

COMMUNITY DEVELOPMENT FINANCIAL INSTITUTIONS AND THE SEGMENTATION OF UNDERSERVED MARKETS

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Abstract

This research is a preliminary examination of whether certain attributes of Community Development Financial Institutions (CDFIs) are correlated with greater success in serving racial and/or ethnic minority populations. The first question is whether minority-owned CDFIs are achieving higher levels of service among minority communities. The second issue is whether two factors are affecting CDFIs that have been successful in serving those communities. The factors are: 1) whether the CDFI specifically targets its services to members of the community; and 2) whether understanding the cultural norms of the community contributes to the success.

Limitations in the data limit the extent to which one can generalize from the results. Minority-owned CDFIs in the sample are providing higher levels of service to historically underserved minorities, measured by the percent of transactions. Measured by the mean loan amount, however, all of the CDFIs in the sample are providing larger loans to whites. That suggests that ownership may affect performance in attracting minority customers, but it may not affect the amount of the loan for which the customer is qualified. The key informant interviews offer some tentative explanations for the percent of transactions, in that all of their CDFIs were located in target-rich environments. Analysis of the location of the borrowers confirmed that minority-owned CDFIs are more likely to lend in census tracts with large minority populations. However, they are not more likely to lend in areas that meet the CDFI definition of a lower-income census tract. The key informants also suggest that familiarity with the cultural norms of potential customers is important. The informants noted that familiarity breeds a higher level of comfort among potential customers, allows the marketing approach to resonate with the customer, and creates a level of trust that might not otherwise exist.

Policy Issue and Importance

As part of an effort to reinforce the impact of the 1977 Community Reinvestment Act (CRA), community revitalization efforts were bolstered with the creation of the CDFI Fund¹ in 1994.

Based on the belief that individuals in our society should be equipped with easy access to financial services, credit, and capital to enable them to meet their own financial needs and climb up the economic ladder, the creation of the CDFI Fund was intended to promote economic revitalization and community development by reaching underserved niche markets. Community Development Financial Institutions (CDFIs) have become a crucial source of investment and mortgage finance in many communities that historically have been underserved, for reasons that include redlining and market failures in which private, individual institutions lack incentives to lend to community development ventures (Pinsky 2001).

The idea of credit targeted to underserved communities was not new, having been conceived decades earlier with the first generation of CDFI-like institutions, such as the Minority Enterprise Small Business Investment Companies launched in the early 1970s. Some suggest that the first African-American community development credit union communities in the 1930s were the beginning of the community finance field. Others suggest an even earlier origin in the minority-owned banks serving the low-income areas, dating a century back (Bates 2000; Benjamin, Rubin, and Zielenbach 2004; Isbister 1994). Still others consider the housing economic development activities of Community Development Corporations (CDCs) in the 1960s to be the inception of the industry (Rubin 2001). The common element, regardless of when and how the concept

¹ The Fund was officially established under the Reigle Community Development and Regulatory Improvement Act of 1994.

originated, is providing financial services in underserved communities to enable people to improve their lives.

Since the establishment of the CDFI Fund in 1994, the CDFI industry has grown to include 800 to 1,000 CDFIs with more than \$20 billion in total assets, including 50 institutions with more than \$100 million in assets (CDFI Data Project 2005). The industry has made notable strides toward the vision stated by the CDFI Fund: “an America in which all people have access to affordable credit, capital and financial services” (CDFI Fund website).

The capital being put to work by the CDFI industry, however, is modest compared to the amount the market needs. Ten percent of U.S. households are unbanked and another 12 percent are underbanked (Financial Literacy & Education Commission 2006). Research reveals that minorities, immigrants, and low-income individuals are significantly less likely to be banked (Stegman and Faris 2001). There are more payday and check-cashing outlets than there are McDonald’s, Burger Kings, and Target, Sears, JC Penney, and Wal-Mart stores combined (Karger 2005). A combination of historical redlining by mainstream mortgage lenders and reverse redlining by subprime and predatory lenders is threatening to set back asset-building opportunities for many minority and low-income households and communities (Schloemer et al. 2006). The rate of homeownership among African-Americans, for example, declined from 49.1 percent in 2004 to 47.9 percent in 2006 (U.S. Census Bureau, Housing Vacancy Survey, Annual Statistics: 2006, Table 20), and is likely to decline further as the full impact of the subprime lending crisis is felt. Small businesses, particularly those owned by minorities and women and

those operating in rural, inner-city, or other historically disadvantaged areas, continue to face obstacles in obtaining affordable financing throughout the business life cycle (Robb and Fairlie 2006). Entrepreneurs are now turning more and more to hard-to-manage credit card debt to fund their businesses (Dale 2007). Substantial gaps remain in the delivery of mainstream financial services, as Benjamin, Rubin and Zielenbach (2004) point out: “. . . low-income communities and individuals have always had limited access to financial services, affordable credit and investment capital.” (p. 177). CDFIs work to fill those gaps, although they have nowhere near the capacity they would need. Even large CDFIs are the size of a single *branch* of some banks.

Given the disparity between the level of need and the resources that CDFIs have to address those needs, careful targeting of those scarce resources is necessary to maximize the positive impacts for the community. Published research on the CDFI industry, however, has not tended to focus on whether CDFIs are actually accomplishing the mission of providing access to financial services in minority communities. This omission may reflect the fact that the industry is relatively young, rapidly evolving, and in the early stages of compiling and making use of standardized data. While much of the research has been for the purpose of knowledge-sharing and policy development within the industry, the exploratory studies on the impact of CDFIs and recent analysis of CDFI data are most relevant to this research.

Generally, CDFIs work to close gaps by delivering capital in new forms and/or to new markets, although no “one-size-fits-all” model has emerged. The environment of flexibility and adaptation lends itself to innovation, but at the same time makes it difficult to generalize about best

practices and community impacts. Instead, case studies have been a common tool for describing the work of CDFIs. For example, researchers at the Center for Community Capitalism have conducted case studies on the Latino Community Credit Union's consumer loan portfolio and on several First Accounts awardees as part of research into banking the un- and underbanked. Building on work by Caskey and Hollister (2001), Dickstein (2006) has contributed substantially to the debate about how and what to measure. Even without defining the appropriate metric for assessing the impact a CDFI might have, she makes a case for the value of good outcome measurements based on the organization's theory of change.

Describing CDFI activities and outcomes is more challenging when examining multiple CDFIs rather than a single institution. Benjamin, Rubin and Zielenbach (2004) blame the diversity of CDFI types for making it hard to generalize about the role of CDFIs. Depository CDFIs, such as credit unions, provide consumer loan and banking services to low-income individuals and neighborhoods, while mortgages are often lead products of loan funds (Rubin 2006). Looking forward, Immergluck (2006) provides several creative suggestions for demonstrating the effect of CDFI activity by using product-line-based typology and distinguishing among three key strategies CDFIs might use. These three strategies are variously people-based (e.g.: micro loan programs), place-based (e.g.: real estate lending in target areas), and/or a hybrid—place-based-people strategies (e.g.: neighborhood targeted home improvement loans). Immergluck's review of available data sources highlights the challenges faced, particularly without transaction-level data, in measuring CDFI impact using even quasi-experimental methods, but he predicts "a small but fairly steady stream of innovative research" and "improvements in data, especially small area

data” (p. 31). In this regard, he inspires researchers to seek additional ways to make as much use as possible out of the available information.

In fact, the data are becoming available. Since 2001, the Common Data Project (CDP) has reported on data collected annually from around 500 CDFIs via the trade associations representing various subsectors of the CDFI field. Until recently, this was the key source of data on the industry. As Rubin (2006) points out, participation is voluntary and the data is mostly descriptive, and, as Immergluck indicates (2006), it is not disaggregated. Because of its voluntary and industry-based nature, “any attempt to expand the variables ... must be weighted against its potential to discourage individual CDFIs from participating in the survey” (p. 30).² The CDFI Fund launched its own data collection protocol in 2004, the Community Investment Impact System (CIIS). Though the universe of mandatory participants is limited to awardees, reporting is required for three years. Already, CDP and CIIS data have enabled analysts to draw important conclusions about the institutions. In 2004, the CDFI Fund was able to show the strong correlation between age, assets, revenue, and stronger financial performance using data on 223 CDFIs (Greer 2006).

Both of these datasets continue to provide valuable insights. From the Fabiani and Greer (2007) and the CDFI Data Project (2003, 2004, 2005) studies, we know that CDFI banks, credit unions, and loan funds differ with respect to size, age, ownership, type of organization, and other characteristics. For example, the average age for a loan fund reporting to CIIS is just under 10

² As it is, Coastal Enterprises Inc. estimates that it spends more than 600 hours each year on external reporting requirements (Dickstein 2006).

years; for a CDCU, nearly 30 years. Younger CDFIs are more likely to be minority-owned and controlled. We know that different CDFI types serve different communities and offer different services within those communities. For example, CDP respondents report that 69 percent of their clients, on average, are low-income and 58 percent are minority, but that credit unions had the highest proportion of low-income and/or minority clients (2005). The profile of rural CDFIs differs from that of urban CDFIs. We also know that they access capital from different sources, with banks being the predominant investor in loan funds, but less significant in CDCUs.

The data analysis has shown significant differences among CDFIs, and those differences affect how the organizations operate. What prior studies have not shown is whether those differences affect the ability of a CDFI to reach different segments of the overall target market that CDFIs serve. There are no studies showing the correlation between a CDFI's attributes and its ability to reach a particular targeted segment of the market. The Center for Community Capitalism's study of the Latino Community Credit Union suggests that it has been relatively successful in penetrating the Latino immigrant market in North Carolina. Only with additional research, such as that attempted here, can we determine whether other CDFIs have enjoyed similar success with other segments of the market, and, if so, what contributes to their success.

This research is a preliminary examination of the characteristics of CDFIs to determine whether certain attributes of the organization are correlated with greater success in serving racial and/or ethnic minority populations historically underserved by mainstream financial institutions (MFIs). This project consists of an analytical component and a set of key informant interviews, as two

alternative and complementary ways to address the research question. This research takes a measure of the extent to which different types of CDFIs are reaching minority racial and ethnic groups, primarily using CIIS data (see methodology section for further discussion), by examining the attributes of those CDFIs that are most successful in reaching those segments of underserved markets. The question is whether CDFIs that are minority-controlled are more able to reach minority segments of the market as defined by the racial and ethnic characteristics of borrowers.

Additional quantitative analysis of the characteristics of the census tracts in which the loans were made complements the initial results of both the quantitative analysis of the relationship between minority ownership and the racial/ethnic characteristics of the individual borrowers; and the qualitative analysis of the key informant interviews. Many economic development finance efforts employ geographic targeting to improve economic opportunities at the community-level and/or as an indirect way to reach individual members of a targeted group. For example, the CRA set out largely to remedy racial discrimination in the provision of credit and financial services; but it seeks to do so by focusing on low- and moderate-income geographies, and low- and moderate-income individuals, within the broader assessment areas of each institution. “The significant correlation between race and income, and between race of homeowner and racial composition and income of neighborhood, gives CRA leverage to overcome barriers to credit faced by minority households” (Barr 2005, p. 120). Thus, efforts to allocate capital to certain minority households and individuals may rely on the demographic characteristics of census tracts as a proxy.

The geographic orientation of services is consistent with the basic nature of CDFIs as locally grown and community-focused organizations. As Ratliff and Moy (2004) point out, "Initial successes of the CDFI industry in addressing the capital needs of particular low- and moderate-income communities derive from the typically small, autonomous nature and narrow geographic focus of its institutions" (p.3). Moreover, CDFIs cannot legally discriminate based on either race or ethnicity, and so using a geographically defined service area with a high percentage of minority residents could be a way to increase the probability that the products and services the CDFI provides will reach minority individuals and households.

Research Questions

This research examines two issues. The first issue is whether CDFIs that are minority-owned are achieving higher levels of service among historically underserved minority communities. That issue is the focus of the two pieces of quantitative analysis of the CIIS dataset undertaken for this study. The second issue is whether two factors that may help minority-owned CDFIs achieve higher levels of market penetration in historically underserved communities are affecting CDFIs that have been particularly successful in reaching into those communities. The two factors are: 1) whether the CDFI specifically targets its services to members of the community; and 2) whether understanding the cultural norms of the community contributes to the CDFI's success in providing services to members of the community. Those issues are addressed through the key informant interviews.

Research Design

We used a mixed-method research design combining quantitative data analysis with key informant interviews. We used the interviews to supplement the results of our quantitative data analysis, to identify potential causative links suggested by the quantitative data analysis, and to suggest additional quantitative analyses.

Samples Used for Quantitative Analysis

Prior studies demonstrated that common measures of performance, such as the type and value of loans made or the value of assets under management, vary among CDFIs with different characteristics. For example, older CDFIs tend to be larger and have more funding sources than younger CDFIs, while younger CDFIs are more apt to be minority-owned. Therefore, an assessment of the performance of CDFIs should control for the characteristics of the organization to ensure that the comparison is made with respect to other CDFIs that share common attributes.

Benjamin, Rubin and Zielenbach (2004) discuss the different types of CDFIs (banks, credit unions, loan funds and venture capital funds), and the different purposes of financing provided (single-family mortgages, multi-family housing finance, and business lending and equity provision). Bershadker et al. (2007) further categorize CDFIs by additional attributes, age and asset size, as well as whether or not the institution is minority- or women-controlled.

To control for factors that studies have shown affect performance, we planned on using data from the CIIS datasets to stratify the initial sample of all reporting CDFIs. After excluding outliers with respect to size and the organization's extent of lending activity, as was done with

the CDFI Fund (2007) report, we anticipated a sample size of over 200 (based on the size of the reporting cohort in 2003, and assuming that the number of CDFIs reporting for CIIS has remained relatively stable over time). The actual sample size proved to be much smaller due to missing data on the race and/or ethnicity of the borrower in over 83 percent of transactions in the Transaction Level Report (TLR) dataset.

Our analysis required joining the Institution Level Report (ILR) dataset, which contains the data about whether the organization is minority-owned, with the TLR dataset, which contains the data about the race and/or ethnicity of the borrower. The ILR dataset included reports from 336 organizations for the period from 2003 to 2005. The TLR dataset includes 118 CDFIs reporting in at least one year between 2004 and 2006. The overlap between the two datasets is 96 organizations, with 78,845 transactions reported.

Of those 96, we excluded 18 CDFIs that reported average assets more than two standard deviations from the mean level of assets for the remaining organizations. Two CDFIs, neither minority-owned, reported assets above the range, while 16 CDFIs, five minority-owned, had assets of under \$3 million and were below the range for inclusion. Ten other CDFIs were excluded because they reported fewer than 30 transactions over the three-year reporting period, indicating that the organization had an insignificant level of activity. That left 74 CDFIs in the sample, with 76,084 transactions, or 96.5 percent of the total number of transactions in the dataset.

The next step was to exclude transactions for which the participating CDFI had not reported the characteristics of the population that were of primary interest, race or ethnicity. Excluding transactions for which the race was omitted or not specified left 24 CDFIs and 12,538 transactions for analysis. Excluding transactions for which the ethnicity, i.e. Hispanic or Not Hispanic, was omitted or not specified left 23 CDFIs and 12,566 transactions for analysis.³

We simplified the quantitative component of the research design because there were so few CDFIs in the dataset after excluding transactions missing key data, and because the final sample of transactions represented such a small percentage of the original data. We collapsed the data on race and ethnicity into one analysis.⁴

For the analysis of the borrower characteristics of our sample of 24 CDFIs, we categorized the CDFIs by ownership, whether minority-owned or non-minority-owned. We also initially categorized the CDFIs by three categories of age of the organization: 1) less than 10 years old; 2) between 10 and 20 years old; and 3) more than 20 years old. We also initially categorized the CDFIs by three size categories, as measured in assets: 1) less than \$10 million; 2) \$10 million to \$20 million; and 3) more than \$20 million. For this analysis, we did not categorize by the type of organization, whether a depository institution (Credit Union or Bank) or investor institution (Loan Fund or Venture Fund), because only one of the institutions was a depository institution.

³ If we had not excluded the 18 outliers, and if they had reported race and ethnicity on all transactions, we would have had, at most, 15,299 transactions with race reported and 15,327 with ethnicity. In either case, data would have been missing on 80 percent of the transactions. Even among the 24 or 23 CDFIs that did report on the race and/or Hispanic ethnicity of the borrower, there were some transactions for which those data were missing.

Table 1 shows how the CDFIs in the sample compare with CDFIs in the ILR dataset (336 organizations), and with CDFIs in the merged TLR and ILR datasets (96 organizations).

Table 1 – Selected Characteristics of CDFIs in ILR, Combined ILR and TLR, and Sample Datasets

	Minority-Owned		Age of the Organization			Size of the Organization		
	No	Yes	< 10 years	10 - 20 years	20+ years	< \$10 million	\$10 - 20 million	\$20+ million
ILR CDFIs	243 (72.8%)		75 (31.5%)	81 (34.0%)	82 (34.5%)	161 (66.3%)	35 (14.4%)	47 (19.3%)
		91 (27.2%)	37 (40.7%)	26 (28.6%)	28 (30.8%)	68 (74.7%)	12 (13.2%)	11 (12.1%)
Combined TLR and ILR	73 (76.0%)		21 (28.8%)	28 (38.4%)	24 (32.9%)	37 (50.7%)	11 (15.1%)	25 (34.2%)
		23 (24.0%)	9 (39.1%)	8 (34.8%)	6 (26.1%)	13 (56.5%)	8 (34.8%)	2 (8.7%)
Sample for Analysis	18 (75.0%)		3 (16.7%)	8 (44.4%)	7 (38.9%)	9 (50.0%)	4 (22.2%)	5 (27.8%)
		6 (25.0%)	3 (50.0%)	1 (16.7%)	2 (33.3%)	3 (50.0%)	3 (50.0%)	0 (0.0%)

* Some CDFIs in the ILR dataset had missing data, and so the numbers reporting age and/or asset size do not sum to the full total of 336 organizations.

Because there were no minority-owned CDFIs with more than \$20 million in assets left in the sample, we further simplified the analysis based on asset size to include only two categories, assets under \$10 million and over \$10 million. After looking at the sample data on the number of transactions reported, we noted that the three minority-owned CDFIs that were less than 10 years old reported the race of the borrower on only 329 of the 12,538 total transactions. Given

⁴ This does mix categories of race and ethnicity, but considering the overlap in the data remaining for analysis and the relative consistency of the reporting of Hispanics as Other for purposes of listing race in the data, we felt that combining the two would simplify the analysis and not obscure crucial distinctions.

the small number of transactions reported by that group and the fact that there was only one minority-owned CDFI between 10 and 20 years old, we decided to collapse the analysis by age into two categories as well, CDFIs under 20 years old and those over 20 years old.

We then analyzed the performance, based on the number of transactions reported, of the CDFIs in the different categories for each of the characteristics of interest (race and ethnicity), first for ownership alone, then for ownership and age, then for ownership and size. We also analyzed performance, based on the mean value of loans made to each group, for the ownership categories.

In addition to the quantitative analysis of the relationship between minority ownership of CDFIs and the race and ethnicity of borrowers for the 24 CDFIs in our sample, we analyzed reported transactions based on the characteristics of census tracts in which the loans were made rather than borrowers. This additional analysis addresses two questions. The first question is to what extent does a characteristic of the CDFI, such as its size or whether it is minority-owned, affect the *percentage of its transactions* that are high-minority or lower-income census tracts? For this question, the unit of analysis is the institution. The second question is to what extent do characteristics of the CDFI affect the *probability that any loan* it makes will be in high-minority or lower-income census tracts? For this question, the unit of analysis is the transaction.

We used the census tract as the area for analysis because the CIIS dataset has less missing data for the census tract in which the loan was made than for the racial and/or ethnic characteristics of the borrower. This gave us a larger dataset to work with. There were 118 institutions and 92,889

observations in the transaction dataset, 336 institutions in the institution dataset, and the overlap between the two was 96 organizations with 78,845 transactions. Tract data was provided on 48,033 transactions.

For analysis of the extent to which the characteristics of the organization affect the percentage of loans in different types of census tracts, we excluded data from 25 CDFIs that reported the tract information on less than two-thirds of their transactions. That left 46,391 transactions by 71 CDFIs. For the probability analysis, we excluded three outliers—CDFIs reporting census tract data for more than 4,000 transactions each—and 10 CDFIs that did not report any tract data. That left 32,905 transactions by 83 CDFIs.

Because of the larger number of observations in the two datasets, we were able to do cross-tabulations and use multivariate regression analysis to determine the relationship between the characteristics of CDFIs and the census tracts in which loans are made.

We used three different specifications for the dependent variable. The first is “very-low-income,” which is defined as census tracts with median income less than 60 percent of area median income.⁵ The second is “low-income,” which is defined as census tracts with median

⁵ The CDFI Fund defines low-income as at or below 80 percent of area median income and very-low-income as at or below 60 percent of area median income (CDFI Fund, 2008).

income less than 80 percent of area median income. The third is “high-minority,” which is defined as census tracts with less than 50 percent white, non-Hispanic population.⁶

In the institutional-level analysis, 25 institutions were deleted because they reported tract information on less than two-thirds of their transactions, leaving 71 institutions in that sample.

In the transaction-level analysis, we deleted all transactions without census tract (which removed those 10 organizations without any tract data at all), and we deleted all transactions from three large institutions as outliers. Thus the sample used for the institution-level analysis includes 83 institutions and 32,905 transactions.

In the institution-level analysis, for each institution in the dataset, we calculated the share of its transactions that fell in each type of target tract as a continuous variable. The greater number of CDFIs in the dataset enabled us include both the race and gender as ownership categories.

Twenty-one of the 71 CDFIs were minority-owned, and 20 of the 71 were women-owned.

Of the 32,905 transactions in the transaction-level analysis, 30 percent of the transactions fell in very-low-income tracts, about 53 percent in low-income tracts, and 45 percent in high-minority tracts. Of the 83 CDFIs in the transaction-level analysis sample, 17 institutions (20 percent) are minority-owned and 22 (27 percent) are women-owned.

⁶ Fifty percent is chosen as a cut off point for high-minority, because there is a 50 percent probability that a customer from that track is minority. We choose the cut off point after comparing the minority quartile distribution of all census tracts in the nation (available upon request).

We were able to use more independent variables for our tract-level analysis than for the analysis based on only 24 CDFIs because of the larger datasets. For the institution-level analysis of the sample of 71 CDFIs, we included more-detailed categories for ownership, the type of CDFI, and the size of the CDFIs. For the transaction-level analysis of the sample of 83 CDFIs, we also added categories for the loan purpose and year of origination.

Of the 71 CDFIs in the institution-level analysis, 63 were loan funds, 7 were credit unions or banks, and 1 was a Community Development Venture Capital Fund (CDVC). Of the 83 CDFIs in the transaction-level analysis, 75 were loan funds, 6 were credit unions, and 2 were CDVCs. Fabiani and Greer (2007) showed that CDFI performance varies by the type of institution, and so we included the differentiation for these analyses, but combined the CDVC Fund with the loan funds.⁷ Thus, as with the analysis of the 24 CDFIs, loan funds dominate the dataset.

As in the analysis based on 24 CDFIs, we considered it important to control for the impact of CDFI size on performance. Age and asset size were highly correlated among the institutions in both of the larger datasets, consistent with Greer (2006), who finds that, on average, CDFIs increase in asset size as they mature. Therefore, we combined both features in a single set of dummy variables. “Big” CDFIs are those with assets over \$20 million; “Moderate Growth” CDFIs are those started between 1990 and 1999 and with between \$10 and \$20 million in assets. “Startup” CDFIs are those with less than \$10 million in assets and which started doing business after 1999. “Other” CDFIs are those started before 1990 with assets under \$20 million and those

⁷ In the initial analysis of twenty-four CDFIs, there was only one loan fund, and this did not allow us to distinguish between types of CDFI.

started before 2000 with assets under \$10 million, and they make up the largest group. Among the 71 CDFIs in the institution-level analysis sample, 23 were Big, 10 were Moderate Growth, 8 were Startup, and 30 were Other. Among the 83 CDFIs in the transaction-level analysis sample, 22 were Big, 10 were Moderate Growth, 7 were Startup, and the 44 were Other.

Loan purpose was defined as one of six categories: 1) business loans (including business fixed and working capital loans); 2) housing loans (including home improvement and home purchase loans); 3) micro loans; 4) real estate development loans (including commercial and housing development); 5) consumer loans; and 6) other loans. For purposes of the regression analysis, consumer and other loans are combined, leaving five categories. We found that the loan purpose was so highly correlated with loan amount that we omitted loan amount as a variable.

For the age of loan, we used three periods: 1) loans closed before 2000; 2) loans closed between 2000 and 2002; and 3) loans closed in 2003 or later.

Qualitative Data from Key Informant Interviews

Because the key informant interviews were to be with personnel from CDFIs that had been unusually successful at serving minority and/or ethnic communities, we chose informants from among the 24 CDFIs for which we had data on the racial and ethnic characteristics of borrowers. To determine whether a CDFI had been successful in lending to racial or ethnic minorities, we calculated the percentage of loans that each organization made to either a racial minority or a Hispanic borrower for each of the three reporting years. Of the 24, only 9 reported having more

than 60 percent of their transactions with either racial minorities or Hispanic borrowers. We selected three CDFIs from the list, choosing for geographic diversity, with one CDFI from the Northeast, one from the South, and one from the Southwest, and to ensure that at least one of the CDFIs served a predominantly black community and at least one a Hispanic community.

Once we narrowed the list of CDFIs we wanted to study in more detail, we ranked the organizations for selection. We then contacted the top-ranked CDFIs to determine their willingness to participate. Our first choice from the Southeast declined to participate, and so we replaced it with a CDFI from the Mid-Atlantic region. Our first choice in the Southwest initially agreed to participate. After one telephone interview, however, we were informed that we would not be able to interview any other staff members within the time available. Therefore, we contacted the second-choice organization in the Southwest and conducted an additional interview. As a result, we interviewed multiple informants at two CDFIs, one in the Northeast and one in the Mid-Atlantic region, and a single informant at two other CDFIs in the Southwest. At the CDFIs at which we were able to interview more than a single person, we tried to talk with people both from upper management and those who interacted directly with the customers, in order to get different perspectives on the issues.

We asked the key informants about the organization's mission, how it defined its target customer base, how much emphasis it placed on achieving high levels of service with its target customers, and how it viewed the importance of the short- and long-term sustainability of the organization in financial terms. To gauge the reliability of the observations, we also asked about the

informant's background, length of employment with the CDFI and/or related businesses, and responsibilities within the organization.

Data Analysis: Number of Loans to Minorities and Number of Transactions

The data allowed us to divide the sample by race of borrower into American Indian (952 transactions), Asian (333 transactions), black (3,777 transactions), Hawaiian (3 transactions), Other (2,941 transactions), Pacific Islander (5 transactions), and white (4,527 transactions). For analysis, we used three categories, Black, White, and Other Minority. We did not analyze separately for American Indian because, of the 952 transactions, 874 from are from one minority-owned CDFI (91.8 percent of transactions), constituting 100 percent of that CDFI's transactions.

Minority-owned CDFIs constituted 25 percent of the CDFIs in this sample (6 of 24), but they engaged in 37 percent of all transactions. The minority-owned CDFIs had a lower percentage of transactions with black customers than the CDFIs that were not minority-owned, as shown in Table 2. At the same time, minority-owned CDFIs were more than twice as likely to engage in transactions with Other race borrowers, and less than half as likely to engage in transactions with white borrowers. While the missing data and small sample mean that the results are not generalizable, the data do suggest that minority-owned CDFIs in the sample are achieving higher levels of service among minority communities, although not necessarily in black communities.

Table 2 – Number of Transactions by Race of Customer and Ownership of the CDFI

	Race of Customer			
	Black	White	Other Minorities	Total
Minority-owned (6)	1,248	923	2,414	4,585
% of customers who are:	27.2%	20.1%	52.6%	36.6%
Not Minority-owned (18)	2,529	3,604	1,820	7,953
% of customers who are:	31.8%	45.3%	22.9%	63.4%
Total	3,777	4,527	4,234	12,538
% of customers who are:	30.1%	36.1%	33.8%	100.0%

$\chi^2 = 1294, 2df, p < 0.001$, significant at the 0.000 level

Of the 4,234 transactions reported with race of borrower as Other, 2,941 also had the ethnicity of the borrower in the data. Of those 2,941 transactions, 1,999 (68 percent of transactions) were from two CDFIs, and those transactions were also reported as being with a Hispanic customer. It is thus clear that many Hispanic customers identify themselves, or are identified by the CDFI, as “Other” for purposes of reporting race. To the extent that also holds true for the ownership as reported in the ILR, then a CDFI with Hispanic owners would appear in the analysis as a minority-owned CDFI. One of the two CDFIs with the large number of Other and Hispanic transactions was included in the analysis as minority-owned, the other was included as not minority-owned.

Separating the CDFIs in the sample by size, as measured by the average assets over the reporting period, shows some differences between CDFIs in the sample that are larger (assets over \$10 million) and those that are smaller (assets under \$10 million). The larger minority-owned CDFIs had 74 percent of their transactions with minority customers: 32 percent with blacks and 43 percent with Other minorities. The larger CDFIs that were not minority-owned had 52 percent of their transactions with minority customers: 38 percent with blacks and 14 percent with Other

minorities. That means that the larger CDFIs that were not minority-owned were almost twice as likely to have engaged in a transaction with a white as the CDFIs that were minority-owned.

The differences in the racial characteristics of borrowers between the smaller CDFIs that were minority-owned and those that were not are even more pronounced. The smaller minority-owned CDFIs in the sample had 97 percent of their transactions with minorities: 12 percent with blacks and 85 percent with Other minorities. The smaller CDFIs that were not minority-owned had 60 percent of their transactions with minorities: 21 percent with blacks and 40 percent with Other minorities. Smaller CDFIs that were not minority-owned were more than 15 times as likely to have engaged in a transaction with a white as those that were minority-owned.

These results suggest that the smaller minority-owned CDFIs in the sample may be more focused on serving a Hispanic population, while the larger minority-owned CDFIs are more evenly balanced in the minority communities they serve. The CDFIs that were not minority-owned, regardless of size, were much more likely to be doing business with whites than the minority-owned CDFIs. The difference, however, was much more pronounced among the smaller CDFIs because of the extremely small percentage of transactions the minority-owned CDFIs had with whites. The results, however, are not generalizable to all CDFIs because of the data issues discussed earlier.

Separating the CDFIs in the sample by the age of the organization, more than 20 years old versus less than 20 years old, also shows differences between the groups. The older minority-owned

CDFIs in the sample had 87 percent of their transactions with minorities: 32 percent with blacks and 55 percent with Other minorities. The older CDFIs that were not minority-owned had only 22 percent of their transactions with minorities: 3 percent with blacks and 19 percent with Other minorities. The older CDFIs that were not minority-owned were over six times as likely to have engaged in a transaction with a white as those that were minority-owned.

Unlike their older counterparts, the younger CDFIs in the sample, those under 20 years old, showed much less difference between their tendencies to engage in transactions with whites based on the type of ownership. The younger CDFIs that were minority-owned had 75 percent of their transactions with minorities—24 percent with blacks and 51 percent with Other minorities—while the younger CDFIs that were not minority-owned had 72 percent of their transactions with minorities: 47 percent with blacks and 25 percent with Other minorities. The younger CDFIs that were not minority-owned were only 13 percent more likely to engage in a transaction with a white than the smaller minority-owned CDFIs.

The data for the older CDFIs in the sample suggest, at first glance, an historic pattern of segregation, with those controlled by minorities serving minority communities and those controlled by whites serving white communities. That suggestion must be taken with utmost caution, however, for two reasons. First, the very small sample of only two CDFIs that were minority-owned and seven CDFIs that were not minority-owned is clearly insufficient to draw any generalizable conclusion. Second, the pattern does not reveal causation. The ownership of those CDFIs may simply have come to reflect the composition of the community it serves over

time, which would account for the data every bit as much as any suggestion of the ownership targeting services to a specific group that resembles itself.

Amount of Loan

In addition to analyzing the performance of CDFIs based on the number of transactions with minority and non-minority borrowers, we also looked at the value of loans made by the different CDFIs to the different racial and ethnic groups. The results are shown in Table 3.

Table 3 – Mean Amount of Loan by Race of Customer and Ownership of the CDFI

	Race of Customer			
	Black	White	Other Minority	Total
Minority-owned				
Number of loans	1,248	923	2,414	4,585
Mean amount of loan	\$15,491	\$24,062	\$11,770	\$15,257
Not Minority-owned				
Number of loans	2,529	3,604	1,820	7,953
Mean amount of loan	\$23,321	\$45,103	\$29,373	\$34,577

One obvious difference between the minority-owned CDFIs in the sample and the CDFIs that are not minority-owned is in the mean amount of the loans they make. The minority-owned CDFIs lend only 44 percent as much, on average, as the CDFIs that are not minority-owned lend. The minority-owned CDFIs' mean loan to blacks was 66 percent, to whites 53 percent, and to Other minorities 40 percent of the respective mean amounts for the CDFIs that were not minority-owned. This result is not entirely surprising, given that the minority-owned CDFIs are generally smaller than the ones that are not minority-owned. As Table 1 showed, none of the minority-

owned CDFIs has assets of over \$20 million, while over a quarter of the CDFIs that are not minority-owned do. Having more assets may enable those CDFIs to make larger loans.

The data also show that the minority-owned CDFIs made smaller loans to Other minorities than to blacks, while the CDFIs that were not minority-owned made smaller loans to blacks than to Other minorities. This may reflect the very high percentage of loans to Other minorities made by the smaller minority-owned CDFIs, assuming a correlation between the size of the CDFI and the mean amount of the loans it is able to make.

Interestingly, the data show that both groups of CDFIs made substantially larger loans to whites than to either blacks or Other minorities. The mean loan made by a minority-owned CDFI in the sample to blacks was only 66 percent of the mean amount loaned to whites. The mean loan made by a minority-owned CDFI in the sample to Other minorities was only 49 percent of the mean amount loaned to whites. For the CDFIs that were not minority-owned, the corresponding figures were 52 percent for blacks and 65 percent for Other minorities, respectively. These data may be due to differences among the types of customers doing business with the CDFIs in the sample, the types of loans they seek, regional economic conditions, or a number of other factors that can affect the relationship between lenders and borrowers. As with the lending patterns of older CDFIs, the pattern should be viewed with utmost caution because of the small sample size, which means the data from each institution has the potential for undue influence on the single measure of central tendency.

Data Analysis: Loans in Low-Income and Minority Census Tracts

For the institution-level analysis sample of 71 CDFIs with data on the census tract in which the loan was made, minority-owned CDFIs had a lower median percentage of loans in low-income census tracts than CDFIs that were not minority-owned. Minority-owned CDFIs also had a higher median percentage of loans in high-minority tracts, as shown in Table 4. Women-owned CDFIs had a higher median percentage of their loans in all three categories of census tract than did their counterparts that were not owned by women. Depository CDFIs in the dataset have the highest median percentage of loans in both very-low-income and low-income tracts, but not in high-minority tracts. Both the Big and Startup CDFIs had higher median percentages of loans in all categories of target tract than the Moderate Growth and Other age/size types, although the differences were smaller in the high-minority tracts.

Table 4 – Median Percent of Transactions in Tract by Type of Tract by CDFI Characteristics

		Median Percent of Transactions in Tracts that are:		
		Very-low-Income	Low-Income	High-Minority
All		24%	57%	33%
Minority-owned	Yes (30%)	15%	57%	37%
	No (70%)	26%	60%	25%
Women-owned	Yes (28%)	39%	64%	38%
	No (72%)	16%	55%	27%
Type of CDFI	Loan Fund (90%)	18%	57%	33%
	Depository (10%)	73%	90%	23%
Age/Size	Big (32%)	28%	61%	39%
	Moderate Growth (14%)	14%	42%	33%
	Startup (11%)	36%	82%	35%
	Other (42%)	20%	42%	31%

Institution-Level Analysis: Share of Each Institution’s Loans in Target Census Tracts

For the regression analysis of the percentage of each institution’s loans that are in different types of census tracts, the dependant variable is continuous, the percent of transactions in target tracts, and we use ordinary least squares (OLS) regression. For each of the categories shown in Table 4, we then create dummy (indicator) variables, resulting in a dataset composed of 71 observations with six indicator variables as independent variables.

The results of the OLS regression are consistent with the descriptive statistics in Table 4. Table 5 shows the results of the regression. In all three models, the baseline categories for the indicator variables are: not minority-owned, not women-owned, loan fund, and Other size/age. The coefficients, therefore, indicate the increase or decrease in the percentage of an institution’s loans that are in the type of census tract compared with the baseline for that indicator variable, all other conditions being held constant. For example, being women-owned increased the percentage of loans in very-low-income census tracts by 17 percent compared with the percent of such loans made by CDFIs that were not owned by women.

Table 5 – OLS Regression Analysis of CDFI Characteristics and the Percentage of Loans in Target Tracts

	Very-Low-Income		Low-Income		High-Minority	
	Coefficient	P>t	Coefficient	P>t	Coefficient	P>t
Minority-owned	-0.02	0.687	-0.02	0.802	0.15	0.096*
Women-owned	0.17	0.005***	0.13	0.081*	0.03	0.774
Depository	0.35	0.000***	0.20	0.062*	-0.02	0.857
Big	0.08	0.189	0.07	0.354	0.12	0.427
Moderate Growth	0.04	0.656	0.02	0.872	-0.01	0.918
Startup	0.14	0.115	0.19	0.070*	0.11	0.214
Constant	0.16	0.002	0.43	0.000	0.26	0.001
R-square	0.3164		0.1426		0.0662	

Joint Prob>F	0.000***	0.119	0.607
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* significant at the 0.10 level

**significant at the 0.05 level

*** significant at the 0.01 level

Both women-owned and depository institutions had significantly higher percentages of loans in very-low-income census tracts, 17 and 35 percent higher respectively, than the baseline category institutions for those categories, all other conditions being held constant. The joint significance of the overall model was also significant at the 0.01 level. The findings are consistent with the descriptive analysis in Table 4, which showed that the 20 women-owned CDFIs in the sample had a median of 64 percent of their loans in low-income tracts, compared with a median of 55 percent for CDFIs that were not owned by women. The seven depository CDFIs had a median of 90 percent of their loans in low-income tracts, compared with a median of only 57 percent for the 64 loan funds.

Being women-owned, a depository institution, and in the Startup age/size range all significantly increased the percentage of loans in low-income census tracts compared with the baseline categories. However, the significance is only at the 0.1 level, and the overall joint significance (F-test) and low R-square indicate a relatively poor fit for the model.

Only being minority-owned was significant for the percentage of loans in high-minority census tracts, and only at the 0.1 level. The overall joint significance was not statistically significant and the low R-square indicates a poor fit for the model.

Overall, the analysis suggests that women-owned and depository institutions may tend to concentrate their lending in lower-income census tracts, while minority-owned institutions concentrate more in high-minority tracts. The small sample size and very small number of CDFIs in some of the categories, seven depository institutions for example, may contribute to the lack of fit and the apparent high levels of significance for some of the variables.

Transaction-Level Analysis: Likelihood That a Loan Will Be in a Low-Income or Minority Census Tract

We undertook additional analysis at the transaction level to further explore the relationship between CDFI characteristics and lending patterns. For this analysis, we examined the probability that a loan made by CDFIs with different characteristics would be in a specific type of census tract. The dependent variable is dichotomous, whether the loan was in the type of tract or not, and so we used logistic regression. To avoid biasing the results toward institutions with high numbers of transactions, we excluded three outliers, each with more than 4,000 reported transactions.

For independent variables, we used the same attributes of the institution as in the OLS analysis. We added a pair of variables, purpose of loan and year originated, as noted earlier. These additional independent variables in the transaction-level analysis allow us to examine how the different service (loan) types provided by CDFIs vary among very-low income, low-income, and high-minority census tracts.

Table 6 shows the mean probability that transactions by different types of institutions, for different purposes, or originated in different periods, were made in target census tracts, using the same three census tract categories as in the OLS regression analysis.

Table 6 – Mean Probability of Loan Being in a Type of Census Tract by CDFI Characteristic, Loan Purpose, or Date of Origination

		Mean Probability of Transaction in a Census Tract that is:			
		Number of Loans	Very-Low-Income	Low-Income	High-Minority
All		32,905	30%	53%	45%
Minority-owned	Yes (20%)	7,507	32%	51%	73%
	No (80%)	25,352	30%	53%	35%
Women-owned	Yes (27%)	9,321	33%	54%	43%
	No (71%)	23,538	29%	52%	46%
Type of CDFI	Loan Fund (93%)	25,377	21%	47%	45%
	Depository (7%)	7,469	60%	73%	45%
Age/Size	Big (27%)	10,177	26%	50%	53%
	Moderate Growth (12%)	8,693	36%	60%	39%
	Startup (8%)	1,253	39%	62%	47%
	Other (53%)	12,782	29%	50%	42%
Loan Purpose	Business (16%)	5,283	19%	39%	27%
	Housing (44%)	14,528	22%	47%	50%
	Micro-loan (6%)	2,084	16%	41%	37%
	Real Estate (10%)	3,330	38%	69%	52%
	Consumer (19%)	6,165	62%	75%	49%
	Other (5%)	1,515	26%	51%	42%
Date Originated	Before 2000 (14%)	4,479	25%	52%	56%
	2000 – 2002 (31%)	10,422	22%	45%	41%
	After 2002 (55%)	18,004	36%	58%	43%

Table 7 shows the results of the logistic regression analysis for the three different categories of target tract. In all three models, the baseline categories for the indicator variables are: not minority-owned, not women-owned, loan fund, Other size/age, consumer or other loan purpose, and originated between 2000 and 2002.

Table 7 – Logistic Regression Analysis of CDFI and Loan Characteristics and the Probability of Lending in Target Tracts

CDFI/ Loan Purpose/ Date	Type of Tract								
	Very-Low-Income			Low-Income			High-Minority		
	Est.	Odds Ratio	p	Est.	Odds Ratio	p	Est.	Odds Ratio	p
Minority- Controlled	0.07	1.07	0.04**	-0.17	0.85	0.00**	1.73	5.62	0.00***
Women- Controlled	-0.03	0.97	0.35	-0.09	0.91	0.00***	0.43	1.53	0.00***
Depository	1.76	5.82	0.00***	1.08	2.94	0.00***	-0.28	0.76	0.00***
Big	0.50	1.65	0.00***	0.23	1.26	0.00***	0.55	1.73	0.00***
Mod Growth	0.44	1.55	0.00***	0.45	1.57	0.00***	-0.69	0.50	0.00***
Startup	0.67	1.96	0.00***	0.62	1.86	0.00***	-0.36	0.70	0.00***
Business Purpose	-0.20	0.82	0.00***	-0.43	0.65	0.00***	-0.57	0.57	0.00***
Housing Loan	-0.28	0.76	0.00***	-0.27	0.76	0.00***	0.21	1.23	0.00***
Micro Loan	-0.43	0.65	0.00***	-0.44	0.64	0.00***	-0.00	1.00	1.00
Real Estate	0.68	1.97	0.00***	0.76	2.14	0.00***	0.51	1.66	0.00***
1999 & Prior	0.31	1.36	0.00***	0.38	1.46	0.00***	0.36	1.43	0.00***
Made After 2002	0.38	1.46	0.00***	0.34	1.40	0.00***	0.13	1.14	0.00***
Constant	0.06		0.00***	-0.34		0.00***	-0.94		0.00***
Pseudo R- square	0.125			0.071			0.115		
LR Statistic	4958			3155			4321		
df	12			12			12		

* significant at the 0.10 level

**significant at the 0.05 level

*** significant at the 0.01 level

In the first two models, in which target census tract is defined by income, almost all variables were significant, as were the models overall. This, however, is not surprising given the large

number of transactions. The relatively low pseudo R-squares suggest that the models are not a very good fit, although the odds ratios do reveal some suggestive patterns.

Loans for real estate development were more likely than consumer loans in all three types of tracts, while business loans were less likely. Those findings suggest a hierarchy of lending, in which real estate development is most highly ranked, followed by consumer lending, with business loans at the bottom. The reasons for this result may be based in policies promoting real estate development, such as the low-income housing tax credit, or by the dominance of loan funds in the sample, among other possible explanations.

The loans made by the six depository CDFIs in the sample were substantially more likely to be in low or very-low-income census tracts than those made by the loan funds in the sample, but less likely to be in high-minority tracts. A transaction originated by a minority-owned CDFI is slightly less likely to be in a low-income tract, and slightly more likely to be in a very-low-income tract, than a loan by a non-minority-owned CDFI. As expected, loans by minority-owned CDFIs are much more likely to be in a high-minority tract. Taken together, those findings show that there clearly is a difference between high-minority and low-income tracts. While the high odds ratios for depository institutions, compared with loan funds, may be the result of the very small number of depository institutions in the sample, the fact that one group is lending more often in tracts defined by income, while another group is lending more often in tracts defined by race, suggests strongly that the two types of tracts are not congruent.

Overall, the transaction-level analysis suggests that demographic makeup of CDFI leadership is not a reliable predictor of whether an individual transaction in our sample will occur in a lower-income tract, but it is a predictor of whether it will occur in a high-minority tract, and in particular, that transactions originated by minority-controlled CDFIs are substantially more likely to be located in high-minority tracts. This is consistent with the transaction-level analysis of the 24 CDFIs, and suggests that the ownership characteristics of CDFIs may affect how they perform with respect to serving minority communities.

Key Informant Interviews

As noted earlier, we selected the CDFIs for our key informant interviews to try to ensure geographic diversity. One of the CDFIs serves part of a large metropolitan area in the northeast, in a geographic area that is more than 25 percent black. Another is headquartered in a metropolitan area in the mid-Atlantic region, also with a population that is more than 25 percent black. The other two, at which we were able to interview only one key informant each, operate in separate metropolitan areas in the southwest. The first is in an area that is majority Hispanic; the other is in an area that is more than 80 percent Hispanic.

At two of the CDFIs, we interviewed both upper-level managers and front-line personnel, while we were able to interview only upper-level managers at the other two CDFIs. At one CDFI in the northeast, we interviewed the executive director, who had over 15 years of experience with the organization, a program director who started out as a loan processor and remediation specialist, and a loan counselor who had eight years of experience with a private-sector bank

before coming to the CDFI. At the other, headquartered in the mid-Atlantic region, we interviewed the Portfolio Manager, who had been with the CDFI for over five years and in his/her current position for over four years, and a loan officer who had been with the company for about six months. The loan officer did have experience with microfinance overseas before coming to work at the CDFI. Those two CDFIs both marketed to underserved communities within their city and/or metropolitan area. At two other CDFIs, both headquartered in the southwest, we were able to interview only an upper-level manager, in one instance the Executive Director and in the other the Chief Financial Officer. The Executive Director has held that position with her/his organization for over eight years. The Chief Financial Officer has over 10 years of experience in management, business development, and finance. Those organizations both work with underserved communities throughout their region or state. All four are currently minority-owned CDFIs.

Targeting of services based on racial/ethnic identity

While all four CDFIs had a high percentage of transactions with historically underserved minority communities, the key informants did not see the organization's mission as primarily serving a population defined by its racial and/or ethnic identity. The key informant(s) from one of the four sites indicated that the CDFI specifically targeted geographic areas where families with very low incomes reside, based on the extent of need within those areas. Those areas are largely inhabited by people from a historically underserved community, but improving housing conditions for the families, not serving the racial/ethnic group, is the mission of the organization. Another key informant saw the CDFI's mission as helping microentrepreneurs build their businesses, and recognized that, while the demographics of the organization's service area meant

that most of the customers would belong to a specific racial/ethnic group, the actual focus was on economic development in the service area. The key informant(s) from another CDFI said that the organization served a predominantly African immigrant customer base, which accounted for the high percentage of transactions with blacks, but the informant(s) defined the target population as the immigrant community, and the organization was actively soliciting business among a growing Hispanic population in its market. The fourth CDFI had worked with seniors in a geographically defined part of the metropolitan area for many years. When it first began operating, the area was mostly white, but the area had transitioned over time to become predominantly minority, and the customers had changed accordingly.

A common theme in the comments is that the key informants do not see their CDFI's focus as defined by race or ethnic identity. They all operate in communities that have significant needs for their services within a racial/ethnic group, which certainly contributes to the high percentage of transactions with those groups, but their statements suggest that the emphasis is more on the service than on helping a specific racial/ethnic group. The experience of the CDFI working in the transitioning geographic area clearly reflects that emphasis. It defines its target market as seniors living in a certain area. The CDFI defining its target community as immigrants, rather than by racial/ethnic identity, also suggests a different definition of the community the organization serves.

The analysis of the geographic distribution of CDFI loans, that is, the share of its resources that a CDFI deploys in low- to moderate-income (LMI) areas or high-minority areas, suggests that

minority-owned or minority-controlled CDFIs do indeed target their lending by geography, and that they are particularly likely to make loans in areas in which minorities constitute more than half of the population.

Familiarity with and links to the community

Key informants from all four CDFIs felt that their organization's success in providing financial services to its target community was helped by their familiarity with the cultural norms of their community. Key informants with the two CDFIs in the southwest both observed that in order to work with their many Hispanic customers who are recent immigrants, it is essential to understand their perspective and how it differs from that of Americans—including that of their Hispanic customers who have lived in the United States for a longer period of time. The key informant(s) from the CDFI targeting immigrants said much the same thing. The customers are not familiar with the American financial or legal system, and part of the service that the CDFI provides is educating the customer, to explain how banking works in the United States and to make sure that the customer has the financial knowledge to succeed in his or her new environment. The key informants from those three CDFIs also noted that having front-line personnel who come from the community plays an important role in building trust and making the customer comfortable doing business with the CDFI. According to the key informant(s) from the CDFI working with seniors, they also have a different perspective than younger customers, and understanding that difference is an important factor in the organization's success.

The key informants' comments suggest the importance of being familiar with the cultural norms of the community and having at least front-line personnel who share a common background with

the community. Customers seem to be more comfortable doing business with people with whom they share experience, and the CDFIs' approach to marketing its services may resonate more easily with the customers if it is tailored to address the customer's cultural perspective. One key informant suggested that the difference was between being bilingual and bi-cultural. This informant said that in this context being bilingual means being able to converse with CDFI customers in their native language, while being bicultural implies a deeper understanding of the customer's way of thinking.

Discussion and Policy Implications

Limitations in the data make any conclusions of limited generalizability. The quantitative data on the race/ethnicity of borrowers are from a small percentage of reporting CDFIs (24 of 336, representing 7 percent of CDFIs reporting in the ILR system and 16 percent of transactions in the merged ILR/TLR dataset of 96 CDFIs). If the CDFIs included in the sample differ from the ones excluded in any systematic way, the data from the sample may not be representative of the reporting CDFIs or population. Therefore, all conclusions must be read with the understanding that the conclusions apply only to the sample CDFIs.

Overall, minority-owned CDFIs are providing higher levels of service to historically underserved minorities, measured by the percent of transactions. Measured by the mean loan amount, however, the results are less clear, at least as far as the CDFIs in the sample are concerned. The minority-owned CDFIs had an overall mean loan amount that was only 44 percent of the mean loan amount for the CDFIs that were not minority-owned. All of the CDFIs, whether minority-

owned or not, had a higher mean loan amount for their white customers than for either blacks or Other minorities. Thus, while the minority-owned CDFIs in the sample are providing more loans to minorities, the CDFIs in the sample are providing larger loans to whites. That suggests that the ownership may affect performance in the organization's ability to attract and make loans to minorities, but it may not have an impact on the amount of the loan for which the customer is qualified, at least among these CDFIs.

The key informant interviews offer some tentative explanations for the differences, at least those for the percent of transactions. First, none of the key informants suggested that their organization defined its target market based on racial or ethnic group status. In fact, all defined the market with other terms. One served poor households in specific regions, one served seniors in parts of a metropolitan area, one served immigrants, and one served microentrepreneurs in parts of the southwest. They all emphasized the services they offered, not the identity of the group served.

The key informants did suggest that their CDFIs were located in target-rich environments. For example, key informants from the two CDFIs headquartered in the southwest acknowledged that they served an area with significant numbers of Hispanics who could use their services, and the CDFI headquartered in the northeast worked in a largely minority section of the metropolitan area, and so its clients were mostly minorities. To the extent that the location determines the demographics of the market, ownership may be irrelevant. On the other hand, the owners may

select the service area, in which case the choice of location is not independent, and ownership does matter.

One implication seems to be that CDFIs can provide higher levels of service to historically underserved markets by choosing to work target-rich areas, without any specific definition of the market by race or ethnicity. Investors who want to have more of an impact among underserved communities can provide funding to CDFIs working in those environments.

An intriguing result of the analysis of the census tract characteristics of the transactions of minority and non-minority-owned CDFIs is the general observation that factors related to the likelihood of a loan in the sample being in a lower-income tract are often the inverse to those related to the likelihood of a loan being in a high-minority tract. This may suggest that different strategies apply to different markets, and that simply targeting lower-income areas will not necessarily result in lending in high-minority tracts, or vice versa. However our analysis should be taken only as suggestive, and not conclusive.

The key informant interviews also suggest that familiarity with the cultural norms of potential customers is an important component of success. The informants noted that familiarity breeds a higher level of comfort among potential customers, allows the marketing approach to resonate with the customer, and creates a level of trust that might not otherwise exist.

Another implication is that CDFIs that want to reach underserved markets may want to find staff who are from those markets, or who are very familiar with the specific culture of the community the CDFI is trying to serve. A CDFI may, for example, hire and train members of the community to provide financial services through the CDFI, or it could fund a center that would provide the training in the schools or other facilities.

As for the differences in the mean loan amounts, the data do not support any definitive explanation. Minority-owned CDFIs appear to be lending more in high-minority areas, but not in low-income areas. It may be that the minority-owned CDFIs in the sample are smaller, and therefore less likely to make large loans for major development. On the other hand, mainstream financial institutions may be skimming the relatively higher-income minorities in lower-income tracts, but not whites, leaving the CDFIs to serve the lower-income minorities and all of the whites, who would have higher average incomes than the remaining minorities.

We have explored different ways to use the data to examine the policy question: If we want to maximize the *share* of capital that goes to target communities or borrowers, what are the best channels for doing so? But because of missing data, super-simplified analysis, and the fact that our dataset does not represent the CDFI population as a whole, our analyses will not support any generalizable conclusions about the industry. As mentioned repeatedly, the datasets are incomplete and not representative. Even the larger dataset used for the analysis of the census-tract characteristics of CDFI transactions accounted for less than 70 percent of the ILR reporting institutions, who in turn represent just a fraction of all certified CDFIs.

Instead, this paper undertakes to demonstrate how loan-level transaction data could be used to evaluate and perhaps improve industry performance. As such, it raises more questions for additional research than it answers, and we outline a few of these below.

In our analysis, we define “performance” in terms of the minority and income profile of the populations and communities served, *as a share of the number of transactions*. This variable might be of interest to a funder as an indicator of the through-put of capital to high-need communities and borrowers. That does not approach the issue of whether *share of transactions* versus *total amount of capital* is paramount. Some CDFIs with a very high share of transactions in target tracts or to target borrowers may be quite small; a larger CDFI might provide substantially more capital to the same target market, even though its own resources are less concentrated there. For example, removing the three largest CDFI’s for our transaction-level analysis hardly changes the percentage of loans going to target areas, but removes about a third of the number of transactions made in them.

Moreover, there are a number of factors we did not incorporate into our models. One unobserved variable that would be important to research further relates to the location of the CDFI. How does CDFI location(s) effect the provision of financing to particular types of borrowers or communities?

With more-comprehensive data, research could be undertaken to better understand the interplay between the levels of service to target communities and the levels of service to disadvantaged individuals and households. For example, do CDFIs active in high-minority areas target higher-income customers? It would be of particular interest to test whether being active in low-income communities leads to more loans to minority households.

It would also be useful to better understand the relationship between scale, sustainability, and share of financing to distressed markets, and where the tensions or complements lie. Ratliff and Moy (2004) suggest that CDFIs' localized and "customized approach has served the institutions and the customer base well, [but] it has also inhibited growth" (p. 3). Do CDFIs who deliver a higher share of their resources to undercapitalized communities or underserved borrower types have an easier or harder time raising capital? Does higher exposure to underserved markets impair ability to reach scale? Is there an effect on profitability, either a negative one (due perhaps to potential to cross-subsidize or to higher service delivery costs) or a positive one (based on reduced competition within these markets)? And, what is the relationship between CDFI-control demographics and these scale and sustainability factors?

It is essential to study the performance and welfare impacts of CDFIs with respect to distressed communities and underserved borrowers. The CIIS dataset could have provided a unique vehicle to do so, but, unfortunately, much of the necessary data was missing. Our analysis is a first step in exploring the potential of a more complete CIIS dataset to understand and ultimately improve industry performance. It also suggests several additional areas for further research. We

encourage the CDFI Fund to continue to invest in development and analysis of comprehensive industry data.

Conclusion

While the findings are of limited generalizability, they do suggest that there are benefits to minority ownership of CDFIs. Even though minority-owned CDFIs may not be lending as much, on average, to minority borrowers as CDFIs that are not minority-owned, they do seem to have significantly more transactions, suggesting that they are more active in minority communities. On the other hand, further research is also needed to examine whether white borrowers are, in fact, receiving loans with a higher mean value than their non-white counterparts, and, if so, why.

The key informant interviews suggest ways that CDFIs can be more effective in reaching minority communities and improve their level of services in historically underserved markets, moving toward the bi-cultural approach. The quantitative data also show that “minority” is much more than a dichotomous category. Clearly, better, more-complete, and more-detailed data are needed to determine whether the character of the ownership of a CDFI determines how well it can serve a given community.

While we have concerns over data quality and lack of representativeness, our objective is to demonstrate a basic approach to using CIIS data to better understand the CDFI industry, rather than to draw definitive conclusions from this exercise. We urge continued development of data

so that such analyses can be refined. We hope this analysis can demonstrate the potential power of the CIIS dataset to address important questions that have been raised.

References

- Barr, Michael. 2005. Credit where it counts: The Community Reinvestment Act and its critics. *New York University Law Review* 80:513-652.
- Bershadker, Andrew, Michael Bzdil, James Greer and Supapol Siris. 2007. Three Year Trend Analysis of Community Investment Impact System Institutional Level Report Data, FY 2003-2005. Community Development Financial Institutions Fund. December 2007.
- Bates, T. 2000. Financing the development of urban minority communities: Lessons of history, *Economic Development Quarterly* 14(3):227-241.
- Benjamin, L., J. S. Rubin, and S. Zielenbach. 2004. Community development financial institutions: Current issues and future prospects, *Journal of Urban Affairs* 26(2):177-195.
- Caskey, John P., and Robinson Hollister. 2001. *Business development financial institutions: Theory, practice, and impact*. Institute for Research on Poverty, Discussion Paper 1240-01.
- CDFI Data Project. 2003. *Providing capital, building communities, creating impact*. Washington, DC:Author.
- . 2004. *Providing capital, building communities, creating impact*. Washington, DC:Author.
- . 2005. *Providing capital, building communities, creating impact*. Washington, DC:Author.
- CDFI Fund Website. 2008. http://www.cdfifund.gov/who_we_are/about_us.asp. Accessed July 30, 2008.
- Dale, A. 2007. Small firms use credit cards for capital; People denied loans charge expenses like heat and taxes, *Wall Street Journal*. July 24, 2007. p. B4.
- Dickstein, Carla. 2006. *Measuring impact in practice: Reflections and recommendations from Coastal Enterprises, Inc.'s experience*. Wiscasset, ME: Coastal Enterprises, Inc.
- Fabiani, D. and J. Greer. 2007. Growth, diversity, impact: A snapshot of CDFIs in FY 2003. Washington, DC: Community Development Financial Institutions Fund, U.S. Department of the Treasury.
- Financial Literacy and Education Commission. 2006. *Taking ownership of the future: The national strategy for financial literacy*. Washington, DC:Author.
- Greer, James. 2006. The benefits of a maturing CDFI industry. Available at <http://www.cdfifund.gov/news/2006/maturingCDFIbenefits.pdf>. Accessed July 23, 2008.

Immergluck, D. 2006. What might we know? Research design issues for measuring CDFI subsector impacts. Draft working paper dated March 6, 2006 presented at convening at the MacArthur Foundation.

Isbister, J. 1994. *Thin cats: The community development credit union movement in the United States*. Davis, CA: Center for Cooperatives, University of California.

Karger, H. 2005. *Shortchanged: Life and debt in the fringe economy*. San Francisco, CA: Berrett-Koehler Publishers, Inc.

Pinsky, M. 2001. Taking stock: CDFIs look ahead after 25 years of community development finance. A *Capital Xchange* Journal Article prepared for The Brookings Institution and Harvard University, available at http://www.brookings.edu/articles/2001/12metropolitanpolicy_pinsky.aspx. Accessed on February 21, 2008.

Ratliff, Gregory A. and Kirsten S. Moy, 2004. New Pathways to Scale for Community Development Finance. Gregory A. Ratliff and Kirsten S. Moy. <http://www.nw.org/Network/training/documents/NewPathwaystoScale.pdf>

Robb, A. M., and R. W. Fairlie, 2006. Tracing access to financial capital among African-Americans from the entrepreneurial venture to the established business. Conference Proceedings, Research Conference on Entrepreneurship Among Minorities and Women. June 19-20, 2006, Kenan Flagler Business School, University of North Carolina at Chapel Hill.

Rubin, J. S. 2001. Community development venture capital: A double-bottom line approach to poverty alleviation, a paper presented at Changing Financial Markets and Community Development: A Federal Reserve System Community Affairs Research Conference, Federal Reserve System, Washington, D.C. April 5–6.

———. 2006. What do we know? Research on outcomes and impacts in the CDFI field. Working Paper presented at convening at the MacArthur Foundation. March 14, 2006.

Schloemer, E., W. Li. K. Ernst, and K. Keest. 2006. *Losing ground: Foreclosures in the subprime market and their cost to homeowners*. Durham, NC: Center for Responsible Lending.

Stegman, M. A., and R. Faris. 2001. *Welfare, work, and banking: The North Carolina financial services survey*. Chapel Hill, NC: Center for Community Capitalism.