolve this debate stimulated research on other aspects of lending such as the behavior of lenders and the flow of credit into lower-income areas and to lower-income people. As noted in the Joint Center's previous study on CRA (completed in cooperation with The Brookings Institution for the U.S. Treasury Department), recent CRA-related research has generally steered clear of comparisons of rejection rates and instead attempted to detect a CRA influence on credit flows - particularly on flows of mortgage credit - by either: 1) comparing lending patterns for CRA-regulated and un-regulated lenders; 2) examining the performance of consolidating institutions; or 3) assessing the impact of CRA agreements (Belsky *et al.*, 2001).

A. Comparing Portfolio/Market Shares of CRA-Covered Lenders with Others

The logic behind attempts to detect the influence of CRA by examining mortgage lending patterns is that if CRA is having an effect on the practices of covered lenders, CRA-eligible mortgage lending performance by these institutions should exceed that by non-covered lenders, assuming that it is possible to control for other factors influencing lending to lower-income areas

and borrowers, and for product mix. Because of the methodological challenges of operationalizing appropriate controls, studies have generally drawn tentative conclusions about the impact of CRA, without controlling for all relevant factors.

Evanoff and Segal (1996) obtained mixed results when they conducted this comparison with mortgage lending data over the 1990-95 period. They found CRA-eligible loans were an increasing share of originations made by CRA-covered institutions and their affiliates in the first half of the 1990s. The authors also found that CRA-regulated institutions and their affiliates had much greater shares of their originations in CRA loans in the 1990s compared with the 1980s. The authors did not control, however, for the fact that during the 1990s banks and thrifts were required to report on the activities of affiliates even in areas where they did not have branch offices, whereas they did not have to report on these activities during the 1980s. Additionally, Evanoff and Segal found that white-black differences in denial rates and applications narrowed both for lenders covered and not covered by CRA, suggesting that forces beyond CRA were influencing mortgage credit flows over the period.

In a more recent study, Gunther and his colleagues (1999) examined CRA-covered and non-covered lenders' loans for the purchase of one-to-four family homes. They found that financial institutions not covered by CRA increased their portfolio share of lower-income neighborhood originations from 11 percent in 1993 to 14 percent in 1997. Meanwhile, CRA lenders' portfolio share of such loans opened and closed the period at about 11.5 percent. Gunther and colleagues also compared loans to lower-income borrowers across the two lender types, finding that non-CRA lenders' portfolio share of loans to these borrowers rose from 25 percent in 1993 to 32 percent in 1997, while CRA lenders' portfolio share fell from 26 to 25 percent. The authors use these findings to argue that deregulation and technological advances in the financial services industry were more likely than CRA to have been responsible for the increased access to credit that lower-income borrowers and neighborhoods now enjoy (Gunther *et al.*, 1999). This argument was challenged by Immergluck (1999), however, who raised a number of methodological objections that undermine several of the study's findings.

B. Mortgage Performance of Institutions Active in Mergers and Acquisitions

Another way to assess the impact of CRA is to analyze the mortgage activity of institutions that have been especially active in acquisitions and mergers. The theory behind such analyses is that since regulators review a financial institution's record under CRA in evaluating merger and acquisition applications, consolidating institutions should be especially attentive to CRA-eligible activities in order to smooth the way for regulatory approval.

Avery and his colleagues (1999) found that the proportion of CRA home purchase originations by consolidating organizations and their affiliates typically increased in the counties in which they had branch offices. Moreover, CRA-eligible loans as a share of total home purchase originations increased more among consolidating banking organizations than among organizations that did not engage in merger activity in the same counties. The authors also found, however, that consolidating banking organizations lost market share over the period to independent mortgage and finance companies and credit unions. In balancing the study's empirical results, the authors summarize their findings as consistent "with the view that CRA has been effective in encouraging bank organizations, particularly those involved in consolidation, to serve LMI and minority borrowers and neighborhoods."

C. Impacts of CRA Agreements

A third way to detect the impact of CRA is to compare mortgage lending in areas covered by CRA agreements with those that are not, and to compare lending by lenders that have signed CRA agreements with those that have not. Shlay (1999) examined lending data for six metropolitan areas, testing the hypothesis that metropolitan areas where CRA organizing activity is highest should have better records of lending to underserved areas and borrowers. She found that lending increased to low-income and minority borrowers and neighborhoods in all cities examined, suggesting that the extent of CRA organizing in a particular city is not necessarily predictive of the increases in lending to underserved markets. Though not supported by the data in her study, she notes that 'regulation from below,' in the form of CRA-organizing, may have created the impetus for strengthened CRA enforcement at the federal level that was felt across all markets, and feels that the combined efforts of community reinvestment groups and federal regulators were partially responsible for the increases in lending to lower-income and minority borrowers and neighborhoods in the 1990s.

Schwartz (1998) also looked at the effect of CRA agreements on lender behavior. He compared mortgage and home improvement lending in 1994 by banks with and without CRA agreements. His results indicated that the presence of an agreement appeared to make a positive impact on bank lending to low-income and minority households and neighborhoods, with the most dramatic difference being on lending to black households. Schwartz also found that those institutions with agreements had higher approval rates for low-income and minority borrowers than institutions that had not entered into such agreements. He did not look, however, at lending behavior before and after signing agreements, and he did not control for other factors that may have generated the patterns he observed. For example, it is possible that the decision to sign an agreement is endogenous – that is, lenders with a greater capacity or willingness to meet CRA obligations sign agreements, in effect taking credit for actions they would have undertaken anyway.

A recent paper by Bostic (2001) looks for an effect of signing an agreement on overall lending in the counties in which the participating lender operates branches. Using a specially constructed panel of counties that includes information on CRA agreements provided by the National Community Reinvestment Coalition, Bostic finds that the number of newly-initiated CRA agreements in a county is significantly associated with 3-year changes in conventional mortgage lending, particularly in lending to lower-income and minority borrowers, and to lower-income neighborhoods. He also found, however, that these effects do not persist over time, waning almost completely after 3 years. Bostic concludes that the effectiveness of CRA agreements in increasing lending activity is ultimately determined by the persistence and sophistication of community groups in monitoring compliance with CRA agreements.

Taken together, the results of existing studies are mixed, largely because each has methodological limitations that limit their broad generalization. Nevertheless, the studies consistently find suggestions of a CRA effect, but one that their authors cannot definitively document, meaning that the debate on CRA's usefulness continues to simmer. The next section examines critiques of the Act, largely built around theoretical as opposed to empirical arguments, that constitute the case for eliminating CRA.

THE IMPACT OF CRA ON ACCESS TO FINANCIAL SERVICES AND SMALL BUSINESS LENDING

Although CRA relates to the provision of a wide range of financial services and mortgage credit to lower-income communities, most of the empirical work done to date focuses on residential mortgage lending. In part this reflects the fact that until recently, the data available (HMDA) also focused on residential lending, as did much of the legislative debate concerning proposed modifications to CRA. In recent years, this focus has shifted. Using newly-available CRA small business data, there is an emerging body of empirical literature on the impact of CRA on small business lending. In addition, the growing policy debate about how best to expand access to financial services by lower-income people has spurred additional research on CRA's impact on the provision of banking services. This section briefly reviews some of the recent literature in each of these areas.

A. CRA and the Provision of Financial Services

As noted earlier, CRA-regulated entities are evaluated in terms of the extent to which they provide financial services to lower-income neighborhoods. Yet in light of the historical focus on residential mortgage lending, the service test appears to receive little attention in the CRA exam process. Recent research by Stegman and colleagues (2001) based on an analysis of nearly 2,000 CRA exams conducted between 1996 and 2001, concludes that the service test provides only minimal incentives for lenders to extend financial services to currently 'unbanked' individuals or others in need of less costly banking services. Specifically, Stegman and colleagues (2001) argue that regulations do not encourage banks to provide banking products and services such as low-cost checking, check cashing programs, savings clubs, and individual development accounts that would benefit lower-income clients. Further, they note that there is no quality control related to community development services. The effect of programs for which banks do receive credit, such as financial literacy training and homeownership counseling, are therefore not only highly variable, but have unknown impacts on the ability of lower-income people to manage their finances and prepare for homeownership. One of the more spectacular findings of Stegman and colleagues' research is the revelation that over the last five years only eleven banks have received ratings below satisfactory on the service test.³

Adding weight to their discussions of gaps in the community development and retail banking components of the service test, Stegman and his colleagues modeled the relationship between scores on the service, investment, and lending test components of the CRA exam. They found lenders' scores in one area were good predictors of their scores in other areas, with one exception. When lenders achieved so few points from the lending and investment test that they were in danger of achieving an overall grade below satisfactory, their service test scores were unusually high. This discrepancy was often just sufficient to get the lender's aggregate score to the 'satisfactory' threshold.

Overall, the research conducted for this report and the recent research by Stegman and colleagues (2001) casts suspicion on the usefulness of the service test as it is currently implemented as a tool for ensuring access to and delivery of financial services for lower-income people and areas. CRA's branch-based focus, derived from its initial intention to counteract mortgage credit redlining at a time when mortgage lending largely took place through small branch-oriented commercial banks and thrifts, is largely unrelated to several of the requirements of the Act in its

³ It is worth noting that one line of argument suggests that this is cause not for concern, but for celebration. If lenders do take CRA seriously and make good faith efforts in their service activities, there should be relatively few failures.

current version, particularly to mortgage lending. Yet, the one area - retail banking services - where this linkage still holds most directly and where there appears to be an opportunity to aid lower-income people, seems to subject lenders to the weakest level of oversight of the three CRA exam components.

B. CRA and Small Business Lending

The 1995 CRA regulations mandated reporting on small business lending on the part of CRA-regulated lenders, and spurred new interest in the impact of CRA on small business lending. Immergluck and Smith (2001), noting the discrepancy in the growth rate of small business lending between higher- and lower-income areas, suggest that CRA is not forcing banks to take as active an interest in the small business market in lower-income areas as they do in mortgage lending in these areas. They find that fewer loans per firm are made in lower- than in higher-income areas and that this disparity worsened over the late 1990s. This observation is consistent with exam guidelines instructing regulators to focus on the revenues of the business applying for the loan and the size of the loan itself, rather than on the characteristics of the neighborhood in which CRA-eligible small business lending takes place. Immergluck and Smith also cite evidence (Cavalluzo *et al.*, 1999) that minority-owned small businesses, particularly those owned by blacks, are denied loans at higher rates than whites, even after controlling for a variety of firm characteristics, including credit history.

Zinman (2001), in contrast, posits that CRA is having a more significant effect on small business lending outcomes, especially when care is taken to control for the differential ‘toughness’ across regions and across regulators of CRA enforcement. In particular, Zinman presents econometric evidence that CRA does work to expand small business lending by regulated entities by twelve to fifteen percent. Furthermore, Zinman argues that the observed changes in small business lending appear to generate real benefits to communities in the form of expanded payrolls and reduced incidence of business bankruptcy, without undermining bank profitability. While these results imply that CRA serves to improve the efficiency of small business lending, Zinman is not able to identify the specific mechanism that generates these results, nor to match the results to a specific theory of market failure that CRA may work to eliminate.

CRITIQUES OF THE CONTINUING NEED FOR CRA OVERSIGHT

As noted in the U.S. Treasury CRA Report (Belsky *et al.*, 2001), there are three broad arguments challenging the continuing need for CRA oversight of banking organizations. The first claims that current credit markets are too competitive to allow discrimination to flourish and choke off credit to lower-income minority communities (Hylton and Rougeau, 1996). The second argues that CRA is an improper remedy for discriminatory practices directed toward specific borrowers and areas and is not the most efficient method for achieving its intended goals (Bentson 1999; Gruben *et al.*, 1990; Lacker, 1995). The third contends that whatever past market failures may have existed in credit markets, they have since been corrected (Gunther *et al.*, 1999).

A. Discrimination in Mortgage Lending

The first challenge to the continuing need for government intervention in mortgage markets rests on the claim that these markets are too competitive to permit market failures based on prejudice (so-called ‘taste-based’ discrimination). According to this argument, lenders who deny access to credit-worthy borrowers because of their race or ethnic background (and hence to lower-income borrowers and areas because of the correlation between income and race) will lose out to others

whose business practices are not based on prejudice, because the latter will be more profitable by exploiting the market opportunities that discriminators create. This line of argument states that given sufficiently competitive markets, discrimination cannot materially alter credit flows to lower-income areas (Hylton and Rougeau, 1996).

Discrimination in mortgage markets may also be ‘statistical.’ Statistical discrimination occurs when a lender finds it cheaper to use the characteristics of an applicant’s group to estimate his/her creditworthiness rather than the applicant’s own credit background (Ladd, 1998). As noted in the Boston Fed study, at least some of the observed differences between the treatment afforded white and minority applicants was the fact that loan officers appeared more ready to provide assistance to white applicants than minority applicants (Munnell *et al.*, 1996; 1992). One possible reason suggested was that the loan officer may have concluded that there was a greater likelihood that a negative credit report was more likely to be in error or otherwise more easily resolved in the case of a white applicant, and hence may have felt that it would be more time consuming and costly to work on ‘credit repair’ with minority applicants. Unlike taste-based discrimination, statistical discrimination is not inconsistent with profit-maximizing behavior by individual lenders.

Although the attempt to create ‘race blind’ electronic underwriting systems may work to reduce discriminatory mortgage lending, the growing use of these tools does not entirely eliminate the potential for discrimination in mortgage lending. For example, many loans continue to be manually underwritten and involve face-to-face contact between the loan officer and potential borrower. Even a share of those loans processed initially with automated electronic underwriting systems are ‘referred’ back to the lender for manual underwriting. Again, the potential exists to deny ‘referred loans,’ not on the basis of objective criteria, but as a result of some form of statistical or taste-based discrimination. In any event, engaging in the practice of differentiating among applicants on the basis of their membership in a racial or ethnic group is illegal. In essence, the law requires that lenders make decisions about mortgage loans as if they had no information about the applicant’s race, regardless of whether race is or is not a good proxy for risk factors not easily observed by the lender (Ladd, 1998).

Though in theory it is possible to test for the presence of both statistical and taste-based discrimination, it is difficult in practice. In one of the few studies to empirically assess the issue, Tootell (1996) essentially rules out the possibility that statistical discrimination was likely to have been the cause of the differing denial rate patterns by race that he observed in data for Boston. In general, studies relating to these issues (cf. Board of Governors of the Federal Reserve System, 1993; Canner and Passmore, 1995; Canner and Passmore, 1997) have not been conclusive (Lacour-Little, 1999). Reviews of the most recent literature and audit studies conclude, however, that whatever motivates market participants, market forces have not yet been sufficient to eradicate mortgage lending discrimination (Yinger, 1998; Urban Institute, 1999). Moreover, these academic findings are too often supported in the statistical evidence presented in court cases that document that despite substantial progress, various forms of discriminatory practices still persist in mortgage and housing markets.⁴

B. CRA as a Remedy

A second argument made against CRA asserts that even if some lenders are improperly discriminating, the proper solution is to apply and enforce existing laws prohibiting this sort of

⁴ For a collection of essays on the current state of Fair Housing and Fair Lending see *Cityscape*, 1999, “Commemorating the 30th Anniversary of the Fair Housing Act”.

behavior. Bentson (1999) has argued that the laws prohibiting both taste-based and statistical discrimination, and their enforcement by the banking regulators and the Department of Justice, are sufficient to address whatever discrimination may be occurring. Moreover, he notes that, based on the disposition of lending discrimination complaints, there is little evidence of widespread discrimination. For example, of the more than 2,000 Fair Lending complaints received by the Department of Housing and Urban Department under the Fair Housing Act and other civil rights laws from 1989 through 1995, in only one percent of the cases (23 cases) did HUD find lenders guilty, and HUD referred only nine to the Justice Department for prosecution. Benston does not, however, address the possibility that victims of statistical discrimination would be unlikely to know of their predicament, or that some victims may believe that the authorities would be unable to help them even if they did register a complaint. Relatively low numbers of prosecutions from Fair Lending complaints cannot, therefore, provide conclusive evidence of the presence or absence of discrimination.

In another critique of CRA as a remedy, Lacker (1995) claims that CRA is actually a means for redistributing wealth, but is an inefficient vehicle for doing so. He argues that providing direct subsidies for loans to lower-income borrowers through specialized financial institutions rather than through banks would be a more efficient way to deliver subsidies to lower-income borrowers and areas.⁵ This argument rests on the premise that CRA is intentionally redistributive. Yet, competing justifications for the Act state that, rather, CRA is a mechanism for addressing informational externalities and entry delay by lenders that serve to diminish credit flows in lower-income markets. From this perspective, CRA is a method for enforcing an enhanced degree of market efficiency (rather than a redistributive policy). In short, the persuasiveness of arguments against CRA as an inefficient redistributive policy or tax rest on a conception of the Act that is not clear in the initial legislation and subject to dispute among current observers. As such, these arguments provide useful insight but, like others, cannot offer conclusive statements about the need for CRA.

C. Market Forces

A final criticism states that changes in the mortgage lending industry since the 1970s have obviated the need for CRA. Gunther and his colleagues (1999) contend that competition for lower-income lending has increased as federal restrictions on the geographic scope of banks' activities have been relaxed, and as mortgage companies have increasingly met the needs of CRA-eligible borrowers, even as depositories' role in mortgage lending wanes. A complementary argument states that advances in information technology make it easy for out of market lenders to assess borrower creditworthiness and property values in distant areas, leading to greater competition everywhere. These arguments in turn imply that the positive effects of increased competition and lower information costs have reduced or eliminated the coordination problems in lower-income markets that CRA was in part intended to address. In fact, the factors cited by Gunther and his colleagues indeed have helped reduce market failures. It does not necessarily follow, however, that imperfections have been eliminated, that with changes in the marketplace such failures could not recur in the absence of CRA, or that lending patterns evidenced during the economic boom of the 1990s will persist in a less robust economic climate. Consequently, the impact of advances in information technology on the continuing need for CRA remains unresolved.

⁵ Similar claims that CRA is effectively a tax on financial institutions also imply that it is better to pursue redistributive goals with direct subsidies.

Lacker (1995) takes issue with the idea that market failures exist at all. He observes that while recent technological advancements may or may not have improved market information, no one has ever provided proof that information-based market failure occurred in the first place. In particular, he notes that to the extent that information problems existed in the past, they would have affected lending in both affluent and lower-income areas. This argument dismisses CRA's (and HMDA's) widely accepted role in increasing market information and enhancing transparency of market activities. Yet, CRA's beneficial impact via market information and transparency, independent of any specific benefits for lower-income borrowers or lower-income communities, is one of the few aspects of the Act that faces few theoretical or empirical challenges in the research and policy community.

SUMMARY

The strong economy of the 1990s, along with the dramatic restructuring of the mortgage industry, have had profound effects on the pattern of mortgage lending, particularly the rapid growth of lending to lower-income and minority borrowers. In the face of these important trends, assessments of CRA face the difficult prospect of isolating CRA's influence on mortgage lending patterns. Debate continues over whether CRA actually works to overcome the failures of market participants to appropriately seek out and fund profitable lending opportunities, or simply reflects a government-mandated income transfer program that pressures lenders into uneconomic lending so as to avoid regulatory sanctions or adverse publicity. Some scholars question the need for CRA at all, particularly in its current mortgage-focused incarnation. While the existing literature broadly supports the view that CRA legislation has expanded the flow of mortgage capital into lower-income areas and extended homebuying opportunities for minority families, it is hardly definitive. In an effort to better understand the effect of CRA on mortgage lending, the report next presents a series of benchmark assessments, or comparisons of trends in the lending patterns of CRA-regulated organizations with those of an alternative (or benchmark) group of lending organizations not subject to CRA regulations.