# ASSESSING THE IMPACT OF THE CRA ON BANKING INSTITUTIONS

Robert B. Avery
Raphael W. Bostic
Glenn B. Canner
*Board of Governors of the Federal Reserve System*

*The Community Reinvestment Act (CRA) was enacted in 1977 to encourage federally insured commercial banks and savings associations (banking institutions) to help meet the credit needs of their local communities, including lower-income areas, in a manner consistent with their safe and sound operation. The legislative history indicates that CRA arose out of concerns that banking institutions were accepting deposits from households and businesses in those areas while lending elsewhere and overlooking qualified loan applicants from the local community.*

*There are two polar views about how CRA may affect banking institutions. In one view, lending markets are perfectly competitive and operate with full information. Under this view, if CRA has an effect, it is to force banking institutions to extend loans to borrowers at prices not commensurate with the risks they pose, an activity that would result in the banks incurring losses. A second view holds that lending markets are either not perfectly competitive or have informational imperfections. Under this view, CRA helps to alleviate credit rationing and results in the extension of loans to creditworthy borrowers that had not previously had access to credit, an activity that does not result in losses.*

*In the analysis that follows, we search for evidence to support either of these views of how CRA affects the market. Using data from*

The views expressed are those of the authors and do not necessarily represent those of the Board of Governors of the Federal Reserve System or its staff. The authors would like to thank Pat Dykes, Debbie Prespare, Nicole Price, Melissa Mugharbel, Jennifer Attrep, Paul Calem, Sandra Braunstein, and Glenn Loney for their comments and assistance.

Contact information: (1) Avery: 202-452-2906, ravery@frb.gov, (2) Bostic: 202-452-2711,rbostic@frb.gov, (3) Canner: 202-452-2910,gcanner@frb.gov.

*a recently conducted survey of the performance and profitability of CRA-related lending activities, we first determine whether banking institutions are engaged in marginal lending activities, here defined as loans extended solely as a consequence of CRA. We next determine whether there is evidence that banking institutions have experienced losses associated with these activities. We then determine whether there is evidence that banking institutions experienced gains on these marginal activities. In conducting this exercise, we consider each view and determine the extent to which there is support of that view versus an alternative, including no response to CRA or the other perspective.*

## Background on CRA

CRA calls upon the federal banking supervisory agencies to use their authority to encourage each banking institution to help meet local credit needs in a manner consistent with safe and sound operation by: (1) assessing the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods; and (2) considering the institution's CRA performance when assessing an application for a charter, deposit insurance, a change in branching, or a merger or acquisition.[1]

Implementation and enforcement of CRA has evolved through a series of regulatory and legislative actions. Most significantly, the banking agencies issued joint regulations in April 1995 to revise the CRA evaluation process and make it more objective and performance-oriented. The 1995 regulations provide distinct performance evaluation tests for three categories of banking institutions — large retail, small retail, and wholesale or limited-purpose institutions. To promote consistency of assessments, the statute and implementing regulations establish a uniform set of ratings criteria and four ratings categories: “Outstanding,” “Satisfactory,” “Needs to Improve,” and “Substantial Noncompliance.”

For large retail banking institutions, the regulations establish three performance tests — lending, investment, and service. The discussion focuses on the regulations for large retail institutions, as the analysis focuses only on such institutions. Under this scheme, lending is more heavily weighted than investments or services, so that an institution may not receive a “Satisfactory” or “Outstanding” rating unless it is rated at least “Satisfactory” on lending. The regulations do not establish specific lending, investment, or service thresholds for obtaining a particular CRA performance rating. The lending test involves the

measurement of CRA-related lending activity for a variety of loan types, including home mortgage, small business and small farm, and community development loans.[2]

## The Economics Underlying the CRA Debate

The current debate about CRA centers on whether the market would serve all creditworthy borrowers absent CRA, which is essentially a debate about whether lending markets are perfectly competitive and involve full information. Consider a very simple market with a single loan product and many interchangeable lenders, each with the same cost structure. If the market is perfectly competitive and all information is known, then all lenders are price takers and the equilibrium is such that the price of each loan equals the marginal cost associated with extending the loan. This is an unconstrained, full information equilibrium. In this market, every creditworthy borrower gets a loan from the lender that can best provide the loan.

A second possibility is that the market does not operate at the unconstrained full-information equilibrium, in which case some creditworthy borrowers might not receive credit. This could theoretically arise for a number of reasons. For example, the market may not be perfectly competitive. That is, some firms in the market could have market power and be price setters, perhaps due to regulatory restrictions or other barriers to entry. Alternatively, the market might not feature full information. In this regard, lenders could lack important information on the credit quality of borrowers or could find obtaining information for borrowers from certain groups or areas particularly costly. Previous research has shown that either condition can lead to credit rationing, in which borrowers who would be viewed as creditworthy in a full-information environment do not receive credit.[3] Essentially, the information imperfection results in a marginal cost curve for the lender that is higher than in a full-information environment. Finally, discrimination may also lead to an equilibrium in which creditworthy borrowers do not receive credit.

Critics of CRA argue that lending markets are essentially perfectly competitive with full information. In this view, CRA forces banks to extend additional loans for which the marginal cost associated with these loans exceeds the prevailing market price. Alternatively, proponents of CRA allege that the market is more accurately described in non-perfectly competitive terms. In both the market power and market imperfection cases, some creditworthy borrowers do not receive credit;

the market has some credit-rationing. In this view, CRA induces an increase in lending that moves the market closer to the competitive, full-information equilibrium.

It should be noted that both of these perspectives implicitly assume that all institutions take some action in response to CRA. This need not be the case, however, as some institutions might not find it necessary to respond to CRA. These institutions may find it possible to meet CRA objectives through their normal course of business or may choose to not be concerned about the consequences of a poor CRA performance rating. Moreover, for those institutions that do take some action in response to CRA, the degree of action may vary according to their particular situation.

In the analysis that follows, we search for evidence to support these contrasting views of how CRA affects the market. In conducting this exercise, we consider each view and determine the extent to which there is support of that view versus any alternative, including no response to CRA or the other perspective.

## Data

The data used for the empirical analysis are drawn from the "Survey of the Performance and Profitability of CRA-Related Lending" recently conducted by the Federal Reserve Board.[4] The survey focused on the largest banking institutions and had two parts. Part A focused on an institution's total lending and its CRA-related lending in the four major loan product areas in which CRA lending activity is tracked: one-to four-family home purchase and refinance lending, one-to-four-family home improvement lending, small business lending, and community development lending. Respondents were asked to provide qualitative and quantitative profitability information for both overall and CRA-related lending (as appropriate) within each of the product categories along with various contextual data.

Part B gathered extensive information on the experiences lenders had in 1999 with their CRA special lending programs.[5] Because special lending programs may have been established for many reasons, the survey asked respondents to provide information on the full range of reasons these programs were developed and the benefits they currently receive from them. The survey also collected information on many other aspects of each program, including its loan volume, the type of loans it involved, the populations it was intended to serve, the role of any third party involved in the program, program features offered by

the participating institutions, and information on the performance and profitability of the loans extended under the program.

Of the 500 institutions asked to participate in the voluntary survey, 143 institutions provided responses (Table 1, top panel). Respondent institutions accounted for about one-half of the assets of all U.S. banking institutions as of the end of 1999, and between 39 percent and 53 percent of all CRA-related lending for a given product in that year (bottom panel). The 143 respondents offered or participated in 622 CRA special lending programs in 1999 (Table 2). About 72 percent of the responding institutions offered at least one CRA special lending program; on average the institutions with programs offered about six programs. Because the survey sought detailed information on only the five largest of a banking institution's CRA special lending programs (measured by lending dollar volume in 1999), detailed information was obtained for only 341 programs.[6]

## Identification of Marginal Loans

Because the theories underlying the debate about CRA highlight the marginal activities of banking institutions, the ideal test would identify those loans (if any) extended as a result of CRA(that is, marginal loans) and then observe their profitability. A finding that these loans were unprofitable would support those who argue that lending markets are perfectly competitive with full information; a finding of profitability (or not losing money) would support those that argue that such markets are not.

The survey did not ask institutions to explicitly identify those loans made as a result of CRA. Thus, although the survey provides a wealth of information about the profitability of CRA-related lending and CRA special lending programs, no single survey response can be used to conduct this ideal test. However, the survey does offer profitability information for a number of potential proxies for the loans made in response to CRA. Conditioned on certain assumptions being true, these indirect proxies may provide a reasonable estimate of the profitability of the "true" marginal CRA loans extended by a banking institution and thus provide a reasonable approximation of the ideal test.

There are a number of possible ways to identify marginal loans. In the presentation here, we restrict discussion to a broad and narrow definition of marginal lending activity. The broad definition categorizes marginal loans as all CRA-related loans originated or purchased and all loans extended under a CRAspecial lending program in any of the four

loan product areas covered in the survey (referred to here as "All Proxies"). The narrow definition of marginal lending includes only loans extended under CRA special lending programs established or needed to achieve a "Satisfactory" CRA performance evaluation ("SAT" programs). This narrower category is more closely aligned with the notion of what is needed to meet the minimum CRA requirements. Any program established in part to obtain a "Satisfactory" rating was included in this group, regardless of whether other reasons were cited.

The weakness of using the broad definition is that many CRA-related loans likely would have been made even if the law did not exist and thus are not truly marginal.[7] The weakness of using the narrow definition is that it may exclude marginal loans that banking institutions may have extended that are not under any special program.

The analysis was conducted by choosing a particular definition of marginal lending, and then classifying institutions according to whether they extended marginal loans under this definition. Institutions were classified for each individual product and then at a composite level, which assesses whether the institution extended marginal loans in any product category. Once institutions were classified in this manner, we examined the experiences of the institutions regarding the profitability of their marginal lending and used this experience as a basis for estimating the percentage of the 500 sampled institutions that experienced losses or gains (defined below) in their marginal lending activities. Those institutions that extended no marginal loans were deemed to have neither losses nor gains. This process was done separately for each definition of marginal lending activity.

The survey collected detailed qualitative information on the profitability of lending activities, and this formed the basis of our assessment of the losses and gains associated with an institution's marginal lending activities. Banking institutions were asked if each individual CRA special program was "profitable," "marginally profitable," "break even," "marginally unprofitable," or "unprofitable."[8] The profitability distribution for overall CRA-related lending and CRA special lending programs for survey respondents is given in Table 3. An institution was considered to have experienced losses if *any* of its marginal lending activities (in a particular product area) were reported to be marginally unprofitable or unprofitable.[9] Similarly, an institution was considered to have experienced gains if *any* of its marginal lending activities were reported to be at least break even.

Importantly, the evaluations of losses and gains were conducted separately. Thus, a single institution could have some marginal activities that experienced losses and others that did not. This could even occur within a single loan product area.

### Results of the Analysis

Using the broad definition of marginal lending, our estimates suggest that 35 percent of the institutions sampled experienced at least some loss associated with their marginal lending (Table 4, top panel). This is largely driven by the experiences banking institutions had in home mortgage lending, particularly in their home purchase and refinance lending activities. Few institutions (about 5 percent) reported a loss associated with their marginal small business and community development lending as defined here.

When marginal lending activities are narrowly defined as loans extended under SAT programs, the estimate of the proportion of institutions that are classified as having experienced at least some loss associated with their marginal lending activity is greatly reduced. Overall, 13.6 percent of institutions are estimated to have experienced a loss under this narrow definition. Again, most of the losses occur in marginal lending activity associated with home purchase and refinance lending.

We estimate that the 35 percent of the largest retail banking institutions judged to have some loss associated with their marginal lending activity using the broad definition would, on average, have had an annual loss of $865,000. Most of this loss (96 percent) is estimated to stem from home purchase and refinance lending. When expressed as a share of its overall equity, this implies a reduction in their overall bank return on equity of only .05 percent. The typical large retail bank in 1999 had a return on equity of 27 percent.

One reason this estimate of loss is small is that the loan dollar volumes for those marginal lending activities that had losses tended to be relatively minor. Many CRA special lending programs had only small losses. In addition, those institutions that reported losses on their overall CRA-related lending activities tended to have only a relatively small portion of their assets in CRA-related lending.

The bottom panel of Table 4 shows the proportion of institutions estimated to have had marginal lending activities that did not experience a loss. When marginal lending activities are broadly defined, virtually every institution (99 percent) is projected to have some marginal

lending activities that were break even or better. This finding is not altogether unexpected, given that nearly all institutions reported that their small business and community development lending activities were profitable. However, even for home purchase and refinance lending, which was the loan product category responsible for most of the losses associated with marginal lending, 81.7 percent of institutions reported having some marginal lending activity that did not incur losses.

Using the narrow "SAT program" definition of marginal lending activities reduces the proportion of institutions projected to have had marginal lending activities that did not incur losses. Under this definition of marginal lending, 55.3 percent of the institutions would have had some marginal lending activity that was profitable.

In assessing the significance of these estimates, an important metric for assessing the "winners" (institutions that engaged in marginal lending activities that did not incur losses) is loan quantity. Recall that the view of CRA that asserts that CRA expands profitable lending opportunities focuses on greater volumes of lending as opposed to greater returns from lending. Thus, the assessment of the significance of marginal lending that did not incur losses focuses on the volume of such lending as a more appropriate measure of the significance of these activities.

Starting with the narrow SAT program definition of marginal lending activities, the data show that the 55.3 percent of institutions in the sample that reported that at least some of its marginal lending activities did not incur a loss extended loans totaling nearly $6.5 billion through those non-losing activities in 1999. Much of this lending occurred as community development lending, although a significant fraction was also home purchase and refinance lending. With the broad definition of marginal lending, the dollar volume of lending associated with non-losing marginal activities expands to $124 billion. As a point of contrast, the loan volumes of marginal activities that incurred losses were $0.8 billion using the narrow definition of marginal lending activities and $13.6 billion using the broad "All Proxies" definition of marginal lending activity.

Between the broad "All Proxies" and narrow "SAT program" definitions of marginal lending there are many alternatives, each with a different set of operating assumptions. The full paper provides some flavor of this by presenting results using a variety of definitions of marginal lending activities.[10] Estimates using these alternate definitions generally fall between those presented in Table 3.

We also conducted additional tests, using the framework established above and economic theory to test predictions as to which institutions should have incurred losses. Economic theory suggests that, all else equal, large institutions or those with large market shares should be less likely to show losses as a consequence of CRA. Similarly, institutions actively engaged in mergers and acquisitions or those seeking an "Outstanding" CRA performance rating might be expected to be more likely to show losses. We test these conjectures using the implied categorization of institutions as "winners" or "losers" (institutions that engaged in marginal lending activities that incurred losses) under our various definitions of marginal lending. We find very little support for any of these conjectures. Merger activity and CRAperformance ratings are unrelated to whether an institution is classified as a "loser" or not. Institution size is important. However, it is middle-sized and, to a lesser extent, the largest institutions that seem most likely to be adversely affected by CRA, not the smaller institutions predicted by the theory (although no truly small institutions were included in the survey).

## Summary

Assessments of CRAhave historically been hampered by an inability to identify those loans extended exclusively as a consequence of the law and by a lack of data on the performance and profitability of such loans. The recent survey undertaken by the Federal Reserve on the performance and profitability of CRA-related lending provides a unique opportunity to overcome these difficulties. Using survey responses, one can assess the profitability of the various classifications of marginal lending activities and, in this way, potentially make an assessment of how CRA affects the profitability of banking institutions.

In this paper, we undertake this exercise. Our results provide some support for two polar views about how CRA may affect banking institutions. In one view, lending markets are perfectly competitive and operate with full information. Under this view, if CRA has an effect, it is to force banking institutions to extend loans to borrowers at prices not commensurate with the risks they pose, an activity that would result in the banks incurring losses. A second view holds that lending markets are either not perfectly competitive or have informational imperfections. Under this view, CRA helps to alleviate credit rationing and results in the extension of loans to creditworthy borrowers that had not previously had access to credit, an activity that does not result in losses.

Our estimates suggest that a significant minority of institutions that engaged in marginal lending activities experienced at least some loss associated with those activities. On the other hand, even large percentages of institutions are estimated to have conducted marginal lending activities that did not incur losses. Importantly, even using narrow proxy definitions, we never found a case in which either the number of institutions that experienced at least some loss or the number that experienced at least some gain was zero. This suggests that, at the very least, there are institutions that operate in each of these environments. Further, it suggests that a blanket characterization of an entire lending market may not be appropriate.

Further, the results suggest that an evaluation of the overall effect of CRAon a banking institution is complex. For a given institution, the extent of losses and non-losses associated with marginal lending activities often varied significantly across loan product areas and even within a loan product area. Thus, CRA might result in gains and losses for an institution. In general, the data show that home purchase and refinancing lending was more likely to show losses than other product areas. On the other hand, community development lending, because it is almost always profitable and contributed significantly to marginal lending under all of our definitions of such lending, contributes disproportionately to the share of institutions considered "winners."

Pinpointing the specific shares of institutions that are "winners" and "losers" is difficult, with the estimate highly dependent upon which definition is used to identify marginal lending. The estimate of the proportion of institutions that are "losers" is particularly sensitive to the inclusion of special lending programs that were established to give benefits that go beyond meeting the minimal standard of the CRA – a "Satisfactory" rating – in the definition of marginal lending. This sensitivity occurs not so much because such programs are more unprofitable than others, but because they account for a relatively large share of the special lending programs.

In considering these findings, there are a number of issues that may bear on the results in significant ways. The losses that an institution experienced in its marginal lending activities might have been understated for a number of reasons. First, many of the lending activities that we define as marginal, particularly CRA special lending programs, often include the participation of third parties that may shield the banking institution from exposure to losses. Second, as discussed above, the framework for identifying marginal loans is imperfect, which could lead to the inappropriate inclusion of profitable non-marginal loans.

Third, institutions were asked to report information on their experiences with lending in 1999, a year marked by strong economic growth and relatively few credit problems.

Similarly, the gains associated with marginal lending may have been understated for a number of reasons. First, some programs reported to be unprofitable might be relatively new and not have had an opportunity to generate sufficient loan volumes to cover start-up costs. Second, a small number of institutions that reported losses for their marginal lending activities in a loan product area also reported losses for their overall lending activity in that area, implying that these losses are likely not due to CRA. Third, because nearly all programs were established for a multitude of reasons and very few were established only for CRA-related reasons, it could be appropriate, depending on the circumstance, to attribute the profits or losses associated with a program to one of the other reasons and not to CRA.

It should be kept in mind that the survey focused only on large retail banking institutions. The experiences of smaller institutions, which account for most of the institutions covered by CRA and about half of the CRA-related lending, may differ substantially.

Finally, it bears emphasizing that the preceding analysis focuses on the effect of CRA on individual banking institutions and not on markets. The fact that an institution would not have undertaken marginal lending without CRA does not necessarily mean such lending would not have been undertaken by another institution absent the law. Further, our analysis does not provide a complete accounting of the effect of CRA on banking institutions. For example, it does not consider investment or service activities institutions undertake to meet their responsibilities under the law. Finally, even a complete enumeration of the costs and benefits to banking institutions would not constitute a full cost-benefit assessment of CRA, as it does not consider the benefits of CRA-related activities to the local community.

*Robert B. Avery is a Senior Economist in the Division of Research and Statistics at the Board of Governors of the Federal Reserve System. Avery began his career as Assistant Professor at Carnegie Mellon University. From 1981 to 1988, he served as a Senior Economist with the Board of Governors. He then was a professor at Cornell University until rejoining the Board of Governors in 1994. His work at the Federal Reserve focuses on supervisory issues related to community affairs and bank supervision. Most recently, he was a coauthor of the Federal Reserve's report to the Congress on the performance and profitability*

*of CRA-related lending. He also designed the Federal Reserve's fair lending screening program and developed a pilot program for statistical sampling of the loan review portion of safety and soundness examinations of small banks. Avery served as director or codirector of the 1983, 1986, and 1989 Surveys of Consumer Finances. He received his undergraduate degree from the University of Pennsylvania and his Ph.D. in economics from the University of Wisconsin.*

*Raphael W. Bostic is a Senior Economist with the Federal Reserve Board and is currently conducting research on the ways in which the Community Reinvestment Act has influenced the behavior of lenders and credit markets. His work has also focused on consumer banking issues, with an emphasis on mortgage and small-business lending and bank branching patterns. Bostic has done extensive research on issues surrounding credit scoring and automated underwriting. His broad research interests include financial markets and institutions, with a particular focus on banks in community development, the role and effects of regulation in banking, urban economic growth, and wage and earnings profiles. Bostic was a coauthor of the Board's report to Congress on the performance and profitability of CRA-related lending. He received his B.A. in psychology and economics from Harvard College and his Ph.D. in economics from Stanford University.*

*Glenn B. Canner is a Senior Advisor to the Federal Reserve Board of Governors in the Division of Research and Statistics. Canner joined the Board in 1979 as an economist and was promoted to his present position in 1996. His current areas of specialization are home mortgage and consumer lending, with a strong focus on fair lending laws and community reinvestment. He also oversees the activity of the Board economists working in these areas. During his tenure, Canner has been author and coauthor of numerous articles and research studies. Most recently, he was a coauthor of the Federal Reserve's report to the Congress on the performance and profitability of CRA-related lending and of "CRA Special Lending Programs," published in the November 2000 issue of the Federal Reserve Bulletin. He holds a bachelor's degree in economics from Lake Forest College and earned his master's and doctoral degrees from Brown University.*

**Table 1**
**Profile of Unsampled, Sampled, and Responding Institutions, by Number and by Proportion of Assets or Type of Lending**

| Item | Less than 950 | 950-4,999 | 5,000-29,000 | 30,000 or More | Overall |
|---|---|---|---|---|---|
| By Number of Institutions Not Sampled | | | | | |
| Small Institutions | 9,576 | 0 | 0 | 0 | 9,576 |
| Large Institutions[1] | 0 | 61 | 22 | 4 | 87 |
| Total | 9,576 | 61 | 22 | 4 | 9,663 |
| Sampled | | | | | |
| Respondents | 0 | 72 | 44 | 27 | 143 |
| Nonrespondents | 18 | 273 | 60 | 6 | 357 |
| Total | 18 | 345 | 104 | 33 | 500 |
| Memo | | | | | |
| Response rate (percent) | 0.0 | 20.9 | 42.3 | 81.8 | 28.6 |

**Assets or Type of Lending (Table 1 continued)**

| | Assets | 1-4 Family Mortgage Loan Outstandings | Small Business Loan Outstandings[2] | CRA 1-4 Family Mortgage Loan Originations[2] | CRA Home Improvement Loan Originations[2] | CRA Small Business Loan Originations[2] | Community Development Loan Originations[2] |
|---|---|---|---|---|---|---|---|
| By Percent of Assets Held, Loans Outstanding, or Loans Originated[3] | | | | | | | |
| Not Sampled | | | | | | | |
| Small Institutions | 18 | 23 | 43 | 19 | 25 | 24 | 12 |
| Large Institutions[1] | 10 | 3 | 3 | 2 | 3 | 4 | 8 |
| Total | 28 | 26 | 46 | 21 | 28 | 28 | 20 |
| Sampled | | | | | | | |
| Respondents | 52 | 47 | 31 | 53 | 45 | 39 | 44 |
| Nonrespondents | 21 | 27 | 23 | 26 | 27 | 33 | 36 |
| Total | 72 | 74 | 54 | 79 | 72 | 72 | 80 |

[1] Includes large wholesale banks, special purpose banks, banks headquartered outside the United States, and banks that were acquired after December 31, 1999.

[2] Estimated. Figures for CRA lending are estimates based on preliminary 1999 HMDA data and on CRA data for small business, small farm, and community development lending; estimation of the extent of lending in a banking institution's local community draws on information on bank office location or reported CRA assessment areas.

[3] Percent of assets held: Assets held as of December 31, 1999, as a proportion of assets held by all U.S. banking institutions at that date; Percent of outstanding loans: Dollar amount of loans outstanding at the end of 1999 as a proportion of dollar amount of loans held by all U.S. banking institutions at that time; estimated for small business loan outstandings by extrapolating data from the June 30, 1999, Bank Call and Thrift Financial Reports; Percent of loan originations: Dollar amount of loans originated during 1999 as a proportion of dollar amount of loans originated by all U.S. banking institutions reporting loan origination data pursuant to the HMDA or CRA during the year.

### Table 2
### Banking Institutions and CRA Special Lending Programs Covered in Survey, by Size of Institution, 1999

| Item | All Reporting Institutions | 950-4,999 | 5,000-29,999 | 30,000 or More |
|---|---|---|---|---|
| Institutions | | | | |
| Number Responding to Survey[1] | 143 | 72 | 44 | 27 |
| Offering at Least One Program | | | | |
| Number | 103 | 48 | 31 | 24 |
| Percent | 72 | 67 | 70 | 89 |
| Number of Programs | | | | |
| Among the Five Largest At Each Institution[2] | 341 | 138 | 116 | 87 |
| Smaller than the Five Largest At Each Institution | 281 | 31 | 139 | 111 |
| Total Number | 622 | 169 | 255 | 198 |
| Mean Number Per Institution Offering at Least One Program | 6.0 | 3.5 | 8.2 | 8.3 |
| Number of Programs Among the Five Largest at Each Institution, by Type of Loan Offered | | | | |
| One- to Four-Family Home Purchase and Refinance Only[3] | 247 | 98 | 83 | 66 |
| Small Business Only | 27 | 17 | 4 | 6 |
| Other | 67 | 23 | 29 | 15 |
| One- to Four-Family Home Home Improvement Only | 17 | 7 | 6 | 4 |
| Multi-Family Only | 16 | 6 | 8 | 2 |
| Consumer Only | 5 | 1 | 3 | 1 |
| Commercial Only | 4 | 1 | 3 | 0 |
| Other[4] | 25 | 8 | 9 | 8 |

[1] Excludes one institution (in the middle size category) that did not respond to the special lending portion of the survey.

[2] Institutions were asked for detailed information on only the five largest of their programs (measured by dollar volume of 1999 originations).

[3] Programs reported in this row and the remaining rows of this table are from among the 341 reported by all institutions to be among their 5 largest.

[4] Programs identified as such by survey respondents and programs that offer more than one type of loan.

## Table 3
## Profitability Distribution for Overall CRA-Related Lending and CRA Special Lending Programs

*(Percent distribution of institutions or programs)*

| | Home Purch. | | Home Improv. | | Sm. Bus. | | Comm. Devel.[1] | |
|---|---|---|---|---|---|---|---|---|
| Overall CRA-Related Lending | | | | | | | | |
| Profitability Data Given | 74.8 | | 61.1 | | 65.5 | | 75.7 | |
| Profitable | | 46.5 | | 65.2 | | 83.3 | | 54.8 |
| Marginally Profitable | | 33.4 | | 20.7 | | 13.7 | | 38.8 |
| Break Even | | 4.0 | | 5.0 | | 1.5 | | 3.6 |
| Marginally Unprofitable | | 9.6 | | 7.2 | | 0.7 | | 2.0 |
| Unprofitable | | 6.6 | | 1.9 | | 0.7 | | 1.3 |
| Total | | 100.0 | | 100.0 | | 100.0 | | 100.0 |
| Missing Profitability | 20.1 | | 20.5 | | 27.1 | | 8.8 | |
| No Lending | 5.0 | | 18.4 | | 7.5 | | 15.5 | |
| Total | 100.0 | | 100.0 | | 100.0 | | 100.0 | |
| CRASpecial Lending Programs | | | | | | | | |
| SAT Only Programs | | | | | | | | |
| Profitability Data Given | 65.2 | | 100.0 | | 100.0 | | 61.2 | |
| Profitable | | 23.9 | | 10.6 | | 3.1 | | 51.7 |
| Marginally Profitable | | 32.0 | | 44.0 | | 12.9 | | 40.3 |
| Break Even | | 24.5 | | 45.4 | | 6.3 | | 4.9 |
| Marginally Unprofitable | | 9.2 | | 0.0 | | 51.8 | | 3.2 |
| Unprofitable | | 10.4 | | 0.0 | | 25.9 | | .0 |
| Total | | 100.0 | | 100.0 | | 100.0 | | 100.0 |
| Missing Profitability | 34.8 | | 0.0 | | 0.0 | | 37.2 | |
| Total | 100.0 | | 100.0 | | 100.0 | | 100.0 | |
| Memo: Number of Programs | 96 | | 6 | | 10 | | 70 | |
| All Programs | | | | | | | | |
| Profitability Data Given | 77.5 | | 100.0 | | 93.3 | | 90.0 | |
| Profitable | | 28.9 | | 4.9 | | 55.7 | | 54.8 |
| Marginally Profitable | | 31.7 | | 43.5 | | 10.2 | | 38.3 |
| Break Even | | 13.5 | | 44.2 | | 2.5 | | 3.6 |
| Marginally Unprofitable | | 15.7 | | 4.9 | | 21.6 | | 2.0 |
| Unprofitable | | 10.2 | | 2.5 | | 10.2 | | 1.3 |
| Total | | 100.0 | | 100.0 | | 100.0 | | 100.0 |
| Missing Profitability | 22.5 | | 0.0 | | 6.7 | | 10.0 | |
| Total | 100.0 | | 100.0 | | 100.0 | | 100.0 | |
| Memo: Number of Programs | 226 | | 14 | | 27 | | 122 | |

[1] For community development lending, the breakdown on use of CRAspecial lending programs includes all community development lending.

**Table 4**
**Estimates of Institutions With Losses and Gains, by Product Area and Definition of Marginal Lending Activity**
*(percent of 500 sampled institutions)*

| Product Area | Marginal Lending Activity Definition | |
|---|---|---|
| | All Proxies | SAT Programs |
| Estimate of Losses | | |
| Composite (All Products) | 35.0 | 13.6 |
| Home Purchase | 27.1 | 9.1 |
| Home Improvement | 7.6 | 0.0 |
| Small Business | 4.9 | 3.0 |
| Community Development | 5.5 | 4.5 |
| Estimate of Gains | | |
| Composite (All Products) | 99.0 | 55.3 |
| Home Purchase | 81.7 | 26.3 |
| Home Improvement | 74.3 | 4.0 |
| Small Business | 88.3 | 1.5 |
| Community Development | 79.0 | 45.4 |

## Notes

[1] The federal banking supervisory agencies are the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

[2] For the survey and the current research, CRA-related lending refers to loans extended to low- and moderate-income borrowers (regardless of neighborhood income) and to low- and moderate-income neighborhoods (regardless of borrower income) in a banking institution's CRA assessment area(s). A low- and moderate-income neighborhood (typically a census tract) is one where the median family income of the neighborhood is less than 80 percent of the median family income for the metropolitan statistical area (MSA). Borrower income categories follow the same groupings as those for neighborhoods but rely on the borrower's income relative to that of the concurrently measured median family income of the MSA. For small business lending, the size of the firm, instead of the income of the borrower, is used to define CRA-related lending. All community development loans are considered to be CRA-related lending.

[3] For examples, see William C. Gruben, Jonathan A. Neuberger, and Ronald H. Schmidt, "Imperfect Information and the Community Reinvestment Act," Federal Reserve Bank of San Francisco Economic Review, (Summer 1990), pp. 27- 46; William W. Lang and Leonard I. Nakamura, "A Model of Redlining," Journal of Urban Economics, vol. 33 (1993), pp. 223-234; and Joseph E. Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," American Economic Review, vol. 71, no. 3 (1981), pp. 393-410.

[4] The survey was a response to Section 713 of the Gramm-Leach-Bliley Act of 1999 (P.L. No. 106-95). For more information about the survey and its findings, see the report prepared by the Board of Governors of the Federal Reserve System and submitted to the Congress in July 2000. The report and the survey questionnaire are available on the Federal Reserve Board's web site at www.federalreserve.gov/boarddocs/surveys/CRAloansurvey. For more detailed information about the survey findings regarding CRA special lending programs in particular, see Robert B. Avery, Raphael W. Bostic, and Glenn B. Canner, "CRA Special Lending Programs" Federal Reserve Bulletin, vol. 86 (November 2000), pp. 711-31.

[5] A program would meet this definition only if one of the program's documented purposes was to enhance the institution's CRAperformance.

[6] The 341 programs are estimated to account for about 97 percent of the lending that responding institutions extended under special lending programs in 1999.

[7] The fact that a great number of loans are extended each year to lower-income borrowers or in lower-income neighborhoods by lenders not covered by CRAsupports the proposition that lenders covered by CRA would also extend many such loans without the impetus of the law. See, for example, Table 4, p. 92 in Robert B. Avery, Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner, "Trends in Home Purchase Lending: Consolidation and the Community Reinvestment Act," Federal Reserve Bulletin, vol. 85 (February 1999) pp. 81-102.

[8] For the survey, respondents were asked to compute a profitability measure based on "all revenues and costs associated with origination, servicing, pricing, delinquency, default and losses, prepayment, loan sales and purchases, and related customer account business." This characterization was intended to represent economic profits, although the survey did not state this explicitly.

[9] If an institution reported more than one special lending program in a given loan product area that satisfied the definition of marginal lending, the institution was categorized as unprofitable in that product area if any such programs were reported to be unprofitable.

[10] In the full paper, we explore a number of other options in which we vary the definition of marginal lending. For example, one definition includes all special programs that institutions reported that they believed were needed to obtain a "Satisfactory" or "Outstanding" CRA performance rating or were established to *minimize* the likelihood of adverse public comment on their CRA record ("SOM" programs).

*Preliminary Draft*
*Please do not cite or quote without permission from the authors.*