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Performance and Governance of Community Development Financial Institutions

**Valentina Hartarska
Department of Agricultural Economics and Rural Sociology,
Auburn University
Hartarska@auburn.edu**

*Selected Paper prepared for presentation at the American Agricultural Economics Association
Annual Meeting, Providence, Rhode Island, July 24-27, 2005*

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ABSTRACT

This paper investigates the influence of board size and board diversity on the performance of Community Development Financial Institutions' operating in the Southeast. The results indicate that at present many CDFI boards are larger than optimal. The results also show that CDFIs generally have well diversified boards and that these organizations' performance is unlikely to improve by further diversifying their boards. However, CDFIs performance may be improved by promoting smaller boards.

PERFORMANCE AND GOVERNANCE OF COMMUNITY DEVELOPMENT FINANCIAL

INSTITUTIONS:

BOARD SIZE AND DIVERSITY AS GOVERNANCE MECHANISMS

INTRODUCTION

Policies directed toward improving access to financial services by low-income people are more important than previously thought. Recent studies find that this segment of the population benefits the most from development of financial institutions (Beck, Demirguc-Kunt and Levine, 2004). Nationwide, however, low-income individuals and communities find it increasingly challenging to access financial services offered by conventional financial institutions, as these institutions streamline their operations to become more competitive in the global environment. Non-traditional financial institutions, such as Community Development Financial Institutions (CDFIs), improve low-income individuals' access to finance by providing affordable banking services and low-cost housing, by financing small businesses, and by offering community services that help stabilize neighborhoods and alleviate poverty.

More than 1000 such organizations are currently active in the US and a survey of 442 of them shows that in 2002 these organizations held \$10.2 billion in assets, provided \$2.6 billion in financing to underserved individuals and communities, extended loans to over 7,800 businesses, and helped create and support over 34,000 jobs (2002 Industry Report available at www.cdfi.org). These numbers, although still very small, show that CDFIs expand the frontier of finance and offer services to the estimated 10 percent of the US households who do not even have a bank account (Quercia et al., 2002).

While it is undoubtedly important to encourage lending to underserved individuals and communities, it is also important to understand what makes a well run CDFI. Policymakers will benefit from understanding what types of CDFIs are most likely to reach the largest number of clients in a profitable manner and what governance structures are most conducive to efficient use of scarce financial resources. Given that CDFIs measure returns in both financial and social terms, board members' ability to steer the organization toward achieving the double bottom line of outreach and profitability will likely impact the success of the CDFI because the board plays a significant role in organizations with dual objectives (Holmstrom, 1999).

This paper evaluates the influence of board size (measured by the number of board members) and board diversity (measured the proportion of women and minorities on the board) on the financial performance of Community Development Financial Institutions serving low-income individuals in the Southeast. The impact of board size and diversity on CDFI performance is estimated using an empirical model where performance (measured by return-on-assets or ROA) is modeled as a function of board size and diversity as well as key CDFI characteristics including size, age, and risk characteristics. The results indicate that the size of many CDFI boards is larger than

optimal and that there are some efficiency gains from decrease in board size. The results also indicate that CDFIs have well diversified boards and that these organizations' performance is not affected by board diversity.

The paper is organized as follows: part two present the framework of analysis, part three presents the data and the empirical analysis and part four offers concluding remarks.

FRAMEWORK FOR ANALYSIS

The concept of community development dates back to the 1800s, but the modern CDFI industry started to take shape in late 1960s and early 1970s. In the 1990s, the industry expanded dramatically with the creation of a government agency (CDFI Fund) with the authority to provide funding to individual CDFIs and their partners, and with the change in the Community Reinvestment Act (CRA) that explicitly recognized loans and investments in CDFIs as a qualified CRA activity. Although the growing record of success inspires confidence in the industry and attracts additional lenders, little is known about these organizations' performance and governance. Governance matters because bad governance practices weaken the organization, erode the value of loan portfolio and leave fewer funds available to lend to the poor.

Governance refers to the mechanisms through which investors and other providers of funds ensure themselves that their funds will be used according to the intended purposes. [2] Such control mechanisms are necessary because managers and providers of funds may have diverging preferences and objectives. For example, CDFI managers may work towards fulfilling the outreach mission but they may also have preferences for non-pecuniary rewards. In the corporate governance literature, this problem is known as the agency problem. Agency costs, or costs incurred to align the interests of owners (principals) and managers (agents), exist and are not sub-optimal because it is not possible to have a world without the separation of ownership and control (Jensen and Meckling, 1976). Effective governance structure is needed to compensate for potential adverse results of asymmetric information between owners and CDFI managers. One such mechanism is the board of directors Fama and Jensen (1983a and b).

Managers in CDFIs must consider the welfare of clients as well as the financial success of the institution, which means that managers need to perform several tasks. In multitask environments explicit and implicit incentive schemes such as compensation, perks etc., become less powerful, and less able to motivate managers. (Dewatripont *et al.* 1999a and 1999b). Multiple tasks in organizations lead to a costly lack of focus and to "fuzzy missions". Thus, standard mechanisms of control such as the labor market for managers and the market for takeovers are less efficient and the board of directors becomes the most important governance mechanism. Therefore, understanding what types of boards serve as the best mechanisms of control becomes even more important.

The board of directors is an efficient mechanism of control and board member incentives are aligned with that of owners of capital because of the legal provision that the board can be held legally responsible for failing to perform effective monitoring. In addition board members offer their reputations as collateral to the public and will try to minimize their own risk of losing their reputations (Handy, 1995). Finally, peer policing decreases the incidence of inappropriate behavior (Fama and Jensen, 1983a).

A significant part of the empirical literature has focused on the impact of board size on organizational performance. The main idea put forward is that larger boards are less effective than

smaller boards because when the board gets too big, free riding by some directors may become an issue (Jensen, 1993; Lipton and Lorch, 1992). This hypothesis is confirmed by studies of both large corporate boards and boards of small firms (Yermack, 1996; Eisenber, Sungren and Wells, 1998). Compared to other organizations, financial intermediaries have larger boards but still the impact of board size on financial intermediaries' performance is the same—larger boards are less effective monitors (Adams and Mehran, 2003).

Oster and Reagan (2004) studied the impact of board size in non-profit firms and put forward the hypothesis that in these organizations board size may need to be larger because of the additional duties of board members to supervise fundraising. However, these authors did not find evidence to support this hypothesis. On the contrary, they found that only personal charitable giving by board members increases with board size but an increase in board size reduces oversight and thus does not improve the productivity of the newly committed resources.

Board diversity is another issue that has attracted attention. Traditionally, women and minorities have been underrepresented on corporate boards, especially in banking. Numerous proposals to improve board diversity have emerged. Two different reasons for improving board diversity are given. The first reason is the equity consideration—diversity should be promoted because it is fair to do so. The second reason given for promoting board diversity is that it may help shareholder wealth maximization (Brancato and Patterson, 1999).

The second hypothesis, that board diversity improves firm performance and shareholder wealth, has empirical support (Westphal and Milton, 2000). Moreover, Carter, Simkins and Simpson (2003), exploring the performance of Fortune 100 companies, also found significant positive relationships between the fraction of women and minorities on the board and firm value. In addition, they found that the proportion of women and minorities on boards increases with firm size.

For the case of non-profits, evidence shows that women directors spend more time on monitoring activities. However, since non-profit boards are very diverse better performing organizations do not have proportionally more women and minorities on the boards (Oster and O'Reagan, 2003). Exploring the impact of board size and composition in financial intermediaries is especially important because of the relatively limited research in this area (Macey and O'Hara, 2003)

Many authors have raised the issue of possible endogeneity problems in the impact of board size and composition (Hermalin and Weisbach, 2003). Empirical results have been mixed, with some indicating the presence of endogeneity and others its absence (Belkhir, 2004; Beiner, Drobetz Schmid and Ziommermann, 2004). Given that more of the CDFIs in the sample are relatively new, and thus still searching for the optimal board size, it is unlikely that endogenous bias will be substantial.

EMPIRICAL SPECIFICATIONS AND DATA

The empirical analysis tests two hypothesis: (1) board size negatively affects CDFI performance and (2) board diversity positively impacts CDFI performance. The empirical model estimated is

$$\text{Performance}_i = \alpha_1 + \beta_1 \text{Board Size}_i + \beta_2 \text{Percentage of Women Directors}_i +$$

$$+ \beta_3 \text{Percentage of Minority Directors}_i + \sum_{j=1}^m \beta_j \text{Controls}_{ij} + \varepsilon_i \quad (1)$$

where performance is measured by return on assets (ROA), the vector of controls includes capital structure (Equity to Total Assets Ratio), risk (Liability to Total Equity Ratio), CDFI age, CDFI size and organizational type and ε_i is an error term. Performance is measured only in terms of financial results. Tirole (1999) reviews competing theories on whether measuring performance in more than one dimension (say profitability and outreach) is reasonable and concludes focus on profit maximization is still justified. This is consistent with theories on multiple tasks that suggest that performance should be measured in terms of best observed signal if the two tasks that managers are required to do are complementary. No difference is expected between different organizational types, and non-profits are increasingly operating like for-profit businesses (*The Economist*, January 29, 2000).

The data come from a survey conducted in 2002 by the CDFI Data Project and include all CDFIs operating in the Southeast Census region. A total of 71 organizations provided data on performance, capital structure, organizational type, risk, and board size but of them, only 57 provided information on the percentage of women and minorities on the board. Equation (1) is first estimated using the smaller sample of 57 CDFIs. The sample of 71 CDFIs is also used to estimate a specification with the variables measuring board diversity (percentage of women directors and percentage of minority directors) excluded in order to establish whether the result on the impact of board size on CDFI performance can be successfully replicated with this sample.

Summary statistics of the relevant variables are presented in Table 1. There is significant variation in all variables. For example, the average ROA for the sample is 3.77 percent but it varies from losses of 22.05 percent to gains of as much as 66.56 percent. CDFI size, measured in total assets, varies from \$165,000 to \$1 billion with a mean of \$35.1 million and a standard deviation of \$145 million. The average age of a CDFI is 25 years with a standard deviation of 23 years. CDFIs are well capitalized although not as well as other financial institutions. The mean of the equity-to-total assets ratio is 24 percent and the standard deviation is quite large (29). This compares to the average financial intermediary capitalization in the range of 12 percent for banks. The measure of risk (liability-to-equity ratio) has a mean of 6.75 and a standard deviation of 6.31.

Most of the CDFIs in the sample operate as cooperatives and this is specific for the Southeast because most of the CDFIs outside the region operate as non-profit entities. In the Southeast, 39 percent operate as non-profit units, while only 7 percent are for-profit firms, and the remaining 54 percent are cooperatives.

In the sample, the smallest board consists of 4 members and the largest of 49. The average board size is 11 members with standard deviation of 7. Unlike in other financial intermediaries, there is significant board diversity among board members. The average board has more than 50 percent women (57.21) and more than two-thirds minorities (68.93). Only two organizations reported no women on the board and only 3 reported no minorities.

RESULTS

The results of the estimation are presented in Table 2. The results indicate that board size influences performance while board diversity does not. Consistent with previous findings, larger boards are associated with worse financial results, thus indicating the presence of some free riding

problem. This result is statistically significant at the 1 percent level. CDFIs' performance can be improved by cutting the number of board members. *Ceteris paribus*, trimming the board size by one member is associated with an increase in ROA of .60 to .80 percentage points.

Unlike previous studies that find some evidence for the impact of board diversity on firm performance, the results of this analysis indicate that diversity does not influence ROA. This result is not surprising because the CDFI boards are already well diversified given the significant presence of women and minorities on the boards. This larger representation of women and minorities is not associated with positive or negative impact, consistent with the study of Oster and Reagan (2004). Thus results suggest that, after a certain threshold of board diversity, a further increase in usually underrepresented groups does not have a significant impact. However, other characteristics, such as stakes in the organization or professional qualifications, may matter more.

Estimation results reveal that the level of capitalization of CDFIs does not seem to influence performance. These findings illustrate that non-typical financial institutions can do as good a job in profitably serving the poor as highly leveraged financial intermediaries. The results also show that CDFIs who undertake higher risks as measured by the liability-to-equity ratio have worse performance.

Surprisingly, the results show that older CDFIs have lower ROA. There seem to be no gains from experience in working with the poor, which may suggest that new lending technologies, which newer CDFIs presumably apply, are more profitable. In addition there seem to be no gains from firm size. On the contrary, smaller CDFIs do much better than larger CDFIs. These results may suggest that the smaller and newer firms are more suitable for addressing the need of the target population.

The coefficients of organizational type dummies are not statistically significant in the ROA regression. Although it may be natural to expect that, due to regulatory and other constraints, boards in cooperatives may function differently than those in for-profits and/or non-profit organizational types, such an impact was not discovered.

To draw conclusions about whether the coefficients estimated over one group of the data are equal to the coefficients estimated over another, a Chow test can be performed. If it indicates that the coefficient of the organizational type dummies (non-profit and cooperatives) and those of the interactive dummies (consisting of organizational type dummy multiplied by the board size) are not statistically different from zero, then the two groups should not be pooled together and the specification of the estimated model will be invalid. A Chow test revealed, however, that there is no difference in the influence of board size on ROA for different organizational types.

CONCLUSIONS

CDFIs serve an important social function because they provide access to financial services to underserved low-income individual and families. Understanding what governance mechanisms promote the efficient use of scarce resources that these organizations possess matters because only sustainable institutions have the potential to change low-income individuals' lives in the long-term. The focus of this paper was on evaluating the impact of board size and composition on the performance of CDFIs operating in the South. The results show that CDFIs have well diversified boards and these organizations' performance is unlikely to improve by further diversifying their boards. However, CDFIs performance may be improved by promoting smaller boards.

Table 1: Summary Statistics of the Key Variables

Variable	Mean	Std.	Min	Max
Return on Assets (%)	3.77	12.14	-22.05	66.56
Board size (number of members)	11	7	4	49
CDFI age (years)	25	23	1	119
CDFI size (total assets in \$'000)	35,100	145,000	165	1,070,000
Log of total assets	15.1	1.9	12.0	20.8
Equity to Total Assets Ratio (%)	24	29	-84	100
Liability to Total Equity Ratio	6.75	6.31	-1.49	27.06
Dummy variable for non-profit CDFI	0.39	0.49	0	1
Dummy variable for cooperative CDFI	0.54	0.50	0	1
Percent female board members	57.21	19.28	10	98
Percent minority board members	68.93	29.90	0	100

Table 2: Impact of Board Size and Board Diversity on ROA

	ROA ¹	ROA ²
Constant	36.273 (1.58)	29.052* (1.88)
Board size	-0.795*** (4.54)	-0.604** (2.28)
Percent female board members	-0.062 (0.73)	
Percent minority board members	-0.053 (0.99)	
CDFI age	-0.483** (2.42)	-0.430** (2.49)
CDFI age squared	0.005** (2.50)	0.005** (2.56)
CDFI size(log of total assets)	-1.276 (1.28)	-1.561* (1.87)
Equity to Total Assets Ratio	0.020 (0.31)	0.067 (0.88)
Liability to Total Equity Ratio	-0.363** (2.20)	-0.341** (2.65)
Non-profit CDFI	13.293 (1.66)	13.921 (1.59)
Cooperative CDFI	9.249 (1.07)	8.886 (0.99)
Observations	57	71
R-squared	0.48	0.40
Prob>F	0.0001	0.01

Absolute value of t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

The dependent variable is Return on Assets (ROA)

¹ Estimates of equation (1) using a sample of 57 observation containing a complete set of variables.

² Estimates of equation (1) using a sample of 71 observations without board diversity variables

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ENDNOTES

[1] The data for this study come from The CDFI Data Project Dataset (© 2004 CDFI Data Project) The author would like to thank Ms. Beth Lipson for her helpful comments on the data and the industry.

[2] This definition is based on the definition by Shleifer and Vishny (1997) where corporate governance is defined as the mechanism through which shareholders (providers of funds) ensure themselves that they will receive maximum return on their investments

Valentina Hartarska is an Assistant Professor in the Department of Agricultural Economics and Rural Sociology, Auburn University, 210 Comer Hall, Auburn, Al 36849, phone 334 844 5666, fax 334 844 5639, e-mail: hartarska@auburn.edu .