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Governance and Performance of Microfinance Institutions in Central and Eastern Europe and the Newly Independent States

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Valentina Hartarska

Microfinance is the provision of loans and other financial services to the poor. The *microfinance institution* (MFI) has evolved as a result of the efforts of committed individuals and assistance agencies to reduce rural poverty by promoting self-employment and entrepreneurship. The MFI has two goals—provide financial services to the poor (*outreach*) and cover its costs (*sustainability*). Achieving these two goals is challenging and that is why it is important to study what mechanisms of control promote better performance.

Microfinance is a significant and growing industry, yet there are no studies that explore the link between governance and performance. Data on the performance of MFIs are hard to obtain and governance practices are not transparent. Understanding what governance mechanisms work is important because MFI managers control significant resources. In Central and Eastern Europe and the Newly Independent States (CEE & NIS) the asset base of these organizations is estimated to be 1.2 billion dollars (Foster, Green, and Pytkowska, 2003). This paper uses unique data from recently conducted surveys in the region to study the relationship between governance and MFI performance, and to quantify its effect.

Theoretical Considerations and Empirical Specifications

Governance in microfinance refers to the mechanisms which ensure donors and equity investors, that their funds will be used according to the intended purposes.¹ Such control mechanisms are necessary because the goals of managers may differ from the goals of providers of funds. For example, MFI managers may work for fulfilling the mission of the MFI but they may also have preferences for non-pecuniary rewards or less work. In the corporate governance literature, this problem is known as the agency problem. The manager, who does not own the resources of the firm called an agent for the provider of finance, who is called principal. The costs associated with the agency problem are called agency costs.

The key mechanisms of an effective governance framework are ownership (including institutional and managerial ownership), board and board structure, CEO (manager) and director (board member) remuneration, auditing and information and the market for corporate control (Keysey, Thompson & Write, 1997). This paper explores all mechanism besides ownership as the database used does not contains data on ownership.

MFIs have some unique characteristics that complicate the study of their governance. The need to reach as many poor clients as possible in order to fulfill the outreach mission as well as the fact that many MFIs are organized as NGOs makes them similar to non-profit organizations. Many MFIs are regulated or supervised by a regulatory body, and many MFI collect deposits which makes them similar to banks. That is why this paper uses insights from the corporate

¹ This definition is based on Shleifer and Vishny (1997) definition of corporate governance as the mechanism through which shareholders (providers of funds) ensure themselves that they will receive maximum return on their investments.

governance literature as well as from the literature on governance in banks and in non-profit organization.

External Markets

The manager of a corporation is disciplined by market forces, through the labor market for managers and through the market for takeovers. These market forces have a limited role in microfinance as the market for MFI managers is thin and most MFIs do not have true owners. As the microfinance industry grows and matures, however, other market forces have started to play important role in promoting manager accountability.

Competition for donations and customers, as well as the presence of for-profit firms affects the behavior of non-profit firms and that of MFIs. As they strive for survival, these firms may change ideological perspective and mission if this would bring more donor money (Rose-Akerman, 1986). Indeed, until recently information on the performance of individual MFIs was scant. With the increase in competition for donor funds and for clients, MFIs and their managers are becoming more transparent. Many MFIs are hiring external auditors to certify their financial statements. Moreover, the competition for donors has contributed to the appearance of MFI rating agencies which serve as another external mechanism of control.²

MFIs that provide deposit services, as well as some credit only MFIs are regulated and/or supervised by a government agency. Deposit taking institutions have additional stakeholders (a group of people with similar interest in the organization). First, depositors become the principal as they own the resources used by the MFI. Second, if deposits are insured by the government then taxpayers have a stake in the organizations. From efficient governance standpoint, Dewatripont and Tirole (1993) show that depositors should act as bad times principals, while equity holders should act as good time principals but since depositors are dispersed, an external agency should be involved when (ex-post) efficiency requires interventions. That is, for organizations which collect deposits, regulation is an efficient control mechanism. Regulation, would, however, affect MFI governance by shifting the emphasis away from both outreach and from return because it would promote less risky behavior by the Manager.

The role of these external mechanisms of control is evaluated with the following empirical model:

$$Performance_{i,t} = \alpha_1 + \beta_1 Regulated_{i,t} + \beta_2 Rated_{i,t-1} + \beta_3 Controls_{i,t} + \sum_{j=1}^m \beta_j Controls_{i,t,j} + \varepsilon_{i,t} \quad (1)$$

where *Performance* is measured by outreach and profitability indicators, *Regulated* is a dummy for supervision/regulation by a government agency, *Rated* is a variable that indicates whether the MFI was rated in the preceding period. This specification avoids the endogeneity problem, which is the problem that arises if the manager request rating in the year when he/she observes good

² In the law literature, Manne 1999 proposes similar solution for NGOs governance, namely that an external, for-profit company (which is disciplined by market forces) serve as a monitoring mechanism. NGOs will contract with it to be monitored in terms of charitable and financial aspects of the operations. However, these private organizations according to Manne should not be raters, rather they should have the right to sue NGOs to rectify violations.

performance. Better performance in the following year following does not suffer from endogeneity bias, and would indicate that the rating agency has identified weak points that were consequently addressed by the manager, while worse performance would indicate that these problems were not addresses. Lack of statistical significance would indicate that rating is not an effective governance mechanism. *Controls* is a vector that includes *MFI Age* and *MFI Age Squared* to account for possible non-linear relationship between MFI age and MFI performance, *Log(Total Assets)* to account for MFI size, and *Audit* to control for the quality of the financial statement. The last element $\varepsilon_{i,t}$ is an error term.

Managerial Compensation as an Incentive Aligning Mechanisms

According to the agency literature, compensation that includes both performance based element and a fixed element is the best mechanism to align the interests of managers with that equity holders and donors. Indeed, performance related bonuses are used in the microfinance industry.³ The empirical literature on corporations confirms the positive pay performance link, but the sensitivity is relatively small; in the widely quoted study Jensen and Murphy (1990) show that for large corporations, pay-performance sensitivity is only \$3.25 for \$1,000 increase in shareholder value. Recent papers show that this sensitivity has been increasing (Murphy, 1999)

Banks are regulated industries and regulation may substitute or complement incentive features in managerial contract. High powered incentives may align too much the interest of the managers with that of equity holders and induce managers to take higher risk at the expense of depositors, who may suffer if the MFI fails. For the US bank industries, John, Saunders and Senbet (2000) have argued that regulation that takes into account the top management salary may be more effective than capital regulation in ameliorating risk-shifting incentives. In banks, the higher leverage (use of deposits) requires that the manager's interest are not aligned with the interest of equity holders, thus low pay-performance sensitivity is recommended (John & John 1993). Indeed, pay-performance sensitivity in banking has been smaller than that in other industries (Houston and James, 1995; John and Qian, 2003; Adams and Mehran, 2003).

In non-profits, many forms of incentive pay are illegal. In fact, it has been shown that the asymmetric information between clients and managers (that is, managers know more about the product than clients) makes fixed salaries the better choice for non-profit managers (Easley and O'Hara, 1986). Specifically, since managers get fixed salaries, they are indifferent between telling the truth and lying and will tell the truth. Clients and donors will find the information provided by non-profit managers more credible and this will lead to better funded and better performing firms.

Instead of offering performance based compensation as the agency theory would suggest, non-profits boards may be able to recruit managers by offering compensation packages combining lower wages with some perquisites so that only individuals committed to the mission will self-select to take (Handy and Katz, 1998). Additionally, the appeal of a position of power in non-profit firms may be sufficient to attract good managers (James, 1983). It has been shown that if wages paid to NGO managers are similar to that paid to for-profit manager, and if the NGO technology is superior to that of the for-profit firm, the NGOs will dominate the industry (Scott and Hopkins, 1999)⁴

³ Martin Holtmann has showed this for the case of loan officers, who could be viewed as agents of the managers.

⁴ Donors fund both for-profit and non-profit MFIs and this paper models exactly a situation where donors fund both NGOs and for-profit in the first period and only the efficient organizations in the second period. As the industry

To evaluate the role of the managerial compensation on MFI performance the following empirical model is used:

$$Performance_{i,t} = \alpha_1 + \beta_1 Fixed\ Wage_{i,t} + \beta_2 Higher\ Wage_{i,t} + \beta_3 Regulated_{i,t} + \sum_{j=1}^m \beta_j Controls_{i,t,j} + \varepsilon_{i,t} \quad (2)$$

where, *Performance* are indicators for outreach and financial results, *Fixed Wages* is a dummy for fixed pay, that is a wage not based on performance, *Regulated* is a dummy for regulated MFIs and *Controls* is a vector of controls for MFI size, age, manager's experience and quality of the financial statements.

The MFI board

Boards are very important in microfinance because of the relative limited role of external market forces. The board of directors is an internal governance mechanism that helps resolve the agency problems between owners and managers. Board members are elected by shareholders to monitor and advice managers on behalf of owners. The degree of alignment of board composition and shareholders' objectives is measured in the empirical corporate governance literature by the proportion of outside/independent directors. More independent directors (non-employees, not related to the company) are expected to act as better monitors and advisors. Empirical studies have found both positive and negative relationship between the proportion of outside directors and firm value (review of the literature in Hermalin and Weisbach, 2003).

In the boardroom, the major conflict is between the manager, who has incentives to capture the board and thus ensure his job and non-pecuniary benefits, and the directors (board members) who have incentives to maintain their independence to monitor and, if necessary, replace the manager. Directors are paid, and the market for their services should ensure diligent monitoring (Fama and Jensen, 1983) although corporate directors may also have considerable incentives to slack off or get along with managers (Holmstrom, 1999).

In non-profit organization, the absence of residual claimants (owners of capital) avoids the donor-residual claimant agency problems (Fama and Jensen (1983a).⁵ Internal agents (managers and employees) will still desire to expropriate donations but the non-profit board allows for separation of management from control. Although board members of non-profit firms are rarely paid, they do provide continuous personal time and/or wealth, and would want to do a good job. Board members not interested in the mission leave and substitution is done by the board itself based on mutually agreed upon criteria (Fama and Jensen, 1983b). Indeed, empirical evidence shows that board tenure is important in non-profits and members with longer years on the board perform their monitoring function better (Oster and O'Reagan, 2003).

matures, donors are increasingly concerned with efficiency and are willing to fund only the efficient MFIs so the prediction that the lending/saving technology, not staff wages will determine survival is an important insight. A caveat of this model suggests that wages could even be lower if the personnel is very committed to the MFI mission.
⁵ The agency theory refers to equity owners as residual claimants, because in case of a failure they have a claim on the residual cash flows of the firm. Jensen and Meckling (1976) because they stand to loose if the company loose their investments.

Non-profit boards are typically comprised of outsiders and the proportion of outsiders as a measure of independence has too little variation to be useful in explaining board efficacy.⁶ Research has focused instead on how board diversity affects firm performance. There is evidence that women directors spend more time on monitoring activities, while the occupation of the board members does not affect time spent on monitoring, but affects fundraising (Oster and O'Reagan, 2003). Corporate performance is also affected by board diversity. Firms with higher proportions of women and ethnic minorities perform better according to a recent study of the largest Fortune 1000 companies (Carter, Simkins and Simpson, 2003).

Since some MFIs are subject to regulation they may share some of the specific characteristics of boards in regulated industries. For example, boards in banking have a larger proportion of outside directors than boards of firms in manufacturing (Adams and Mehran, 2003).

Board efficacy can also be influenced by board size, with larger boards being 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 on both large corporate boards and board of small firms (Yermack, 1996; Eisenber *et al.*, 1998). In non-profits firms, monitoring by the board declines with firm size although fundraising increases with size (Oster and O'Reagan, 2003). Banks, however, have larger boards than firms in other industries (Adams and Mehran, 2003).

The influence of board size and tenure on MFI performance is evaluated by

$$Performance_{i,t} = \alpha_1 + \beta_1 Board\ Size_{i,t} + \beta_2 Board\ Size\ Squared_{i,t} + \beta_3 Unlimited\ Term_{i,t} + \beta_4 Number\ of\ Board\ Meetings_{i,t} + \sum_{j=1}^m \beta_j Controls_{i,t,j} + \varepsilon_{i,t} \quad (3)$$

where *Board size* is the number of board members, *Unlimited Term* is a dummy that measures the tenure of the board, and *Number of Board Meetings* measures the annual meetings of the board.

The MFI board has unique characteristics. It is not unusual that several major stakeholders are represented on the board. The major stakeholders in an MFI are donors, equity investors, insiders (employees and managers), creditors (who often provide significant amount of the funding available for microloans), and non-affiliated independent directors. Board activities and therefore, MFI performance in terms of outreach and sustainability may be affected by the relative power of these various stakeholders. In addition to controlling for board independence therefore, we estimate a model that takes into account the representation on the board by all of the major stakeholders.

Recent theoretical work on boards has shown that managers' actions (which determine firm performance) and board structure (proportion of independent directors) are endogenously determined (Hermalin and Weisbach, 1998). Empirical studies account for this endogeneity by including lagged dependent variables and by specifying systems of equations where firm performance, board composition and action are endogenously determined (Rowe and Davidson, 2002; Firth, Fung, and Rui, 2002). To address this endogeneity problems, performance indicators

⁶ Callen and Falk (1993) have defined as insiders board members who receive pay but as pay is atypical in nonprofit boards, this measure is not very useful. Shivdasani and Yermack (1999), Oster and O'Reagan, 2002 measure independence by the power of the CEO to nominate the board and vote on board member selection.

are regressed on lagged dependant variables that capture board diversity and stakeholder representation.

$$\begin{aligned}
 Performance_{i,t} = & \alpha_1 + \beta_1 Insiders_{i,t-1} + \beta_2 Non-affiliated Outsiders_{i,t-1} + \beta_3 Donor Representatives_{i,t-1} + \\
 & + \beta_4 Creditor Representatives_{i,t-1} + \beta_4 Investor Representative_{i,t-1} + \sum_{j=1}^m \beta_j Controls_{i,t,j} + \varepsilon_{i,t}
 \end{aligned}
 \tag{4}$$

where *Insiders* is the lagged value of the proportion of the employees (normally the manager) who are a voting member on the board, *Non-affiliated Outsiders* is the lagged value of the proportion of the non-affiliated board members, *Donor Representatives* is the lagged value of the proportion of board members who are representatives of donors, *Creditor Representatives* is the lagged value of the proportion of board members who are representatives of the creditor, *Investor Representatives* is the lagged value of the proportion of board members who are representatives of an investor and *Controls* is a vector of variables that control for MFI age, MFI size, quality of financial statements, and supervision by a regulatory agency.

To study how board diversification affects MFI performance the following equation is estimated

$$\begin{aligned}
 Performance_{i,t} = & \alpha_1 + \beta_1 Women Directors_{i,t-1} + \beta_2 Expatriates_{i,t-1} + \beta_3 Community Leaders_{i,t-1} + \\
 & + \beta_4 Non-voting_{i,t-1} + \sum_{j=1}^m \beta_j Controls_{i,t,j} + \varepsilon_{i,t}
 \end{aligned}
 \tag{5}$$

where *Women Directors* is the lagged value of the proportion of women sitting on the board, *Expatriates* is the lagged value of the proportion of expatriates sitting on the board, *Community Leaders* is the lagged value of the proportion of local community and government representatives, *Non-voting* is the lagged value of the proportion of non-voting members, and *Controls* is a vector of controls for MFI size, MFI age, regulation by a regulatory body and quality of financial statements.

The Data

Data for this study come from three surveys. The first survey was conducted in 1998 by the Microfinance Center, Poland which is the network organization of the MFIs in the region. Both members and non-members were contacted. The survey collected data on MFI boards, governance and performance. The second survey was conducted in 2001 by the same regional network. In this survey, MFIs reported their performance, organizational and product characteristics for the period 1998-2001. Since 2000, many MFIs have been sending annual reports to the Network Center in Poland and their initial profile was updated for 2002 by the MFC staff. The data on MFI performance, board characteristics and mechanisms of external control were used to develop the database. The microfinance industry is new in Central and Eastern Europe and the Newly Independent States and not all MFIs had a board in place at the time the survey was conducted. In fact, in 2001, of the 150 organizations that participated in the survey (the microfinance center has made a serious attempt to collect info from almost all MFIs

in the region), only 71 had a board. All MFIs with boards were contacted in 2002 and asked to fill in a second survey with detailed questions on governance. The response rate was nearly 50% as 34 organizations completed the survey. The performance and governance indicators of these organizations are the basis for the study.

In microfinance, performance is measured by accounting-based indicators of outreach and of financial performance.^{7,8} In general, accounting measures are considered more-appropriate for longer run studies because managers may be able to manipulate financial statements for a year but their ability to manipulate statements in longer period is limited.

The variables used in the regression analysis are defined in Table 1. The variable that serves as a proxy for the level of outreach is Log(No. active clients) while, while sustainability is proxied by ROE, ROA, OSS, and FS. The summary statistics is in Table 2.

Discussion of the Results

External mechanisms of control play a limited role in improving MFI performance. Regulation affects negatively MIF outreach but this relationship is not statistically significant (Table 3, Model 1). This is line with the literature on banks suggesting that the regulator is more concerned with the soundness of the financial system and, therefore, with the financial performance of the MFI, and less concerned with the need to reach as many clients as possible. Rating by an external agency seems to matter because return on investment (ROE) improves in the year following rating (Table 3, Model 2). MFIs with audited financial statements seem to perform worse than MFI without audited financial statements (Table 3, Model 3). This result should not be interpreted as auditing being inefficient mechanism of external control. Rather, as performance indicators are self-reported, MFIs without audited financial statements may be overestimating their performance. Therefore, auditing is an important control for the quality of financial performance reporting.

Managerial pay affects MFI performance. Perhaps most surprisingly, performance-based incentives affect not financial results but outreach as suggested by the negative and significant coefficient of *Fixed Wage* (Table 4, Model 1). That is, MFIs that pay bonuses achieve better outreach. This is surprising because in MFIs that use performance-based pay, on average, 60 percent of the bonus depends on financial performance and 40 percent depends on performance in terms of outreach. This result suggests that either managers place higher personal value on outreach as suggested by the literature on non-profits, or achieving better outreach is easier than achieving financial results, therefore manager focus on outreach. The result also suggests that there are problems with using high powered incentives when the manager is expected to achieve dual objectives (Holmstrom and Milgrom, 1991).

The outreach mission seems to be pursued less by managers with longest experience in microfinance prior to taking their current job and this relationship is statistically significant! This result is surprising but it may indicate that experienced managers are hired to improve the financial results of the MFIs and that is why these managers may be shifting their focus away from outreach. At the same time, it does not seem that managerial experiences positively affect

⁷ An alternative, market-based indicator of performance is the Tobin's q, measured as the current market value of the company divided by the replacement cost of the company's assets, which is usually measured as the book value of the company's assets.

⁸ In the corporate governance literature, accounting-based measures are credited for not suffering from anticipation problems and market moods.

financial performance although the latter result may be due to the small number of years for which data is available.

Managers who perceive their compensation to be higher than the compensation they can get at an alternative job seem to focus on the MFIs financial performance and achieve better financial results (Table 4, Model 2). This result is significant at 10 percent level even after correcting for quality of financial statement reporting. Better paid managers indeed look at the MFI as a business and may be indifferent to the outreach mission.

The results on board size and board tenure indicate that the MFI boards share similarities with bank boards and with non-profit boards (Table 5). As in banks, performance seems to improve with size and after a point decrease, but this link is not statistically significant. The financial performance of MFIs who have boards with longer tenure, and specifically with boards with unlimited tenure is better than the financial performance of MFIs with limited board term. This is consistent with findings of on non-profit boards, yet it is surprising that board tenure affect financial performance and does not affect outreach! MFI boards in the region may understand the goals of the MFI as becoming financially sustainable and may be paying less attention to the outreach mission.

Board diversity seems to be unrelated to the MFIs' mission of outreach (Table 5, Model 1). None of the four indicators of board diversity is statistically significant in the regression for outreach. Surprisingly, the proportion of expatriates, community leaders and non-voting members on the board influences return on investment and this relationship is statistically significant! The proportion of women also has a positive effect on financial performance as the coefficient is positive and statistically significant in the operational self-sustainability equation (Table 6, Model 3).

Expatriates influence negatively financial sustainability perhaps because they bring easy donation or grants. This result, combined with the positive result on return on investment, suggest that many the MFIs may have reported ROE unadjusted for grants and donations.

Board independence, as suggested by the agency theory influences MFI performance (Table 7). Boards with higher proportion of insiders have less active borrowers and achieve worse return on assets. The most surprising result here is that client outreach is negatively affected by the proportion of donor representatives on the board! This result confirms the notion that donors funding MFIs in CEE & NIS focus more on financial results than on outreach.

Conclusion

This paper studies how various governance mechanisms influence the performance of MFIs in CEE & NIS. Using insights from the corporate governance literature, the literature on non-profit boards and the literature on board of banks, we test how MFI performance is affected by the external control mechanisms, by management remuneration and by size and diversity of and by stakeholder representation on the MFI boards. Results suggest that in CEE & NIS the focus of MFIs is on financial performance and less so on reaching many clients. Perhaps the most surprising here is that it is donors, not managers who drive this process. There is some evidence that either because they place higher personal value to outreach or because it is more profitable but managers respond to incentives for outreach more than they do to incentives for financial sustainability.

Table 1. Variables Definition

<i>Variable</i>	<i>Definition</i>
<i>ROE</i>	Return on equity; measures the rate of return on the average equity for the current year; since self-reported, may not be adjusted for grants and donations
<i>ROA</i>	Return on assets; measure how well the MFI uses its total assets to generate returns; since self-reported may not be adjusted for grants and donations
<i>OSS</i>	Operational self-sufficiency = Operating revenue / (Financial expense + Loan Loss Provision + Operating Expense)
<i>FS</i>	Measures how well the MFI can cover its costs through operating revenues. Financial self-sufficiency = Operating revenue adjusted for subsidized financing / (Financial expense + Loan Loss Provision + Operating Expense)
<i>Log (No. active borrowers)</i>	Measures how well the MFI could cover its cost if its operations were not subsidized and the expansion was funded with commercial =cost liabilities. Logarithm of the number of current borrowers, that is the number of individuals that currently have an outstanding loan balance with the MFI or are responsible for repaying any portion of the gross loan portfolio
<i>MFI age</i>	Number of years since inception
<i>Log(Total Assets)</i>	Logarithm of the total assets of the MFI. Total assets include all assets net of contra asset accounts such as the loan loss reserve and accumulated depreciation.
<i>Regulated</i>	A dummy that equals one if the MFI is regulated/supervised by a government regulatory agency and zero otherwise
<i>Rated</i>	A dummy that equals one if the MFI is rated by a specialized MFI rating agency and zero otherwise
<i>Audited</i>	A dummy that equals one if the financial statement of the MFI are audited and zero otherwise
<i>Fixed Wage</i>	A dummy that equals one if the manager receives a fixed salary and zero otherwise
<i>Higher Wage</i>	A dummy that equals one if the manager estimated that his is paid more than what he could get at a similar job
<i>Board Size</i>	Number of board members
<i>Unlimited Term</i>	A dummy that equals one if the board has unlimited mandate
<i>No. Board Meetings</i>	The number of board meetings per year
<i>Insiders</i>	The proportion of voting board members that are also employees of the MFI
<i>Non-affiliated outsiders</i>	The proportion of board members who do not have an affiliation with any of the stakeholders of the MFI
<i>Donor Representatives</i>	The proportion of board members who represent the interest of the donors or grant giving organization
<i>Creditor Representatives</i>	The proportion of board members who represent the interest of the MFI creditors
<i>Investor representatives</i>	The proportion of board members who represent the interest of the MFI investors/owners of equity
<i>Women directors</i>	The proportion of women on the board members
<i>Expatriates</i>	The proportion expatriates on the board
<i>Community Leaders</i>	The proportion of community leaders on the board
<i>Non-voting</i>	The proportion of non-voting members
<i>New Manager</i>	A dummy that equals one if the manager was hired in the current year, zero otherwise
<i>Manager's Experience in MFI industry (yrs)</i>	The number of years in the manager spent in the MFI industry prior to being hired at this MFI

Table 2. Summary Statistics

<i>Variable</i>	No of observations	Mean	Std. Dev.
<i>ROE</i>	148	-2.336	91.10
<i>ROA</i>	166	3.038	29.29
<i>OSS</i>	257	0.980	0.56
<i>FS</i>	209	0.829	0.41
<i>No. Active Borrowers</i>	457	7,268.198	64,943.26
<i>MFI Age</i>	586	2.563	1.73
<i>Total Assets (\$ thousands)</i>	243	10,905.720	42,953.93
<i>Log(Total Assets)</i>	243	14.058	1.96
<i>Audit</i>	311	0.820	0.38
<i>Regulated</i>	480	0.650	0.48
<i>Rated</i>	267	0.337	0.47
<i>Board Size</i>	282	5.897	2.15
<i>Unlimited Term</i>	131	0.237	0.43
<i>No. Board Meetings</i>	138	4.971	2.99
<i>Fixed Wage Changes</i>	138	0.768	0.42
<i>Manager's wage higher than possible alternatives</i>	170	0.182	0.39
<i>Manager's wage lower than possible alternatives</i>	170	0.118	0.32
<i>Women Directors</i>	170	0.324	0.47
<i>Expatriates</i>	277	0.206	0.25
<i>Community Leaders</i>	138	0.266	0.36
<i>Non-voting</i>	277	0.086	0.16
<i>Insiders</i>	277	0.009	0.04
<i>Non-affiliated Outsiders</i>	146	0.111	0.18
<i>Donor Representatives</i>	138	0.582	0.33
<i>Client Representatives</i>	282	0.177	0.31
<i>Creditor Representatives</i>	282	0.057	0.19
	138	0.044	0.17

Table 3. Table External Control

	Log(No active borrowers)	ROE	OSS
<i>Constant</i>	-1.640 (1.44)	-446.953 (3.08)***	-1.063 (1.42)
<i>Log (Total Assets)</i>	0.646 (8.42)***	19.342 (2.17)**	0.161 (3.09)***
<i>MFI age</i>	0.022 (0.17)	93.782 (1.88)*	0.109 (1.01)
<i>MFI age squared</i>	0.001 (0.10)	-11.740 (1.50)	-0.016 (1.35)
<i>Audited</i>	-0.329 (0.89)	-42.247 (1.09)	-0.507 (2.13)**
<i>Rated (lag)</i>	0.489 (1.44)	54.635 (1.70)*	0.331 (1.65)
<i>Regulated</i>	-0.317 (1.53)	56.477 (1.47)	-0.113 (0.71)
<i>Observations</i>	78	55	66
<i>R-squared</i>	0.73	0.19	0.49

Absolute value of t statistics in parentheses

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

Table 4. Managerial Compensation and Performance

	Log(No. Active Borrowers)	OSS
	LogNac	oss
<i>Constant</i>	-4.096 (3.18)***	0.182 (0.18)
<i>MFI Age</i>	0.220 (2.96)***	0.032 (0.88)
<i>Log (Total Assets)</i>	0.801 (9.19)***	0.240 (6.44)**
<i>Fixed Wage</i>	-0.636 (1.85)*	0.174 (1.25)
<i>Higher Wage</i>	0.396 (0.95)	0.333 (1.84)*
<i>Manager Experience</i>	-0.260 (2.20)**	-0.048 (0.89)
<i>CEO New</i>	0.060 (0.28)	-0.030 (0.34)
<i>Regulated</i>	-0.567 (2.09)**	
<i>Audited</i>		-0.366 (1.72)*
<i>Observations</i>	72	60
<i>R-squared</i>	0.559	0.502

Absolute value of t statistics in parentheses

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

Table 5. Board Size and Board Terms

	ROA	Log (No. active borrowers)
<i>Constant</i>	-116.122 (3.12)***	-4.139 (1.87)*
<i>Log(Total Assets)</i>	4.881 (3.67)***	0.744 (8.94)***
<i>MFI Age</i>	1.463 (0.61)	0.396 (2.69)
<i>MFI Age Squared</i>	-0.142 (0.66)	-0.028 (1.84)*
<i>Board Size</i>	14.233 (1.53)	-0.177 (0.30)
<i>Board Size Squared</i>	-0.968 (1.44)	-0.164 (0.37)
<i>Unlimited Term</i>	18.948 (2.05)***	0.299 (0.40)
<i>No. Board Meetings</i>	-1.373 (1.59)	0.046 (0.71)
<i>Observations</i>	64	80
<i>R-squared</i>	0.12	0.58

Absolute value of t statistics in parentheses

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

Table 6. Board Diversity

	ROE	OSS	FS	Log (No. Active Borrowers)
<i>Constant</i>	-712.529 (3.69)***	-2.323 (3.49)***	-3.013 (5.44)***	-2.626 (2.16)**
<i>Log(Total Assets)</i>	26.863 (2.46)**	0.194 (4.70)***	0.267 (6.47)***	0.692 (7.92)***
<i>MFI Age</i>	117.886 (2.21)**	0.195 (2.66)***	0.106 (2.31)**	0.186 (1.61)
<i>MFI Age Squared</i>	-13.735 (1.66)	-0.024 (2.84)***	-0.016 (3.19)***	-0.013 (0.92)
<i>Women Directors¹</i>	-150.640 (1.48)	0.644 (1.80)*	-0.069 (0.26)	-0.061 (0.08)
<i>Expatriates¹</i>	156.293 (2.09)**	0.185 (0.73)	-0.362 (2.19)**	-0.727 (1.52)
<i>Community Leaders¹</i>	356.291 (2.15)**	-0.238 (0.40)	0.261 (0.91)	0.847 (0.67)
<i>Non-voting Members¹</i>	590.639 (1.74)*	-1.656 (1.22)	0.027 (0.04)	2.746 (0.89)
<i>Audited</i>	92.360 (1.47)	0.038 (0.16)	-0.292 (1.75)*	
<i>Regulated</i>				-0.720 (2.16)**
<i>Observations</i>	41	43	34	51
<i>R squared</i>	0.40	0.53	0.75	0.67

¹ Lagged value. Absolute value of t statistics in parentheses,

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

Table 7. Interest Representation

	Log (No Active Borrowers)	ROA
<i>Constant</i>	-1.350 (0.90)	-50.376 (1.51)
<i>MFI Age</i>	0.070 (0.61)	8.205 (2.65)***
<i>MFI Age Squared</i>	-0.004 (0.30)	-1.274 (3.10)***
<i>Log(Total Assets)</i>	0.690 (7.87)***	3.777 (1.72)*
<i>Insiders¹</i>	-1.323 (1.25)	-48.161 (2.49)**
<i>Investor Representatives¹</i>	-0.621 (0.59)	-1.496 (0.09)
<i>Non-affiliated outsiders¹</i>	-1.122 (1.46)	0.492 (0.03)
<i>Donor Representatives¹</i>	-1.940 (2.47)**	-13.791 (1.01)
<i>Clients¹</i>	0.373 (0.16)	-69.176 (0.67)
<i>Creditor Representatives¹</i>	-1.220 (1.54)	4.620 (0.34)
<i>Audit</i>		-4.628 (0.60)
<i>Regulated</i>	-0.443 (2.04)**	
<i>Observations</i>	54	40
<i>R-squared</i>	0.65	0.50

¹Lagged value

Reference:

- Adams, R. and Mehran, H. 2003 "Is Bank Holding Company Governance Different?" *Economic Policy Review*, Vol. 9, Iss. 1; p. 123.
- Berger, P.G., Ofek, E., & Yermack, D. 1997. Managerial Entrenchment and Capital Structure Decisions. *Journal of Finance*, 52: 1411-38.
- Carter, David A., Betty J, Simkins, and W. Gary Simpson, 2003, "Corporate Governance, Board Diversity, and Firm Value," *The Financial Review*, Volume 38, Issue 1, pp 33.
- Callen, Jeffrey and Haim Falk. 1993. "Agency and Efficiency in Non-profit Organizations," *Accounting Review* 68. , 48-65.
- Dewatripont, M., and J. Tirole. 1994. "A Theory of Debt and Equity, Diversity of Securities and Manager-Shareholder Congruence." *Quarterly Journal of Economics* 109:1027-54.
- Easley, D. and M. O'Hara (1988), "Optimal Non-profit Firms", in Rose-Ackerman (ed.), *Economics of Non-profit Institutions*, New York, Oxford: Oxford University Press.
- Eisenberg, T., S. Sundgren, and M. Wells (1998) "Larger Board Size and Decreasing Firm Value in Small Firms," *Journal of Financial Economics*, 48, pp. 35-54.
- Fama, Eugene and Michael Jensen (1983a), "Agency Problems and Residual Claimants," *Journal of Law and Economics*, Vol. 26, pp. 327-49.
- Fama, Eugene and Michael Jensen (1983b), "Ownership and Control," *Journal of Law and Economics*, Vol. 26, pp. 349-371.
- Firth, Micheal, Peter Fung, and Oliver Rui (2002), "Simultaneous Relationships among Ownership, Corporate Governance, and Financial Performance," Working Paper, Department of Business and Information Systems, The Hong Kong Polytechnic University.
- Foster, Sarah, Seth Green, and Justyna Pytkowska (2003), "The State of Microfinance in CEE & NIS," CGAP Washington, D.C.
- Handy, Femida, and Eliakim Katz (1998), "The Wage Differential between Non-profit Institutions and Corporations: Getting More by Paying Less?," *Journal of Comparative Economics*, Vol. 26, pp. 246-261.
- Hermalin, Benjamin E., and Michael S. Weisbach (1998), "Endogenously Chosen Boards of Directors and their Monitoring of the CEO," *American Economic Review*, Vol. 88, pp. 96-118.
- Hermalin, Benjamin E. and Michael S. Weisbach (2003), "Board of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature," *Economic Policy Review*, Vol. 9, No 1.
- Holmstrom, Bengt (1999), "Managerial Incentive Problems: A Dynamic Perspective," *Review of Economic Studies*, Vol. 66, No.1, pp.169-182.
- Houston, J., and C. James. 1995. "CEO Compensation and Bank Risk: Is Compensation in Banking Structured to Promote Risk Taking?" *Journal of Monetary Economics* 36: 405-31.
- James, Estelle (1983), "How Non-profits Grow: A Model," *Journal of Policy Analysis and Management*, Vol. 2, pp. 350-365.
- Holmstrom, Bengt and Paul Milgrom (1991), "Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership and Job Design," *Journal of Law, Economics, and Organization*, Vol. 7, pp. 24-51.
- Jensen, M. (1993), "The Modern Industrial Revolution, Exit, and the Failure of Internal Control System," *Journal of Finance*, Vol. 48, No.3, pp831-880.
- Jensen, M., and K. Murphy. 1990. "Performance Pay and Top-Management Incentives." *Journal of Political Economy* 98: 225-64.

Jensen, Michael, and William H. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *The Journal of Financial Economics*, Vol. 3, pp. 305-360.

John, K., A. Saunders, and L. Senbet. 2000. "A Theory of Bank Regulation and Management Compensation." *Review of Financial Studies* 13, no. 1: 95-125.

John, Kose and Yiming Qian. 2003. "Incentive Features in CEO compensation in the Banking Industry," *Economic Policy Review-Federal Reserve Bank of New York*, Apr2003, 9(1), pp 109-121.

John, T. A., and K. John. 1993. "Top-Management Compensation and Capital Structure." *Journal of Finance* 48, no. 3: 949-74.

Keasey, Kevin, Steve Thompson, and Mike Write (1997), *Corporate Governance: Economic and Financial Issues*, Oxford: University Press.

Lipton, Martin and Jay Lorsch (1992) "A Modest Proposal for Improved Corporate Governance," *Business Lawyer*, 48 (1), pp. 59-77.

Manne, Geoffrey, A. (1999), "Agency Costs and the Oversight of Charitable Organizations," *Wisconsin Law Review*, Vol. 227.

Murphy, K. J. 1999. "Executive Compensation." In Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Vol. 3. Amsterdam: North-Holland.

O'Regan, Katherine and Oster. 2002. "Does Government Funding Alter Non-profit Governance," *Journal of Policy Analysis and Management*. 21. 359-79.

Oster Sharon and Katherine O'Regan. 2003. "Does the Structure and Composition of the Board Matter? The Case of Non-profit Organizations", Working paper, Yele School of Management

Rose-Ackerman, Susan (1986), *The Economics of Non-profit Institutions: Studies in Structure and Policy*, Oxford: Oxford University Press.

Rowe, Wei and Wallace N. Davidson III (2002), "Endogeneity in Financial Performance and Board Composition: The Case of Closed-End Funds," Working Paper, Department of Finance and Banking, Southern Illinois University.

Scott, C.D. and Hopkins, R. (1999), "The Economics of NGO's," LSE, DEDPS No. 15, London.

Shleifer, A. and Vishny, R.B. (1997), "A Survey of Corporate Governance," *Journal of Finance*, Vol. 52, No. 2, pp. 737-783.

Shivdasani, Anil and David Yermack. 1999. "CEO Involvement in the Selection of New Board Members," *Journal of Finance*. 54, 1829-54.

Yermack, D. (1996) "Higher Valuation of Companies with a Small Board of Directors," *Journal of Financial Economics*, 40, pp. 185-212.