BOARD STRUCTURE AND PERFORMANCE IN ETHIOPIAN MICROFINANCE INSTITUTIONS

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Abstract

This research investigated the effect of one governance dimension, board structure on the sustainability and outreach performance of Ethiopian MFIs. A panel data of 13 MFIs for 6 years (2003-2008) is used for the study. No study of such type is conducted in the past for the Ethiopian environment. The results indicate an experienced manager, a larger board size and educated board members all help to increase sustainability with board education having the largest effect. Manager experience and board size also have a negative effect on depth of outreach (i.e. less lending to women). Board independence has no visible effect on either sustainability or outreach. Surprisingly, no governance variable explains breath of outreach.

Keywords: Sustainability, Outreach, Governance, Ethiopia

JEL Code: G30, G32, J23

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1 Introduction

Microfinance is the delivery of financial services such as saving, credit, insurance and payment products to low income clients. Formal microfinance started with the work of Grameen Bank of Bangladesh (Ledgewood, 1999). Although the industry recorded impressive growth over the last three decades, still it faces challenges in sustainability and outreach to the poor. Sustainability is an issue of recovering the full cost of doing business and operating without government subsidies and donor funds whereas outreach means extending financial service to an ever wider audience (breadth of outreach) and especially towards the poorest of the poor (depth of outreach) (Conning, 1999).

While appraising the performance of the sector in terms of these two dimensions, a lot need to be done. MFIs still reaches only a small percentage of its potential market worldwide (Ledgerwood & White, 2006). They are also blamed for not reaching the economically active poorest of the poor who is in need of financial services (Hashemi and Rosenberg, 2006). Many MFIs cannot be sustainable worldwide despite high repayment rates. They still require the hands of donors (Cull et al, 2007).

Corporate governance is critical for firm performance as the board of directors set strategic directions of firms (OECD, 1999). The focus of this research is investigating the effect of one of the corporate governance dimension, board structure, on the sustainability and outreach performance of Ethiopian microfinance institutions. Other governance dimensions studied by different authors in the microfinance context include board diversity, external governance and ownership structures (See Campion, 1998; Rock et al, 1998; CSFI, 2008; McGuire, 1999; Hartarska, 2005; Mersland & Storm, 2007).

Much of the past research on Ethiopian MFIs focus on performance analysis issues (see Wale, 2009, 2012; Amha, 2004; Kidane, 2007; Kereta, 2006). Limited research is conducted on factors that affect such performance. An exception is the study conducted by Vashisht, Singh and Wale (2011) on the effect of financial decisions. Amha (2008), Ayana, Tsegaye and Erena (2003) studied governance issues in Ethiopian MFIs, but their analysis is descriptive and doesn't provide much guidance. Beyond these, no other study addressed governance issues and their effect on sustainability and outreach in a rigorous manner in Ethiopian MFIs context. The current research will fill this void and provide evidence from a poor economy where governance structures are purported to be weak (Pfister et al, 2008). The study used a combination of secondary and primary data from 13 MFIs covering the period 2003-2008.

The rest of the paper is organized as follows. Section two discusses the effect of board structure sourced from different studies. Section three describes the nature and source of data and the econometric approach followed. Section four discusses the descriptive and panel data results and discusses the findings in light of prior studies. The final section concludes the paper and suggests some direction for further research.

2 Review of literature

Governance is defined as a system of check and balances whereby a board of directors is established to oversee the management of the MFI (Ledgewood, 1999; 111). Governance issues arise whenever all its principals don't manage the organization, or there is a majority-minority shareholding relationship whereby the majority shareholders tend to dominate the minority shareholders or abuse their rights (OECD, 1999). The problem many also arise if there is diffused ownership equity (Gillan et al, 2001). In a diffused ownership structure, there is no incentive for an individual owner to monitor corporate management.

The key mechanisms of effective governance are ownership (including institutional and managerial ownership), board and board structure (size and composition), CEO (manager) and director (board member) remuneration, auditing, information, and the market for corporate control (Keasey et al, 1997). But due to lack of proper data issues like managerial ownership, CEO remuneration, and auditing are not covered. The market for corporate control doesn't work for MFIs as they are not listed on stock exchanges and they are not aggressive profit seekers like corporation.

The current research focuses on the effect of board structure on sustainability and outreach. Some of the variables under this governance dimension include CEO-Chairman duality, CEO tenure, CEO experience and educational background, board size, board education, board independence, and internal auditor reporting structure. The effects of these variables are discussed in the coming sections. Furthermore, the discussion also includes the effect of some control variables such as lending method, MFIs age and size.

CEO Chairman Duality: There is a debate on whether the CEO should board chairman (CEO-chairman duality). Hermalin and Weisbach (1991) argue against this duality and are of the view that the chairmanship may give the CEO an opportunity to pursue his private interest. But others said the duality may be good for firm performance. It empowers the CEO to pursue projects that are deemed essential to the organization. On the empirical font, Buckley (1997) did not find that firms with a CEO-chairman split outperformed those with a CEO-chairman duality. In the microfinance industry, studies by Mersland and Storm (2007) and Coleman and Osei (2008) found a negative effect of CEO Chairman Duality on sustainability reaffirming the claim of Hermalin and Weisbach (1991).

CEO Tenure: this variable could have either a positive or negative effect on performance. On the positive side, a longer tenure gives managers an opportunity to pursue projects that are deemed to enhance firm value. Besides, when their tenure is long, CEOs want to leave a mark regarding performance. On the negative side, with longer tenure, CEO may be engaged in empire building strategies which may adversely affect firm performance. On the empirical front, Coleman and Osei (2008) in Ghanaian MFIs study found that a longer tenure helps to increase outreach, but adversely affect profitability.

CEO Experience and Education: A more experienced CEO is likely to bring better and more relevant information to the board's attention and this may increase financial performance. Furthermore, more experienced managers seem to be interested in lending to poorer borrowers (Hartarska, 2005). This implies that having an experienced manager is good for sustainability and depth of outreach. The literature doesn't say anything about the effect of manager's education, and it is difficult to suppose which goal (commercial or social goal) educated managers pursue.

Board Size: The effect of board size on financial performance is inconclusive. On the one hand a larger board may result a free ride problem in monitoring giving the CEO a freer position which in turn reduces financial performance (Yermack (1996). On the other hand, larger board may improve financial performance due to increased talent pool (Adams and Mehran, 2008). In a study of the microfinance sector, Hartarska (2005) found negative effect of board size on financial performance implying large board result in a free ride problem. Mersland and Storm (2007) found that large boards give small loans and hence improve depth of outreach.

Board Members Education: Coleman and Osei (2008) in their Ghanaian MFIs study found that educated board members helps to increase outreach but has negative effect on profitability. The negative effect on profits may be due to their non-business educational background. Otherwise, cetires paribus, more year of schooling is expected to raise profitability.

Board Independence: More independent directors (non-employees, not related to the company) are expected to act as better monitors and advisors and thus increase financial performance. But Fama (1980) and Hermalin and Weisbach, (2003) are of the view that the effect of board independence on performance is largely inconclusive.

Internal Auditor: The independence of the internal auditor may have a bearing on financial performance. Policy papers for MFIs stress the importance of internal audit and recommend that the internal auditor report directly to the board (Steinwand, 2000). Such an arrangement will help to increase financial performance (Mersland and Storm, 2007)

Lending methods: Group and individual lending methods are the two chiefly employed approaches to lending in MIFs. The literature document that group lending method reduces sustainability due to the high transaction costs nature of the lending method (Okumu, 2007; Mersland and Storm, 2007). But such lending approach is good to reach the poorest clients as the lender doesn't require physical collateral (Navajas et al, 2000; Mersland and Storm, 2007). Besides this lending approach is good to reach many numbers of clients at once and hence increasing the breadth of outreach (Mersland and Storm, 2007; Seibel and Parhusip, 1999)

Age: The age of the organization affects sustainability and outreach through accumulated experience from learning by doing, the development of operating systems, experience and training of staff and the level of scale attained (Okumu, 2007).

The effect of MFIs age on sustainability is mixed with Cull et al (2007) finding a positive effect whereas Mersland and Storm (2007) a negative effect. On outreach, MFIs age has a positive effect on breath of outreach. Loan size may also increase with age (Mersland and Storm, 2007). But increase in loan size with MFIs age may not be regarded as mission drift. Rather future loans may increase due to past successful repayment history of the client. Mission drift is rather a reorientation of MFIs strategy from poorer to wealthier clients (Cull et al, 2007).

Size: size is positively related to sustainability and this may be due to financial services delivered to larger group of clients or larger loan size (Bogan, 2008; Mersland & Storm, 2007; Cull et al, 2008). Size is positively related to breadth of outreach as the number of borrowers can itself be another measure of size (Bogan, 2008). The effect of size on depth of outreach is mixed with Hudon and Traca (2006) found negative relationship implying larger MFIs are pro-poor whereas Cull et al (2007) found positive relationship.

3 Data and methodology

3.1 Data

The data of this study is sourced from two areas. The sustainability and outreach data is sourced from the Microfinance Information eXchange (MIX) Market website (www.mixmarket.com) which is an organization dedicated to the dissemination of quality microfinance data worldwide. Such data pertains to 13 MFIs operating in Ethiopia for six years (from 2003-2008). Although there are close to 30 MFIs operating in the country, no much time series data is available for many of them and hence we used data for the 13 MFIs.

The governance data is collected using a questionnaire distributed to the CEO of MFIs. The data was collected while the CEOs came together to attend a national conference on microfinance development in Ethiopia. The conference was organized by the Association of Ethiopian Microfinance Institution (AEMFI) in the year 2010 at Dire Dawa, Ethiopia. I was one of the paper presenters in that conference and used the opportunity to collect the governance data from the CEOs without hassle. My physical presence there helped to clarify some of the questions to the CEOs at the time.

The questionnaire was distributed to 30 CEOs out of which 19 returned the filled questionnaire (a response rate of 63%). The instrument was designed to capture governance dynamics in the six year period (2003-2008) but not much change is observed in these six years in the governance indicators. Since the two separate datasets need to be matched, the final useable sample of the governance data is reduced to 13 MFIs, although response was available from 19 MFIs. After accounting for missing values, the final data used for regression analysis is 53 MFIs-year observations with the average number of MFIs 10 and the average number of time series 5.3 years.

3.2 The econometric model

Consistent with the model used by Mersland and Storm (2007) and Hartarska (2005) the static panel data model is used in governance regression. The basic two-way panel data model looks like as follows (Gujarati, 2004):

$$OSS_{it} = \alpha + \beta_i BS_{it} + \beta_j C_{it} + \mu_i + \gamma_t + \varepsilon_{it} \quad (1)$$

$$\ln Borrower_{it} = \alpha + \beta_i BS_{it} + \beta_j C_{it} + \mu_i + \gamma_t + \varepsilon_{it} \quad (2)$$

$$\ln AvLnSz_{it} = \alpha + \beta_i BS_{it} + \beta_j C_{it} + \mu_i + \gamma_t + \varepsilon_{it} \quad (3)$$

$$LnWomen = \alpha + \beta_i BS_{it} + \beta_j C_{it} + \mu_i + \gamma_t + \varepsilon_{it} \quad (4)$$

OSS is operational self sufficiency, a sustainability indicator and measured by the ratio of financial revenue to the sum of financial expense, net loan loss provision expense, and operating expense. Financial Self Sufficiency (FFS) which is a sustainability measure adjusted for subsides was initially proposed to be used. But such data is not available from the MIX data source. Additionally Return on Assets (ROA) was another sustainability measure used in the literature. But it is not used in the analysis because the data was not normally distributed even after log transformation. *Borrower* is the number of borrowers, a breath of outreach indicator. *AvLnSz* is average loan size, measured as the ratio of adjusted gross loan portfolio to adjusted number of active borrowers. It is a depth of outreach indicator with smaller loans indicating better depth of outreach to the poorest. *Women* is the proportion of women borrowers, a depth of outreach indicator with higher proportion of women borrowers indicate better depth of outreach to the poorest. All these measures are from MIX (2008) benchmark reports.

BS is Board structure, a governance indicator. This construct is composed of the following variables: *manager experience* measured in number of years, *manager education* measured as completing either BA or MA educational level, *board size* measured in number of board members, *board education* measured as the proportion of board members having university degree, *board independence* measured as the proportion of management in the board of directors and *internal auditor* measured as a dummy variable of whether the internal auditor reports directly to the board.

C is control variables including *lending methods* measured as the proportion of loan disbursed through group lending methods, *MFI age* measured in number of years and *MFI size* measured in assets. μ_i is time-invariant unobserved heterogeneity for MFI *i*. γ_t is time dummies to check the dynamics in sustainability and outreach, the base period being 2003. ε_{it} is time varying error term for MFI *i* in period *t* which is assumed to be identically and independently distributed (i.i.d.) with a zero mean under both the random and fixed effect models. In addition in random effect model the, μ_i, is also assumed to be i.i.d.

Some pre and post estimation tests of OLS assumptions drawn from the econometrics literature (Gujarati, 2004) are checked. From the pre-estimation tests the following checks are made: the normality of the dependent variables, multicollinearity of regressors, and Hausman test for the selection of fixed vs. random effect. From post-estimation tests, the normality of residuals and zero mean of residuals are checked.

Regarding normality of the dependent variables, only OSS is normal on level form. The number of borrowers, average loan size and the percentage of women borrowers are used in the log form. Regarding multicollieanrity, only the age of the MFI has high VIF (>10) and dropped from all specifications. But there are some other variables dropped from some specifications or all specifications due to their own reasons. For instance, the variables board education, board independence and internal auditor are dropped

from the outreach specification due to their time invariant nature and a fixed effect estimation (to be explained later). In other cases, CEO Chairman Duality and CEO tenure are dropped from all specifications due to insufficient variation in the data. The firm size measured by assets is also dropped from the borrowers' regression due to the high correlation between the two variables which shadows the explanatory power of the main governance variables.

Hausman test for the selection of fixed and random effect models result in many type of specification. For OSS regression, the pooled OLS is appropriate. But the fixed effect model becomes proper for borrower, average loan size and women regressions. The appropriateness of the pooled OLS model in OSS specification shows that there are no omitted variables which are time-invariant and MFI specific. Loosely it can be said that board structure variables reasonably explain variation in OSS. But there still may be time varying omitted variables from the model. In the outreach specification the fixed effect is proper. This tells the presence of omitted variables which are time invariant and MFIs specific. Furthermore, these omitted variables in turn are correlated with board structure.

The joint significance of time dummies is checked and the result shows the time dummies are jointly significant, although not individually significant. This result indicates the superiority of two-way panel data models rather than one-way models.

For the problem of hetrosedasticity and intra-class autocorrelation of the error terms, we used cluster-robust standard errors (Cameroun and Trivedi, 2009). Although the governance indicators are suspected to be endogenous, no formal test is conducted due to lack of proper guidance on the literature on the type of endogenous, predetermined and exogenous variables in the structural equation. Furthermore, there are no valid instruments suggested in the literature.

4 Results and discussion

4.1 Summary statistics

The summary statistics are discussed under two parts. The first section deals with the summary statistics of sustainability and outreach variables and control variables whereas the second part deals with the summary statistics of board structure variables.

Table 1. Descriptive Statistics of Sustainability and Outreach indicators and control variables

Variables	N	Mean	SD	Min	Max	CV
OSS	57	130%	54%	15%	232%	0.42
Borrowers	59	120,227	184,021	434	710,576	1.53
AvLnSz	59	$129	$65	$32	$314	0.5
Women	56	54%	21%	15%	93%	0.39
Group Loan	64	85%	19%	30%	100%	0.22
Age	59	7	2	3	11	0.29
Size	59	$26.6m	$49m	$0.1m	$198m	1.84

Note: CV stands for coefficient of variation which is the ratio of standard deviation to mean.

Operational Self Sufficiency (OSS): The average OSS is 130% denoting a typical MFI is operationally self-sufficient. But there are MFIs which have an OSS as low as 15% and as high as 232%. The maximum figure is a very promising result and is probably registered by the purely commercial large MFIs. The coefficient of variation (0.42) is low indicating more similarity in Ethiopian MFIs sustainability figures.

Borrowers: The average numbers of borrowers is 120,227. There are wide swings in this variables with some MFIs serving as low as 434 borrowers and others serving as high as 710,576 borrowers. Besides, the coefficient of variation (1.53) is high indicating Ethiopian MFIs show more variability in number of borrowers as compared to other outreach and sustainability indicators.

Average Loan Size: The average loan size is $129 with the minimum being $32 and maximum $314. The coefficient of variation (0.5) is low and indicates more similarity in loan size among MFIs.

Women Borrowers Served: The average percentage of women borrowers served is 54%. Some MFI have as high as 93% women clients whereas others have a meager 15% women client. The coefficient of variation (0.39) is low indicating Ethiopian MFIs are more similar in their orientation towards serving women borrowers.

Group Loan: In the surveyed MFIs 85% of the loan is disbursed through the group lending methodology. Thus this lending method is considered dominant. On the variation of the lending methods used, some MFIs disburse only 30% of their loan using group lending methods and other fully (100%) disburse loans using this method.

Age: The sample MFIs has an average age of 7 years in the year 2008. The youngest MFIs have 3 years age and the oldest have an age of 11 years.

Size: The sample MFIs has mean assets of $26.6 million with the minimum $100,000 and maximum $198 million. The coefficient of variation (1.84) is the largest from all variables. This tells that Ethiopian MFIs shows huge variations in terms of number of borrowers and asset which are all a measure of size.

In the next section, we discuss the summary statistics of board structure variables. Some of the variables are continuous whereas others are dummy. Hence the statistics differ by the type of variable measurement.

Table 2. Descriptive Statistics of Board structure variables

Variable	N	Mean (Mode)	SD	Min	Max	CV
CEO-Chairman Duality[+]	64	97% (No duality)				
CEO Tenure[+]	58	76% (No specified tenure)				
Manager experience*	62	8	5	1	20	0.6
Manager Education[+]	63	52%(BA)				
Board size*	64	6	1	3	9	0.2
Board Education*	64	86%	30%	0%	100%	0.4
Board independence*	64	3%	6%	0%	20%	2
Internal Auditor[+]	64	61% (Not independent)				
Regional Dummy[+]	64	59% (Oromia), 21% (AA)				

Note: *continuous variables; [+]dummy variables; CV stands for coefficient of variation which is the ratio of standard deviation to mean.

CEO-Chairman Duality: The survey result shows there is no CEO Chairman Duality in Ethiopian MFIs governance system. The National Bank of Ethiopia prohibits such practice. This is in contrary to the practice of some firms in developed nation which allows the CEO to be a board chairman. The CEO-Chairman split is a positive move towards effective governance. The board chairman, by virtue of the power vested in it, can divert the decision making process to his own preference and benefit. This in turn will adversely affect effective governance and firm performance.

CEO Tenure: It is found that in many of the Ethiopian MFIs (76%), there is no specified tenure for the CEO in the incorporation documents. This result clearly indicates that the governance system is completely weak in this dimension. Lack of CEO tenure will lead empire building and rent seeking behavior. Few respondents said that some years (like 3, 5 and 10) are specified as the limit of CEO tenure. Even if such terms are set, they may not be practically implemented for various reasons. In general, the governance system is considered as weak in this variable.

Manager Experience: The average experience of managers is 8 years and there is wide variation in the data as there are managers with 1 years' experience and as high as 20 years. But it is felt as reasonably good.

Manager Education: In the sample MFIs an almost equal proportion of Bachelor degree and Master's Degree holders CEOs are found. Given the educational opportunities available in the country, the academic status achieved by the CEOs is reasonably sufficient. But it is recommended that BA holders need to upgrade their academic status in the future.

Board Size: The average number of board members is 6 and the minimum 3 maximum 9. The board size is marginally lower as compared to the Council of Microfinance Equity Funds (CMEFs) recommendation of 7-9 board (Mersland and Storm, 2007). Small boards have the advantage of reaching consensus easily in board meeting and no free ride in monitoring. But they may be highly influenced by the CEO. Furthermore, with limited talent pool ideas may not be viewed from different perspectives.

Board Education: 86% (5 out of 6) board members have university education which is a good outcome. However, besides attaining a certain educational level, the field of specialization of board members may matter as the study by Coleman and Oesi (2008) suggest. Since MFIs is poverty lending in a modern banking context, it requires good background in fields such as accounting, finance, economics, and sociology. We didn't address the effect of board members educational background and the issue is suggested for future research.

Board Independence: Board independence is measured by the proportion of insiders (part of the management) in the board and the result shows that out of the average 6 board members, there is no insider in the board (3%). This is a good governance practice, although there are some authors who argue that management representation on the board should be high to pursue projects deemed worthwhile for the institution.

Even if insiders are not preferred on MFIs board, the CEO will be present in board meetings. He/she will not having voting power and will be there primarily to clarify some doubts to board members. If most of the board decisions are reached by consensus rather than votes, which are normally the case in passive boards, still the non-voting and smart CEO may influence the decision of board members profoundly. So, future research should also look at the decision making styles of the board (consensus vs. voting) to verify whether the board is independent in the strict sense of the term.

Internal Audit: It is found that a larger proportion of Ethiopian MFIs (61%) either don't have an internal auditor or even if they have, he/she reports to the management rather than to the board of directors. This is a bad governance indicator and need to be corrected in the future.

Regional Dummy: The region with which the MFIs dominantly work is another question forwarded to the CEOs. Even if the operation of the large government owned MFIs is region specific, other private players have branches in different regional states. Thus asking a question regarding the MFIs dominant region of operation is important to know the regional distribution of MFIs and the driver behind this. It is found that most of the sample MFIs dominantly work in the Oromia regional state (59% or 8 MFIs) followed by the Addis Ababa City Administration (21% or 3 MFIs). Other regional states like Amhara, Tigray and Southern Nations, Nationalities and Peoples Region (SNNPR) have few number of (a maximum of two) microfinance players.

The dominance of Oromia regional state and Addis Ababa city administration can be a research issue. Particularly the economic, political and social environments with which microfinance institutions flourish has been studied. For instance Vanroose (2008) found that MFIs flourish in countries where the level of international support is high and in densely populated regions. Although it requires a formal study, these factors may be behind the higher development of MFIs in these two regions as opposed to others.

4.2 Econometric results

As explained in the econometric model section, different models are estimated for different dependent variables. The pooled OLS model is estimated for the OSS regression and the fixed effect model is estimated for all outreach variables. Besides all models are estimated using cluster-robust standard errors to mitigate the problem of hetrosedasticity and intra-class autocorrelation of the error terms. The model adequacy statistics shows that all the included variables jointly explain the measures of sustainability and outreach (the F statistics is significant). The R^2 values for OSS regression are high whereas it is too low for average loan size and women borrowers' regression. The R^2 for borrower regression is amazingly zero indicating no variable explain the variation in borrowers. This calls for a search for proper determinants of breadth of outreach. Year dummies were included in the model. They are jointly significant but not individually significant.

Table 3. The effect of board structure on sustainability and outreach

Variable	Coefficients				P values			
	OSS	Borrower	AvLnSz	Women	OSS	Borrower	AvLnSz	Women
CEO-Chairman Duality	_	_	_	_	_	_	_	_
CEO Tenure	_	_	_	_	_	_	_	_
Manager experience	0.03	0.004	-0.001	-0.06	0.007**	0.740	0.860	0.000**
Manager Education	-0.2	0.04	0.01	-0.13	0.187	0.663	0.891	0.470
Board size	0.08	0.003	-0.03	-0.06	0.022**	0.904	0.144	0.020**
Board Education	0.34	_	_	_	0.008**	_	_	_
Board independence	1.78	_	_	_	0.09	_	_	_
Internal Auditor	-0.25	_	_	_	0.034**	_	_	_
Group loan	-0.0003	-0.008	0.0008	-0.0004	0.924	0.15	0.000**	0.759
LnAge	_	_	_	_	_	_	_	_
Lnassets	0.211	_	0.21	-0.148	0.001**	_	0.328	0.651
Const.	-2.6	-0.82	0.83	2.17	0.006	0.803	0.785	0.654
R^2					***0.82***	***0.00***	***0.36***	***0.20***
F					***3200***	***4122***	***3264***	***1203***
P>F					***0.000***	***0.000***	***0.000***	***0.000***
N = 10; T= 5.3; N = 53								

**values significant at 5%. Year dummies were included in the model; they are jointly significant but not individually significant.

Manager's Experience and Education: An experienced manager increases the MFIs OSS positively. One year of additional experience is associated with a 3% increase in OSS. This finding tells the obvious result that experience is a valuable asset that should be looked by employers when hiring CEOs. Such result is consistent with Hartarska (2005) who was of the view that a more experienced manager brings more relevant information to the board's attention and as a result improves financial performance.

We also found that more experienced managers lend less to women. Overtime, there seems a drift from the original mission of lending to women. This result is inconsistent to Hartarska (2005) who found experienced managers lend more to the poor. Such contradictions may be the result of different development trajectories of the MFI sector in different regions. Some MFIs may start with a social mission and drift later to commercial goals and others may go in a reverse direction. Finally manager experience has no significant effect on breath of outreach. The overall picture is that experienced mangers focus more towards commercial rather than social goals.

Manager's education has no visible effect on either sustainability or outreach performance. This may be due to little variation in the variables itself, little knowledge difference between MA and BA holders (i.e. education doesn't matter as such) or education may matter but other factors such as bad working environment impair the effectiveness of MA holders relative to BA.

Board Size: We found that increasing board size increase financial performance. Adding one more board member increase OSS by 8% which is even greater than the effect of one year of additional experience of managers (3%). Such result may be due to large boards increasing the talent pool of the board. The result is in contrast with Hartarska (2005) who found large boards reduce financial performance. Her result may be attributed to the free ride problem of large boards. In Ethiopia since the board size of 6 members is marginally lower than the international recommended 7-9 board members, adding an additional board member brings more talent and increase financial performance.

On depth of outreach, we found that larger boards lend less to women. This result is again inconsistent with that of Mersland and Storm (2007) who found larger board extend small loans. We don't found any significant effect of board size on breadth of outreach. In general the result seemed to show that large boards are more commercial oriented to the ignorant of social goals.

Board Education: We found board education has a larger effect on increasing OSS (34% which is even higher than the effect of manager experience and board size reported earlier). In contrast, board education

has no visible effect on outreach (both breadth and depth of outreach). The no effect on breath of outreach is inconsistent with the study by Coleman and Osei (2008) who found a positive effect. The puzzling issue is with no effect on either breath or depth of outreach, how board education will positively affect OSS? Strategies like interest rate policies, cost management and others may be used by the educated board members to enhance OSS.

Board Independence: We don't find any visible effect of board independence (measured by the proportion of management in the board) on either sustainability or outreach dimensions. It was expected that less independent boards reduce financial performance as managers may act against the interest of shareholders. But this doesn't hold and the result may be attributed to low variation in the variable itself. From the descriptive statistics section, we deduce that there is no management representation in the board and only the CEO may be there in board meetings to clarify doubts. This little variation of the variable may be one explanation. On the broad literature, the effect of board independence on firm performance is largely inconclusive (Fama, 1980; Hermalin and Weisbach, 2003) and our result seems in line with this.

Internal Auditor: We found that independent internal auditors that report directly to the board reduce financial performance which is not as such a sensible finding. This variable also has no noticeable effect on outreach indicators.

Group Loan: We found group lending methodology reduces OSS and this may be due the high transaction cost nature of the lending approach. This result is consistent with Okumu (2007) and Mersland and Storm (2007). The effect of this variable on outreach indicators is quite opposite to the literature and don't give much sense.

Age: Since this variable is dropped from all specifications, due to multicollineaity, nothing can be said.

Size: Our result indicates that large MFIs have better financial performance as measured by OSS. They do so by extending large loans which is a lower depth of outreach and extending credit to large number of borrowers. This is a classic commercial strategy followed by the large MFIs. Such result is consistent with the finding in Cull et al (2007) and Bogan (2008).

5 Concluding remarks

In this research, we investigated the effect of one governance dimension, board structure, on the sustainability and outreach performance of Ethiopian MFIs. A panel data of 13 MFIs for 6 years (2003-2008) is used for the study. No study of such type is conducted in the past for the Ethiopian environment. The study extends some global studies like Mersland and Storm (2007) and Haratarska (2005) in a one country and unique context.

Some of the descriptive statistics results are illuminating by their own. Starting from the good sides, the managers' experience in the sector is fairly good, managers' educational level is fair considering the educational opportunities available in the country, most board members have university degree, the board is independent as insiders' representation is nil and there is no CEO Chairman duality on the board. But there are some bad signals that need to be corrected. These include lower board size, no specified tenure for CEOs and an internal audit department that is not independent from the management.

Coming to the panel data result, many of the variables are either dropped or become insignificant and this is attributed to low variation in the data rather than genuine reasons. Furthermore, the insufficient variation arises due to the one country nature of the data where governance systems are uniform and the NBE regulations need to be strictly followed by the MFIs. Cross country research with different governance mode may illuminate more light on the effect of many variables.

Despite such limitations, some interesting findings are observed from the panel data models results. An experienced manager, a larger board size and educated board members all help to increase financial performance with board education having the largest effect from all. The first two variables also have a negative effect on depth of outreach. They lend less to women. In general, it can be said that more experienced manager and a larger board are more commercial oriented in their lending approaches. These three variables have no magnificent effect on breath of outreach. Board independence has no visible effect on either sustainability or outreach. From the overall result it can be inferred that most variables

have an effect on sustainability and not on outreach. Specifically no governance variable explains breath of outreach. This tells us the determinants of sustainability and outreach are different and different conceptual framework need to be used.

Although some visible findings are reported, there are more issues to be investigated by further researchers. Cross-country research with large sample size needs to be conducted to get more varied governance data. The following additional variables need to be considered in the model: education background of board members, the presence and role of audit and other committees of the board and the decision making model of the board (consensus versus vote). Endogenity of the governance variables need to be addressed by some form of instrumental variable regression such as the Arellano-Bond difference GMM estimators.

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