CORPORATE GOVERNANCE
AND OWNERSHIP IN
MICROFINANCE ORGANIZATIONS

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Sitting down with microfinance clients and listening to their stories, struggles, and dreams is what inspires me. I dedicate this dissertation to them.

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INTRODUCTION AND SUMMARY OF THESIS

1. INTRODUCTION

As the microfinance industry comes of age, claims that microfinance providers need to improve their corporate governance structures and become more efficient have proliferated (CSFI, 2008). However, little scientific knowledge exists as to what constitutes effective corporate governance structures in the industry. This thesis thus responds to the need for more governance knowledge, especially for the microfinance industry. Specifically, the thesis sheds light on how different governance mechanisms, especially ownership, influence the performance of microfinance service providers.

Microfinance is the supply of financial services to micro-enterprises and poor families (Robinson, 2001, Ledgerwood, 1999, Schreiner, 2002). The U.N. Year of Microcredit in 2005 and the Nobel Peace Prize awarded to Mohammad Yunus and Grameen Bank in 2006 have given considerable public recognition to microfinance as a development tool (Littlefield et al., 2003, Claessens and Feijen, 2006). Recently, microfinance has also become an investment opportunity offering investors a new asset class for their portfolios (Reille and Foster, 2008).

For the delivery of microfinance services, a new type of firm called a Micro Finance Institution (MFI)\(^1\) has come into being. A typical characteristic of an MFI is that it has a dual mission of serving the poor and being financially sustainable (Helms, 2006). Most MFIs are, or have been, sponsored by donors, and their ownership structure spans from member-based cooperatives to investor-owned firms.

\(^1\) This dissertation interchanges the terms Micro Finance Organization (MFO) and Micro Finance Institution (MFI) to refer to microfinance service providers. In this dissertation, there is no difference whatsoever between the two terms. The possible publication outlet has defined the term used in each paper.
Outreach of microfinance services has grown tremendously during the last couple of decades. Christen et al. (2004) reports an astonishing 500 million people served, mostly with savings accounts, while the Microcredit Summit, in their 2006-meeting in Halifax, Canada, celebrated the milestone of 100 million borrowers reached. Nevertheless, microfinance still only reaches a fraction of the world’s poor (Robinson, 2001, Christen et al., 2004). Additionally, there is a special challenge related to reaching poorer segments and people living in less densely populated areas (Helms, 2006, Johnson et al., 2006). Altogether, there is a recognized supply challenge in the market, which indicates that there is a need for more knowledge about factors that influence the performance and outreach of microfinance suppliers. The intent of this dissertation is to fill part of this void by studying how different governance mechanisms influence the financial and social performance of MFIs.

The rest of this introductory chapter is organized as follows. Section 2 provides a brief overview of microfinance research. Section 3 positions the dissertation into relevant theoretical views. Section 4 discusses the relevance of the research. The extensive dataset constructed for the dissertation is presented in Section 5. The research questions and the major findings in the four research papers are outlined in Section 6, while Section 7 provides some additional robustness checks to test whether the statistical results presented in papers two and three yield satisfactory and confident results.

2. A BRIEF OVERVIEW OF MICROFINANCE RESEARCH

Scholars from a broad spectrum of research traditions have found interest in microfinance research. Mersland (2005) identified 130 peer reviewed articles published between January 2002 and September 2004. The articles were found in thirty-nine different journals from a
wide variety of traditions and schools. Thirty-two of the journals had only one article related to microfinance. Approximately five of every six articles were in multi-disciplinary development journals or in one of the two specialized practitioner oriented journals, Small Enterprise Development & Microfinance and Journal of Microfinance. Less than one in ten articles was found in economics, finance, or business management journals, indicating that the development aspects of microfinance attract most interest from researchers.

In particular, the impact from access to microfinance (overview in Claessens and Feijen (2006) and Littlefield et al.(2003), the building of inclusive financial sectors (overview in Helms (2006) and United Nations’ “Blue Book” (UN, 2006), aspects of group lending and group collateral (Besley and Coate, 1995, Ghatak and Guinnane, 1999, Paxton et al., 2000), and the development of microfinance theory (see (Aghion and Morduch, 2005) for overview) have motivated researchers. Additionally, the widespread tradition of informal savings and lending schemes, often referred to as Rotating Savings and Credit Associations (ROSCAs) (Ambec and Treich, 2007, Bouman, 1995, Calomiris and Rajaraman, 1998, Besley et al., 1993), has also attracted great interest from scholars.

A schism that has stirred up considerable debate in the industry is the proposed long-term “win-win” logic between poverty outreach and organizational sustainability. The debaters argue whether improved organizational sustainability is what is needed to enable organizations to increase outreach to poor clients (Woller et al., 1999, Morduch, 2000, Schreiner, 2002, Rhyne, 1998). Linked to this debate is the study of the performance of microfinance organizations. Here, the Mixmarket and its Microbanking Bulletin (www.themix.org) have provided the industry with important knowledge and benchmarks. It is especially to this stream of research, the study of the performance of MFIs, that this
dissertation adds new knowledge by bringing in questions, theories and empirics on how the governance of MFIs influence their performance.

3. THEORETICAL BACKGROUND AND CONSIDERATIONS

The point of departure for the dissertation is that corporate governance, understood as the system or the set of mechanisms by which organizations are directed and controlled (OECD, 1999), influences the performance of organizations. During the last three decades, the study of corporate governance has become a major area of research (Denis, 2001, Denis and McConnell, 2003, Shleifer and Vishny, 1997). Adams and Mehran (2003) report systematic differences between the governance of banking and manufacturing firms. This indicates that effective governance structures may be industry specific. Yet, except Hartarska (2005), little academic governance research is done in the microfinance industry (Mersland, 2005, Labie, 2001). Most literature on corporate governance in the microfinance industry consists of consultancy reports and guidelines on how to structure boards and board procedures, and warnings against “weak governance structures” found in cooperatives and non-profit organizations (Campion and Frankiewicz, 1999, Council-of-microfinance-equity-funds, 2005, Rock et al., 1998, Otero and Chu, 2002, Jansson et al., 2004).

Most research on corporate governance is rooted in agency theory, indicating that there are agency costs stemming from the separation of ownership and control (management) (Jensen and Meckling, 1976, Fama and Jensen, 1983). These costs can be minimized depending on the existence and practical implementation of corporate governance mechanisms. Thomsen (2008) lists a long list of mechanisms, all of which may serve to mitigate agency costs. Examples include boards, creditor monitoring, managerial incentive systems, product market competition, moral standards, and legal protection. Stakeholder theorists further widen the
approach, arguing that, not only do managers need to respond to owners’ interest, they also have to balance the need of several other stakeholders like employees, customers, local communities, and authorities (Freeman, 1984, Mitchell et al., 1997).

The theory of ownership of enterprise framed by Hansmann (1996) takes into account both agency and stakeholder theories. It argues that different costs occur depending on who owns an enterprise. According to Hansmann, costs stem from market-based contracts between the enterprise and its stakeholders (for example, employees, customers and debt holders), and from the practice of ownership. The argument is that these costs can be minimized depending on who owns the enterprise.

Because owners may have different incentives to control management, the study of ownership is important in corporate governance literature (Thomsen, 2008). For the microfinance industry, this is particularly relevant because several ownership types coexist (Labie, 2001). For example, throughout the world, there are millions of informal savings and credit groups (ROSCAs) that have been initiated by the poor (Ambec and Treich, 2007, Bouman, 1995) or have been promoted by donors (Allen, 2006, Ashe, 2002). At the same time, public ownership of different types of rural, agriculture, development, and postal banks is common (Christen et al., 2004). However, this dissertation concentrates on formal private suppliers of microfinance. These are incorporated as non-profit organizations, member-based cooperatives, or shareholder firms owned by investors with different degrees of profit motivation (Isern et al., 2003). Cooperatives are, without a doubt, the dominant ownership form. India alone hosts more than 100,000 cooperatives (Misra and Lee, 2007). In addition, non-profit organizations exist in the thousands (White and Campion, 2002), while only a few hundred shareholder firms exist. However, most cooperatives are very small and operate in
isolation, while most shareholder firms are relatively large compared to the average non-profit or cooperative MFI.

Hansmann (1996) argues that the difference between ownership types lies in who controls the organization and who receives the profit from it. In a shareholder firm, the shareholders control the organization, decide on how to distribute the profits, and are free to sell their privileges. A non-profit organization might have several stakeholders influencing the organization. However, no particular group or person can claim ownership of it or receive residual earnings from it. A cooperative is controlled by its members, who are the only ones entitled to receive the proceeds from operations, whether through dividends or rebated prices on services.

A review of several microfinance policy documents and relevant reports reveals that most outline the strengths of shareholder firms and the weaknesses of non-profit organizations and often the cooperatives (Berenbach and Churchill, 1997, C-GAP, 2003, Chavez and Gonzalez-Vega, 1994, Christen and Rosenberg, 2000, Greuning et al., 1998, Hardy et al., 2003, Jansson et al., 2004, Staschen, 1999). The implicit message is that a shareholder firm can perform better, in both outreach and financial performance, than a non-profit organization. This has resulted in a call in the industry for non-profit organizations to become shareholder firms (Fernando, 2004, Ledgerwood and White, 2006). But does the ownership type actually influence the MFI’s financial and social performance? This is one of the major questions that this dissertation aims to answer.
4. RELEVANCE OF THE RESEARCH

Researchers are increasingly being criticized for not studying issues relevant to practice (Tranfield, 2002). Ernø-Kjølhede et al. (2001) describes the demand for more relevance in research as “an increased articulation of societal expectation concerning the ability of public research to contribute to solving societal problems, wealth creation and other forms of utility” (Ernø-Kjølhede et al., 2001, p. 49). Furthermore, Gibbons (1994) calls for a knowledge production system denoted as “mode 2,” where there is a considerable level of interaction between science and society.

To respond to the demand for more relevance in research, the research questions in this dissertation have been framed after active participation in the microfinance industry and in-depth study of relevant policy documents that guide industry actors. In particular, papers issued by the Consultative Group to Assist the Poor (www.cgap.org), a World Bank-related donor consortium, have been studied. Moreover, at the outset of the dissertation, a study of 130 peer reviewed articles related to microfinance was conducted (Mersland, 2005). The study revealed that, between January 2002 and September 2004, not one single study addressed questions related to corporate governance in MFIs. Hartarska’s (2005) paper on the governance of East European MFIs was in fact the only rigorous study available at the outset of this dissertation process. This stands in stark contrast to the importance given to corporate governance in the microfinance practitioner and policy maker communities. In a recent study, weak governance structures were considered to be the second most important risk factor in the industry (CSFI, 2008), and several policy guidelines have been issued on the subject (Campion and Frankiewicz, 1999, Council-of-microfinance-equity-funds, 2005, Rock et al., 1998, Otero and Chu, 2002). We thus have a situation in which policy guidelines are issued without grounding in rigorous academic studies. For an industry claiming to be a major
contributor to fulfilment of the UN’s Millennium Development Goals (Littlefield et al., 2003), the lack of scientifically based knowledge is alarming. However, relevance alone is not a sufficient criterion for academic research. It is the interaction between theory and data that is the core of any scientific approach, including this dissertation.

5. THE DATASET

Hartarska (2005) and Morduch (1999), among others, highlight the need for better data for the study of microfinance questions. The construction of a new dataset has therefore been a major part of the dissertation. Until recently, data from Mixmarket (Microbanking Bulletin at www.themix.org) has been the main source of information for global microfinance empirical research. Thanks to new assessment reports produced by specialized microfinance rating agencies and co-funded by Ratingfund (www.ratingfund.org), a new source of information has become available.

According to Ratingfund, MFIs benefit from rating and assessment in four ways. First, ratings and assessments increase financial transparency when it is made publicly accessible for all interested parties. Second, rating reports provide benchmarks against other MFIs and give management of different organizations the opportunity to compare their performance against peer organizations. Third, ratings make the organizations want to improve performance. Through in-depth analysis of the institution, management can point out areas that require more focus. Fourth, ratings and assessments give investors and donors the opportunity to compare and monitor standardised information on their investments.

From a scientific point of view information from rating reports has at least four advantages compared to data from Mixmarket. First, raw data (the rating reports) are publically available
at [www.ratingfund.org](http://www.ratingfund.org). Second, several more variables, especially variables relevant to the study of corporate governance, are available. Third, the data is not self-reported, as in Mixmarket, but collected and verified by a third party (the rating agency). Fourth, large MFI bias is avoided. Mixmarket data includes most of the very large MFIs. Several, but not all, of these are excluded in rating reports because they often do not demand specialized microfinance rating reports, but undergo traditional rating from agencies like Standard & Poor’s. The large firm bias is illustrated in Table 1. Mean differences between Mixmarket and Rating reports are considerable, but median differences are more similar. Taken together, the dataset built on rating reports is more representative of the overall universe of the thousands of MFIs.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mixmarket (2006)</th>
<th>Rating reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>704 MFIs</td>
<td>290 MFIs 4 years of observations</td>
</tr>
<tr>
<td>Age</td>
<td>12 (median 9)</td>
<td>9 (Median 7)</td>
</tr>
<tr>
<td>Total assets</td>
<td>45,566,650</td>
<td>7,187,112 (2,899,500)</td>
</tr>
<tr>
<td>Total staff</td>
<td>400 (median 94)</td>
<td>94 (51)</td>
</tr>
<tr>
<td>Active loan clients</td>
<td>73564</td>
<td>12543 (4878)</td>
</tr>
<tr>
<td>Gross loan portfolio</td>
<td>33,072,688</td>
<td>4,585,764 (2,112,000)</td>
</tr>
<tr>
<td>Average outstanding loan</td>
<td>1026 (median 456)</td>
<td>772 (433)</td>
</tr>
</tbody>
</table>

Altogether, the dataset now covers 290 MFIs in sixty-one countries gathered by rating agencies between the years 2000 and 2007. The vast majority of the reports are from the last four years. The information stems from risk assessment reports made by five rating agencies: MicroRate, Microfinanza, Planet Rating, Crisil, and M-Cril. The reports range from ten to more than forty pages of narrative and accounting information, including benchmarks for up to four years. Methodologies applied by the rating agencies have been compared. No major difference in MFI assessment relevant to variables used in the dissertation has been found. When necessary, all entries in the dataset have been annualised and converted to US dollars.
using official exchange rates. All five agencies are approved official rating agencies by the Rating Fund of the Consultative Group to Assist the Poor (C-GAP) (www.ratingfund.org).

With the help of Master of Business students and an experienced consultant in microfinance, up to 103 variables for up to four fiscal years have been extracted from the reports. The variables were selected based on a combination of theoretical interest and availability. Thus, the dataset includes information beyond the requirements of the dissertation, and will be used in several joint post-doctoral research efforts recently initiated.

6. THE PAPERS

Four research papers compose the dissertation. The papers and their specific research questions have materialised in a sequence similar to the way they are presented here. The strategy has been to expose the papers in several academic forums to secure relevant feedback and critique. All papers have been presented at two different research conferences, and have gone through important blind peer review processes to improve their quality and scholarly rigor. As a result, all papers are accepted for publication in peer reviewed journals.

The first two papers are concerned with ownership and ask the question: “Do shareholder owned MFIs and non-profit MFIs differ, and if yes, how?” The first paper, “The Cost of Ownership in Microfinance Organizations,” forthcoming in World Development, expands Hansmann’s (1996) theory of ownership and illustrates that shareholder owned MFIs and non-profit MFIs do differ, and that each organizational type has its own benefits. It is therefore not obvious, as policy makers indicate, that shareholder owned MFIs will perform better than non-profit MFIs. The paper illustrates that non-profit MFIs (and cooperatives) can more effectively mitigate the costs of market contracts, and that such mitigation is highly
relevant because most MFIs operate in severely inefficient markets. However, the shareholder owned MFI can reduce the cost of ownership practice because owners have stronger incentives to monitor management. The paper concludes that the co-existence of different ownership types is probably what best serves microfinance customers.

The second paper, “Performance and Trade-offs in Microfinance Organizations – Does Ownership Matter?”, published in Journal of International Development, empirically examines differences in performance between shareholder owned MFIs and non-profit MFIs and finds that the differences between the two ownership types are minimal in terms of both social and financial performance. The paper rejects the hypothesis that shareholder owned MFIs perform financially better than non-profit MFIs and rejects the hypothesis that non-profit MFIs perform better socially than shareholder owned MFIs. The paper concludes that the policy guidelines calling for the transformation of non-profit MFIs to shareholder owned MFIs lack a well-grounded foundation. The paper also recommends the adaptation of a regulatory framework that allows strongly performing non-profit MFIs to become regulated and to be able to mobilize savings.

Based on the finding that ownership does not influence MFI performance, paper three, “Performance and Governance in Microfinance Institutions,” forthcoming in Journal of Banking and Finance, asks the question: “What are the governance mechanisms that influence MFI performance?” The findings in this paper are that best practice governance mechanisms from regular firms in mature markets generally do not have much influence on the performance of MFIs. However, having a female CEO, local rather than international directors, and an internal auditor reporting directly to the board have a positive impact on the MFI’s financial performance. Additional findings are that CEO/Chairman duality increases
outreach, while individual lending has a negative impact on social performance. The paper concludes that a wholesale adoption of best practices in governance mechanisms from mature markets is probably counter-productive at this stage of the industry’s development. Traditional board oversight and public regulation do not seem to be core solutions to MFI governance.

The findings in paper three motivate paper four, “The Governance of Non-Profit Micro Finance Institutions: Lessons from History,” forthcoming in Journal of Management and Governance, which asks: “If best practices governance mechanisms from regular firms do not have much influence on MFI performance, what are the governance mechanisms that have influence?” Paper four takes an original approach as it draws a parallel between historic savings banks and today’s non-profit MFIs. The paper illustrates the similarities between savings banks and non-profit MFIs and specifically outlines the non-profit ownership premise present in both types of organizations. The paper identifies the governance mechanisms that allowed savings banks to survive and prosper, and it analyses whether the practice of similar governance mechanisms could positively influence MFIs’ performance today. The conclusion of paper four is also a valid conclusion of the dissertation: “The findings could prompt a revision in the thought surrounding microfinance governance, which stresses for-profit ownership, regulation, and traditional vertical board control. The lessons from savings banks indicate that a broader and more stakeholder-based understanding of corporate governance is necessary. Stakeholders like depositors, donors, local communities, and bank associations can together provide a monitoring system that can enhance the long-term survival of MFIs. The findings also indicate that the need to transform ownership and limit regulation to for-profit MFIs could be mitigated, and a pragmatic attitude toward financial objectives may improve the financial viability of the MFIs.”
7. ROBUSTNESS CHECKS

Of the four papers briefly outlined above and presented in full later in the dissertation, paper two “Performance and trade-offs in microfinance organizations – does ownership matter?” and paper three “Performance and governance in microfinance institutions” make use of statistics in analysing the research questions. In order to increase confidence in the statistical results presented in the two papers several robustness checks have been carried out and are properly reported in each of the papers. Journal reviewers have pointed to the robustness checks as strong points of the papers. It is however always possible to carry out additional tests. For example, the regression models can be modified by including or replacing independent or dependent variables, and specific tests can be applied to check whether the statistical methods employed are yielding satisfactory and confident results. Two guiding principles have helped define whether or not to include additional tests in the two papers. Firstly, the research model must be rooted in solid theory and whenever possible in previous empirical research. No estimation technique or regression model is perfect and no additional robustness check can replace the need for good theoretical basis of the research model. Good theory always comes first. Secondly, the regression results should be understandable and have some practical relevance (Hair et al., 2006). “Why” does the model yield its results? And, “So what”? Only when the statistical results are understandable and when some practical guidance can be derived does the research exercise become relevant.

The fact that both of the mentioned papers are accepted in reputed peer reviewed academic journals should indicate that the papers are well rooted in theory and that they demonstrate practical relevance. Nevertheless, additional robustness checks can still be relevant. This can be either as a response to critique from other researchers or to serve as a motivation and
possible initiation of new research. To illustrate some possible additional robustness checks related to model specifications and statistical methods applied in papers two and three the following section is provided.

Model specifications

In paper two, that applies Schreiner’s (2002) framework in the search for performance differences between shareholder owned MFIs and non-profit MFIs, it could it be interesting to test whether there is a difference between the two ownership types when it comes to growth. Growth in number of credit clients can be accommodated within Schreiner’s framework as an alternative proxy for *breadth* of service outreach. Besides, rapid growth can also be interpreted as a risk factor. Thus, in order to test whether growth is a variable distinguishing between shareholder owned MFIs and non-profit MFIs, and still maintaining Schreiner’s (2002) performance framework, we can replace the total number of credit clients in table 5 in paper two (page 85 in this dissertation) with growth in credit clients. The alternative results for one year regression are presented in table 2.

Table 2: Logit calculations of organisational predictions replacing total credit clients with growth in credit clients, Years 0 (the year of rating) when the binary variable ownership type contain shareholder owned MFI, coded as 0, and non-profit MFI, coded as 1

<table>
<thead>
<tr>
<th></th>
<th>Year 0</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt level</td>
<td>-.997</td>
<td>.325</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>3.653</td>
<td>.022</td>
</tr>
<tr>
<td>PaR 30</td>
<td>6.563</td>
<td>.166</td>
</tr>
<tr>
<td>ROE</td>
<td>-.131</td>
<td>.892</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>.017</td>
<td>.955</td>
</tr>
<tr>
<td>Growth in Credit clients</td>
<td>.917</td>
<td>.218</td>
</tr>
<tr>
<td>ROA</td>
<td>3.136</td>
<td>.399</td>
</tr>
<tr>
<td>Total voluntary savings</td>
<td>-.002</td>
<td>.018</td>
</tr>
<tr>
<td>Constant</td>
<td>-.716</td>
<td>.555</td>
</tr>
<tr>
<td>Observations</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>Classified correctly (%)</td>
<td>79.0</td>
<td></td>
</tr>
<tr>
<td>Omnibus Chi-sq (8) test</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>0.300</td>
<td></td>
</tr>
</tbody>
</table>
As illustrated in table 2 growth in credit clients does not significantly distinguish between shareholder owned MFIs and non-profit MFIs. Other coefficients and significant levels mirror earlier findings. This additional robustness check thus supports the findings presented in paper two that shareholder owned MFIs and non-profit MFIs don’t differ much when it comes to performance within the framework proposed by Schreiner (2002).

It could also be interesting to study how growth influences the results in paper three where we study how different governance mechanisms influence the financial and social performance of the MFI. We could for example include asset growth as a variable controlling for risk in all regressions presented in tables 5 and 6 at pages 110 and 114 in this dissertation. By simply calculating yearly growth as $\frac{\text{Assets}_t}{\text{Assets}_{t-1}}$, we get a measure for growth. A disadvantage of this procedure is apparent as we loose one year’s observations. However, as illustrated in table 3 the model still yields satisfactory results.
Table 3: Estimation of performance measures using asset growth as additional risk metric

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>PY</th>
<th>OSS</th>
<th>OC</th>
<th>Average loan</th>
<th>Credit clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.338*</td>
<td>0.010</td>
<td>0.000</td>
<td>1.089**</td>
<td>-1.836</td>
<td>-93.881**</td>
</tr>
<tr>
<td>CEO/chairman duality</td>
<td>-0.020</td>
<td>0.054</td>
<td>-0.339**</td>
<td>-0.105*</td>
<td>-0.198</td>
<td>-0.831</td>
</tr>
<tr>
<td>International directors</td>
<td>-0.007</td>
<td>0.011</td>
<td>-0.090*</td>
<td>0.022</td>
<td>-0.074</td>
<td>-0.304</td>
</tr>
<tr>
<td>Internal board auditor</td>
<td>0.009</td>
<td>-0.033</td>
<td>0.118</td>
<td>0.074*</td>
<td>-0.108</td>
<td>-3.993</td>
</tr>
<tr>
<td>Board size</td>
<td>-0.004</td>
<td>-0.007</td>
<td>-0.034</td>
<td>0.013*</td>
<td>-0.100**</td>
<td>2.293**</td>
</tr>
<tr>
<td>SHF</td>
<td>-0.019</td>
<td>-0.018</td>
<td>-0.190</td>
<td>0.008</td>
<td>-0.559</td>
<td>9.580**</td>
</tr>
<tr>
<td>Female CEO</td>
<td>0.080**</td>
<td>0.077</td>
<td>0.195*</td>
<td>-0.015</td>
<td>0.200</td>
<td>-2.947</td>
</tr>
<tr>
<td>Individual loan</td>
<td>0.008</td>
<td>-0.108**</td>
<td>-0.128</td>
<td>-0.083*</td>
<td>0.372</td>
<td>-9.151**</td>
</tr>
<tr>
<td>Competition</td>
<td>0.014*</td>
<td>0.026*</td>
<td>-0.011</td>
<td>0.015</td>
<td>-0.025</td>
<td>2.404**</td>
</tr>
<tr>
<td>Bank regulation</td>
<td>0.011</td>
<td>0.000</td>
<td>0.123</td>
<td>-0.049</td>
<td>0.477</td>
<td>2.970</td>
</tr>
<tr>
<td>Urban market</td>
<td>-0.003</td>
<td>0.069</td>
<td>0.104</td>
<td>0.019</td>
<td>-0.099</td>
<td>5.601*</td>
</tr>
<tr>
<td>MFI experience</td>
<td>-0.001</td>
<td>0.000</td>
<td>-0.019**</td>
<td>0.003</td>
<td>-0.036**</td>
<td>0.088</td>
</tr>
<tr>
<td>Portfolio at risk (30)</td>
<td>-0.040</td>
<td>-0.104</td>
<td>0.624**</td>
<td>-0.076</td>
<td>0.306</td>
<td>1.089</td>
</tr>
<tr>
<td><strong>Asset growth</strong></td>
<td>-0.003</td>
<td>0.014</td>
<td><strong>-0.032</strong></td>
<td><strong>0.065</strong></td>
<td><strong>-0.093</strong></td>
<td><strong>-0.657</strong></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.023**</td>
<td>-0.004</td>
<td>0.138**</td>
<td>-0.084</td>
<td>0.218**</td>
<td>6.212**</td>
</tr>
<tr>
<td>Human dev. Index</td>
<td>-0.094</td>
<td>0.413</td>
<td>-0.517</td>
<td>0.270</td>
<td>0.711</td>
<td>-21.410</td>
</tr>
<tr>
<td>Wald F (sign.)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Exclusion test (sign.)</strong></td>
<td><strong>0.849</strong></td>
<td><strong>0.522</strong></td>
<td><strong>0.422</strong></td>
<td><strong>0.000</strong></td>
<td><strong>0.154</strong></td>
<td><strong>0.275</strong></td>
</tr>
<tr>
<td>Firm years</td>
<td>261</td>
<td>262</td>
<td>224</td>
<td>267</td>
<td>262</td>
<td>266</td>
</tr>
</tbody>
</table>

The exclusion test is a test if asset growth can be excluded from the model.
One star indicates a 10% significance level, two stars 5%.

First of all, table 3 shows that firm years are reduced from between 303 to 355 in tables 5 and 6 at pages 110 and 114 to between 224 to 267 when asset growth is included. Nevertheless, previous findings are generally mirrored in table 3. More important is the lack of statistically significance for asset growth in five out of the six regressions. The exclusion test tells us that in all regressions except operational costs asset growth does not improve the regression models. However, a counter-argument is that asset growth is simply added to the original regression. Instead it could replace either PaR30 or firm size, as it may be highly correlated.
with these. However, background regressions (not reported) with either PaR30 or firm size left out, or both, turn out to be similar to the findings in table 3. The exclusion test still rejects the hypothesis that asset growth cannot be excluded in five of the six regressions. The lesson learned is that leaving out asset growth as a control variable in paper three was correct. However, future specific studies on MFI’s operational costs should include asset growth as an explanatory variable.

Statistical methods

The statistical methods applied in analysing research questions may influence the results. In what follows some additional tests will be presented to check whether the statistical methods applied in paper 3 are appropriate considering the theoretical interest of the paper and the information available in the dataset.

The information available in the rating reports, the raw data forming up the dataset, is of such a nature that annual observations of several financial variables are available for up to four consecutive years, while MFI specific variables are normally available only for the year the rating took place. For example, if the report indicates that the MFI has five board members we have to assume that the MFI has had five board members during the whole panel period, normally four years. This goes for most of the governance variables that are of theoretical interest in paper 3 like for instance level of competition, lending methodology, female CEO and international board members. This is a limitation in the dataset that influences the choice of statistical methods. For example, the fixed effect panel data method cannot be applied since no meaningful average of annual observations can be calculated when they are all assumed to be the same value. Thus, if panel data is to be applied, estimation of coefficients must be made using the random effects method.
It might however be that standard pooled OLS regressions yield satisfactory results even if the data has a panel structure. Hsiao (2003) proposes a test of the data to decide whether pooled OLS or panel methods should be applied. The test's null hypothesis is that individual means are common and thereby making it possible to use standard pooled OLS regression. The variation may be divided into individual (MFI), time (year of observation), and joint (MFI and year) effects. We can use this test to check for example the ROA regression in paper three as follows:

\( ROA = B_1 \text{Duality} + B_2 \text{Int. directors} + B_3 \text{Board auditor} + B_4 \text{Board size} + B_5 \text{SHF} + B_6 \text{Female CEO} + B_7 \text{Individual loan} + B_8 \text{Competition} + B_9 \text{Bank regulation} + B_{10} \text{Urban} + B_{11} \text{MFI age} + B_{12} \text{PaR30} + B_{13} \text{Firm size} + B_{14} \text{HDI} + \text{Constant} + u \)

The result of the test is shown in table 4.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees</th>
<th>Mean square</th>
<th>F-Statistic</th>
<th>Signif Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>1.336</td>
<td>99</td>
<td>0.013</td>
<td>2.465</td>
<td>0.000</td>
</tr>
<tr>
<td>Time</td>
<td>0.100</td>
<td>7</td>
<td>0.014</td>
<td>2.601</td>
<td>0.014</td>
</tr>
<tr>
<td>Joint</td>
<td>1.414</td>
<td>106</td>
<td>0.013</td>
<td>2.436</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>0.871</td>
<td>159</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.285</td>
<td>265</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"Individual" refers to the variation pertaining to each MFI, "Time" is the variation caused by year, and "Joint" is variation induced by both MFI and year effects. The null hypothesis is that panel data effects are not present for each of the three effects. High F-statistic, and, therefore, low significance level rejects the hypothesis.

The low significance levels indicate that we can reject the hypothesis that individual, time, and joint effects have common means. This indicates that we cannot estimate (1) efficiently using the OLS method. We obtain similar results for all dependent variables except operational self-sufficiency (OSS) and average loan. For these two dependent variables the
time effect is not significant. However, this does not invalidate the use of panel data methods for these variables, as the individual and joint effects are both significant.

The random effects models applied in paper 3 can be studied further. First of all, (1) shows that we use a number of time invariant explanatory variables. In fixed effects estimation, all time invariant effects are washed out. However, we want to study these effects for reasons spelled out in the paper's theory section and, therefore, the fixed effects method cannot be used. The question is therefore whether the random effects model can be usefully employed.

In paper three we use the 3SLS model. This involves first a GLS run and then another run using the GLS estimates as instruments. We may use a Hausman test for the model at two stages: (1) Is the GLS better suited than OLS? Thus, the coefficient values obtained with GLS is contrasted with those obtained with the OLS. (2) Is 3SLS better suited than GLS?

The Hausman test (Greene, 2008) gives a measure of coefficient equality between two assumed models, and tests for their difference. The null hypothesis is that the two estimates do not differ systematically. The Hausman tests are presented in table 5.

<table>
<thead>
<tr>
<th>Table 5: The Hausman tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>ROA</td>
</tr>
<tr>
<td>OSS</td>
</tr>
<tr>
<td>PY</td>
</tr>
<tr>
<td>OC</td>
</tr>
<tr>
<td>Average loan</td>
</tr>
<tr>
<td>Credit clients</td>
</tr>
</tbody>
</table>

The Hausman tests show rejection of coefficient equality in nearly all regressions of GLS against pooled OLS, and further 3SLS against GLS. For average loan and for credit clients as
dependent variable we find rejection in one case, but not the other. Overall, we use the same estimation procedure in all regressions for ease of comparison, and because the estimation procedure is clearly superior to pooled OLS estimation.

Conclusion

The additional robustness checks presented in this section illustrate how tests can be applied in order to check whether the research models and statistical methods applied in an analysis yield satisfactory and confident results. The additional tests presented in this section confirm the findings presented in papers two and three and increase the confidence in their results.
REFERENCES


THE COST OF OWNERSHIP IN
MICROFINANCE ORGANIZATIONS‡

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Key words:
Microfinance, ownership, corporate governance, nonprofits, cooperatives, transformation

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ABSTRACT

We compare the ownership-cost of Shareholders Firms (SHFs), Non Profit Organizations (NPOs), and Cooperatives (COOPs) involved in microfinance. A paradoxical situation motivates us: most providers, both historically and today, are NPOs or COOPs, while policy papers advocate SHFs. We lay out a theoretical framework to understand ownership costs in microfinance organizations better. We propose that cost variables related to market contracting favor NPOs and COOPs, whereas most cost variables related to the practice of ownership favor SHFs. We conclude that what best serves the customers is the coexistence of ownership types and call for empirical research to test this theory.
1. INTRODUCTION

Microfinance is the supply of banking services to micro-enterprises and poor families. Private suppliers of microfinance are normally incorporated as member-based Cooperatives (COOPs), Non Profit Organizations (NPOs), or Shareholder Firms (SHFs). This paper compares the costs of these three ownership types. A paradoxical situation motivates us: While policy makers normally advocate SHFs, most suppliers of microfinance are NPOs or COOPs. Compared to a few hundred SHFs, there are thousands of NPOs and India alone has more than a hundred thousand COOPs (Misra and Lee, 2007). To understand ownership costs in Microfinance Organizations (MFOs) better, we lay out a theoretical driven framework and use it to compare the costs of the different types of MFOs.

The UN Year of Microcredit in 2005 and the Nobel Peace Prize given to Mohammad Yunus and Grameen Bank in 2006 have given considerable public recognition to microfinance as a development tool. Christen et al. (2004) report an astonishing 500 million persons served, mostly with savings accounts, while the Microcredit Summit’s 2006 meeting in Halifax celebrated the milestone of 100 million borrowers. Nevertheless, microfinance still only reaches a fraction of the world’s poor (Christen et al., 2004, Robinson, 2001). Thus, there is a recognized supply challenge in the market (Helms, 2006).

Other studies analyzing microfinance supply have compared the welfare approach and the sustainability approach: the first measures success by how well it fulfills the short-term needs of the poorest people; while the second proposes a long-term, “win-win” logic between poverty outreach and organizational sustainability (Woller et al., 1999, Morduch, 2000, Rhyne, 1998). This conceptual study complements existing research as it claims to be the first to present a systematic framework that explains the intrinsic ownership-cost differences.
between the most common types of suppliers in the microfinance industry. Proper use of the framework could help direct future empirical work and policy guidelines on MFO ownership.

To develop the framework, we apply Hansmann’s (1996) economic theory of ownership, which identifies several variables influencing the cost of ownership. We relate each of these variables to the microfinance industry and analytically compare the ownership cost of SHFs, NPOs, and COOPs. To illustrate and support our analysis, we outline several examples and share descriptive global statistics from the MIX 2006 Benchmarks (www.themix.org). The effect of each cost-variable is isolated and finalized with a proposition which indicates whether the ownership costs in NPOs and COOPs are, on average, higher or lower than for SHFs. Based on an extension of Hansmann’s theory, we propose that cost-variables related to market contracts favor NPOs and COOPs, whereas most of the cost-variables related to the practice of ownership favor SHFs. The apparent lower costs of ownership-practice in SHFs provide strong support for this ownership type. However, our analysis also indicates that NPOs and COOPs can more effectively mitigate the costs of market contracts, and that such mitigation is highly relevant since most MFOs operate in severely inefficient markets. Thus, the theory does not support policy makers’ preferences for investor ownership. A mixture of different ownership types, similar to that found in mature banking markets, would probably best serve microfinance customers.

The rest of this paper is organized as follows: section two lays out ownership policies and empirics; while section three explains the theory and the methodology applied, followed by sections four and five, in which the cost variables for market contracts and the practice of ownership are analyzed. Section six presents a table summarizing the discussions of the
former sections. Section seven concludes the paper and provides implications for policy makers and researchers.

2. OWNERSHIP POLICIES AND EMPIRICS IN THE MICROFINANCE INDUSTRY

Policy papers generally advocate SHFs as the most appropriate ownership type for the microfinance market (Berenbach and Churchill, 1997, C-GAP, 2003, Chavez and Gonzalez-Vega, 1994, Christen and Rosenberg, 2000, Greuning et al., 1998, Hardy et al., 2003, Jansson et al., 2004, Staschen, 1999). The arguments used are that SHFs can be regulated by banking authorities, accept deposits, provide a larger range of better quality services, be independent from donors, attract private equity capital, and benefit from superior corporate governance because they are privately owned. Some of these arguments relate to a situation where national legal frameworks consider NPOs and most COOPs as inferior banking organizations. Few NPOs are regulated and allowed to mobilize savings, and the supervision of most COOPs is generally considered outside the scope of banking authorities (C-GAP, 2003).

One consequence of current policies has been a “call” for NPOs to transform into SHFs (White and Campion, 2002, Fernando, 2004, Rhyne, 2001). Accounts of successful transformations have been shared (Fernando, 2004), and guidelines on how to transform have been published (Ledgerwood and White, 2006, White and Campion, 2002). Between 1992 and 2006, about 43 NPOs were transformed into shareholder organizations (Fernando, 2004, Hishigsuren, 2006). In most cases, the original NPO continued as a major owner in the new SHF (White and Campion, 2002, Ledgerwood and White, 2006). Transformed SHFs have generally been able to increase their outreach considerably (Ledgerwood and White, 2006). However, some observers fear that increased outreach doesn’t come without cost and warn
about a possible “mission drift” (Woller, 2002). Christen (2001), however, does not give credit to these fears.

Empirical studies of the ownership effects on the dual microfinance objectives of outreach and sustainability are scarce. Exceptions are Mersland and Strøm (Forthcoming) who on a global dataset of rated MFOs found that the differences between NPOs and SHFs was minimal on both outreach and sustainability dimensions, similar to what Hartarska (2005) found in her study on corporate governance in East European MFOs. However, Gutierrez-Nieto et al. (2007) did find that NPOs are more efficient in making a large number of loans while operating as cheaply as possible when compared to non-NPOs.

Historically, pro-poor banking has been dominated by COOPs and NPOs, such as the 17th century philanthropic English loan funds (Hollis and Sweetman, 1998), the 18th century Irish loan funds (Hollis and Sweetman, 2004), the 19th century savings banks (Teck, 1968), and the 19th century Schulze-Delitzsch and Raiffeisen cooperatives (Teck, 1968). The cooperatives and savings banks still continue to flourish in several highly competitive markets (Christen et al., 2004, Peachey and Roe, 2006). In mature bank-markets, where different ownership types coexist, researchers find little evidence to suggest that SHFs are more efficient than the COOPs or NPOs (Altunbas et al., 2001, Crespi et al., 2004, ESBG, 2004).

The global statistics from the MIX 2006 Benchmarks (www.themix.org) provide self-reported data from 704 MFOs. Five charter types are represented: Banks, Credit Unions, Non Bank Financial Institutions (NBFIs), NGOs, and Rural Banks. Banks and Rural Banks can have different types of ownership and be both privately and publicly owned. However, the Credit Unions are similar to the COOPs, the NGOs are similar to the NPOs, and the NBFIs are
similar to the SHFs. In table one, descriptive statistics for the three ownership types are displayed.

<table>
<thead>
<tr>
<th>Indicators:</th>
<th>SHFs</th>
<th>COOPs</th>
<th>NPOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of MFOs</td>
<td>230</td>
<td>74</td>
<td>282</td>
</tr>
<tr>
<td>Median Age of MFO (years)</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total assets (US$)</td>
<td>6 124 068</td>
<td>6 500 227</td>
<td>3 757 662</td>
</tr>
<tr>
<td>Number of active borrowers</td>
<td>11 007</td>
<td>4 852</td>
<td>10 947</td>
</tr>
<tr>
<td>Gross loan portfolio (US$)</td>
<td>6 395 958</td>
<td>5 401 213</td>
<td>2 834 596</td>
</tr>
<tr>
<td>Average loan balance per borrower (US$)</td>
<td>562</td>
<td>1408</td>
<td>227</td>
</tr>
<tr>
<td>Percentage of women reached</td>
<td>55%</td>
<td>51.9%</td>
<td>82.1%</td>
</tr>
<tr>
<td>Return on Assets (ROA)</td>
<td>1.5%</td>
<td>0.3%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Portfolio at risk &gt; 30 days</td>
<td>2.2%</td>
<td>4.2%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Write-off ratio</td>
<td>0.9%</td>
<td>2.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Operating expense/Loan portfolio</td>
<td>20.8%</td>
<td>14.0%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Cost per loan (US$)</td>
<td>144</td>
<td>156</td>
<td>70</td>
</tr>
</tbody>
</table>

The smallest COOP in the dataset has more than three hundred thousand dollars in assets, and thus the COOPs represented are clearly not the average small COOP involved in microfinance. Few of these smaller COOPs are in a position to self report their data to the MIX. However, the data illustrates that MFOs differ according to their type of ownership. Generally speaking, NPOs are smaller in assets, but not in customers, when compared to SHFs. NPOs’ average loan balance is considerably lower than that for SHFs. Similarly, NPOs serve more female customers. Measured as Return on Assets, SHFs have higher profits, while risk profiles are fairly even with the NPOs. Lower operating expenses in SHFs seem to be related to higher average loans, since the cost per loan in NPOs is actually half that of SHFs.

3. THEORY AND METHODOLOGY

Like Hansmann (1996), we do not advocate any particular type of ownership. Instead, we search for non-legal (La-Porta et al., 1998) and non-historic (Bebchuk and Roe, 1999) variables which influence the cost of ownership. SHFs are firms limited by shares like banks.
and non-bank financial institutions, and owned by investors whether they are profit seeking or social investors, individuals or organizations. COOPs are customer owned organizations like credit unions, building societies, savings and credit cooperatives, etc. NPOs are organizations without any legal owners. We recognize that organizational objectives are not necessarily uniform within the same ownership type. However, we follow Hansmann’s logical reasoning that the intrinsic differences between SHFs, COOPs, and NPOs lie in who controls the organization and who receives the profit from it. In an SHF, the shareholders control the organization, decide on how to distribute the profits, and are free to sell their privileges. In a COOP, the ultimate control is in the hands of its members who, through their voting rights, can decide on policy issues. The members are also the only ones entitled to receive proceeds from the operations either through dividends or rebated prices on services. An NPO may have several stakeholders influencing the organization. However, no particular group or person can legally claim ownership of it or receive residual earnings from it.

We view the firm as a nexus of contracts between different patrons and the firm (Jensen and Meckling, 1976). In MFOs the main patrons are employees, credit customers, savings customers, debt holders, equity holders, and donors.\(^1\) There are two possible relationships between the firm and the patrons: in the first, the patron deals with the firm through market contracts; while in the second, the patron can also be the owner of the firm. Both of these relationships involve costs and, by analyzing these, ownership types can be better understood and compared.

\(^1\) Service providers including rating agencies, networks, auditors, credit bureaus, providers of technical assistance, etc. are also important patrons of MFOs. However, they are considered outside the scope of this article.
Market contracts are not costless. Market failures, like an absence of effective competition and substantial informational disadvantages, prevail in the microfinance industry (Porteous, 2006). In all the relevant markets – employees, customers (both savings and credit), debt holders, equity holders, and donors – market imperfections exist. According to Hansmann, the costs of market imperfections can be reduced by assigning ownership to the affected patrons or avoiding having owners (NPOs). For the purpose of this paper, we will concentrate on market failures affecting customers and, when relevant, donors.

The practice of ownership involves costs. Agency costs, derived from the separation of ownership and control, as well as the cost of collective decision-making, are well known from the literature and will, together with other relevant costs, be studied in this paper. The assumption is that, whether ownership of MFOs is assigned to investors, customers, or nobody (NPOs), different costs will be incurred.

In our analysis, we identify cost-variables found in or deduced from Hansmann (1996). We start with cost-variables related to market contracts, followed by variables related to ownership. We isolate the effect of each variable and compare the cost of SHFs with the cost of COOPs and NPOs. We end each comparison with a proposition indicating, all else being constant, whether the ownership cost for the studied variable is higher or lower in COOPs and NPOs when compared to SHFs. In table four, we summarize our analysis by assigning the term ‘higher’ or ‘lower’ to each of the studied variables. We do not at any point try to indicate how much higher or lower the cost might be. When the analysis provides no clear indication, we assign the symbol ‘?’ . We generally do not try to compare cost differences between COOPs and NPOs, but recognize that there can also be considerable differences between these ownership types. Occasionally in the text we make the reader aware of such differences.
We do not claim that the cost-variables analyzed are all similar in importance; nor do we claim that we cover all relevant cost-variables.

4. THE COSTS OF MARKET CONTRACTS

According to Hansmann (1996), the costs of market imperfections can be reduced by ownership assignment. In the following, we analyze cost-variables identified by Hansmann and apply them to the microfinance industry. We discuss how the costs of market contracts vary depending on whether the supplier of microfinance is an SHF, a COOP, or an NPO.

**Market inefficiency # 1: The cost of limited competition**

Customers pay the price of limited competition in microfinance markets: first, in the form of high interest rates on loans or low interest on savings offered by monopoly/oligopoly MFOs; and second, in the form of under-consumption, or no consumption at all, of important banking services. Where MFOs exist, the markets are normally characterized by a severe lack of competition, and most clients have limited bargaining power vis-à-vis the provider of microfinance. The median yield on gross loan portfolio charged by the 704 MFOs reporting to the 2006 MIX Benchmarks is 30,2%, the mean 34,3%, and the maximum 139,5%. In Mexico, the MFO Compartamos has over years maintained a ROE above 50%, driven by interest rates of around 100% p.a. (Rosenberg, 2007). However, in Bolivia, where competition has been increasing, the average annual yield has decreased during the last decade from 50% to just above 20% in the leading MFOs (Porteous, 2006).

All else being constant, since SHFs have owners with the right to appropriate the profits, they should have a stronger incentive than NPOs and COOPs to exploit their customers. Yet the Compartamos case illustrates that NPOs can also maximize their profits. Before transforming
into an SHF, it also used to charge around 100% interest on the loans. However, there was an argument to expand outreach to more clients, not to produce profits for owners (Rosenberg, 2007).

In addition, some COOPs charge high interests on loans. For example, informal member owned savings and credit groups (similar to very small COOPs) often charge interests above 100% per year. However, the argument here is to offer the net-savers a high return on savings, not to enrich investors (Allen, 2006).

The data from the MIX 2006 Benchmarks illustrates that the larger COOPs represented do on average offer considerable lower interest rates on loans compared to NPOs and SHFs, while NPOs on average charge higher interest rates than their peers. However, when calculating the financial margin adjusted for operating expenses and loan losses, NPOs have the lowest margin while COOPs have the highest as illustrated in table 2.

<table>
<thead>
<tr>
<th></th>
<th>Portfolio Yield</th>
<th>Financial margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP</td>
<td>23%</td>
<td>3.5%</td>
</tr>
<tr>
<td>SHF</td>
<td>34.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>NPO</td>
<td>38.6%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

Other ownership-costs, like the cost of managerial opportunism, may in some contexts outperform the NPOs’ and COOPs’ advantage in minimizing the costs that stem from limited competition. However, the exercise in this paper is to isolate the costs related to each cost-variable. Thus, when isolating the cost of limited competition, NPOs and COOPs should have lower costs compared to SHFs since NPOs don’t have owners that can appropriate their profits and financial margins in COOPs benefit the members. Thus, on average, the following proposition should hold:
Proposition # 1:

*The ownership-cost related to limited market competition is lower in NPOs and COOPs than in SHFs.*

**Market inefficiency # 2: The cost of “lock-in” market power**

Monopolistic exploitation can also occur after beginning to patronize with an MFO. The use of non-tangible collaterals, such as credit history and group guarantees, has been the main innovation in microfinance and made it possible for MFOs to mitigate the risk of lending (Aghion and Morduch, 2005, Ghatak and Guinnane, 1999). However, an unexplored side effect of the innovations can be that they increase the difficulty in shifting between credit providers. Establishing new credit groups is complex (Marr, 2006), and if an existing credit group wants to shift from one MFO to another, all the members have to agree jointly. Single members wanting to shift need to be accepted into new credit groups. Similarly, the importance of credit history in lending appraisals may lead to a lock-in situation. Starting with a small loan, a credit history can be built, and increases in loan amounts can often be expected (Aghion and Morduch, 2005). However, a credit history is an intangible asset, which in markets without effective credit rating bureaus is difficult to transfer from one MFO to another.

The cost of “lock-in” market power in the microfinance industry has not, as far as we know, been subject to a major research effort. However, as competition increases the need to remain in good standing with a single lender decreases (Vogelgesang, 2003). Thus, easy shift of suppliers becomes important.
There is currently a tendency in the industry to shift from group methodologies to individual lending. Of the 704 MFOs reporting to MIX 2006 Benchmarks, 136 practice only different forms of group methodologies, while the rest practice either pure individual lending (252 MFOs) or a combination of individual and group lending (316 MFOs). Individual lending allows bigger loans (Cull et al., 2007), and it is possible that the shift towards individual lending is a response to increased competition and the need to reduce the cost of lock-in market power.

Similar to the cost of limited competition, the cost of lock-in can be mitigated by assigning ownership to customers (COOPs) or ownerless organizations (NPOs) with fewer intrinsic incentives to exploit the customers.

Proposition # 2:

*The ownership-cost related to “lock-in” market power is lower in NPOs and COOPs than in SHFs.*

**The cost of asymmetric information**

Asymmetric information increases the cost of market contracting. In microfinance, a situation of asymmetric market information is particularly present in four relationships; MFO-borrowers, MFO-depositors, MFO-donors, and MFO-debt holders; the last is outside the scope of this paper.

**Market inefficiency # 3: The cost of asymmetric information between MFOs and borrowers**
In a principal-agent model, the principal, the MFO, knows little about how the agent, the borrower, will use a loan or if the loan will be repaid. Hence, all banks establish expensive screening and selection processes together with follow up and monitoring of the customers to minimize agency-costs (Freixas and Rochet, 1997). In addition, microfinance often mitigates risks through the use of group guarantees. The involvement of neighbors, family members, and friends in selecting and monitoring clients reduces the costs of adverse selection and moral hazard. In addition, a borrower will be less inclined to default when they know that friends and family members will have to bear the loss. To decrease the cost of asymmetric information further, ownership of the MFO can be fully assigned to the borrowers, as in a credit cooperative. However, a well-known challenge in larger COOPs is individuals exploiting the firm at the expense of other members. This is probably why most COOPs have difficulties in expanding outside their local communities, and also why a common bond between the members is seen as a prerequisite for successful COOPs (Magill, 1994). For example, in Uganda where there are more than one thousand COOPs, a study including 147 of the largest COOPs revealed that on average they only had 640 members (Deshpande et al., 2006). Thus, we propose that, on average, smaller COOPs have lower costs regarding asymmetric information between MFOs and borrowers compared to SHFs.

We do not propose that borrowers are more inclined to repay their loans to NPOs than to SHFs. However, asymmetric information between borrowers and MFOs also involves the risk that the MFO will use their superior knowledge to exploit customers. In many markets this is a major problem, as MFOs tend not to reveal the true cost of borrowing. Real interest rates are covered in creative contracts including countless types of commissions and fees (C-GAP, 2003, Porteous and Helms, 2005). Regulation efforts and consumer education programs like those carried out by AMFIU in Uganda (www.amfiu.org.ug) are being installed to increase
transparency in and understanding of microfinance operations. NPOs, COOPs, and SHFs all tend to conceal their real interest rates. However, on average, owners with pecuniary incentives to exploit customers are more inclined to veil information. Thus, taking all this together, we propose the following proposition:

Proposition # 3:

The ownership-cost related to asymmetric information between the MFO and the borrower is lower in NPOs and COOPs than in SHFs.

Market inefficiency # 4: The cost of asymmetric information between MFOs and depositors

One of banks’ major functions is to monitor borrowers on behalf of depositors (Freixas and Rochet, 1997). However, the depositors are in a poor position to determine exactly how the bank is managing their money (Diamond, 1984). Since the owners of SHFs don’t share profits but only losses with their depositors, they have pecuniary incentives for opportunistic behavior, including risky lending (Jensen and Meckling, 1976, Hansmann, 1996, Rasmussen, 1988, Arun, 2005).

In several SHFs most shareholders are NPOs, socially oriented funds, or donors with limited incentives to exploit depositors (Goodman, 2005, Ivatury and Abrams, 2005, Ivatury and Reille, 2004). Yet there is a strong push in the industry to attract more profit driven investors, both local business people (Jansson et al., 2004) and international investors (Ivatury and Reille, 2004, Abrams and Stauffenberg, 2007). Since owners of SHFs are free to sell their shares and several donors have a limited time horizon for their investments, more profit-minded investors will probably enter the industry in the years to come. In the Compartamos
IPO in Mexico in April 2007, truly commercial investors bought most of the shares (Rosenberg, 2007).

As a response to asymmetric information between banks and depositors, governments impose regulations and deposit insurance schemes. Today, even a country like Congo (DRC), crippled by conflict and poverty, has a banking law aimed at reducing depositors’ risk. During the last decade, emphasis has been placed on how to regulate microfinance operations and organizations effectively, and most of the important bilateral and multilateral agencies have commissioned policy documents and guidelines (Berenbach and Churchill, 1997, Christen et al., 2003, Chavez and Gonzalez-Vega, 1994, Christen and Rosenberg, 2000, Greuning et al., 1998, Hardy et al., 2003, Jansson et al., 2004, Staschen, 1999). However, what seems to be generally overestimated is the capacity of such schemes to monitor institutions effectively in countries where corruption blossoms and banking authorities are generally weak. Another issue that does not seem to be taken into account is how the presence of deposit insurance schemes can encourage SHFs to take on more risk than COOPs (Fisher and Fournier, 2002).

To minimize the agency costs related to asymmetric information between depositors and MFOs, ownership can be attached to the depositors (COOP) or it can be given to an organization without owners (NPO), with fewer overall incentives to exploit depositors (Cuevas and Fischer, 2006).

Proposition #4:

*The ownership-cost related to asymmetric information between the MFO and the depositors is lower in COOPs and NPOs than in SHFs.*
Market inefficiency # 5: The cost of asymmetric information between MFOs and donors

Donors influence the microfinance industry (C-GAP, 2006). As depositors, donors don’t know precisely how MFOs use the money that is received. Even though (some) donors impose costly monitoring schemes like auditing, rating, follow up visits, and on-site experts, there is still a considerable risk that the MFO will distort the use of a donation. Therefore, since NPOs have no owners and, therefore, implicitly fewer incentives to exploit donors, all else being equal, donors prefer contracting with NPOs (Easley and O’Hara, 1983, Glaeser and Shleifer, 2001, Hansmann, 1996). In addition, several donors face legal constraints in partnering with SHFs since the shareholders can appropriate public funds (e.g. the Danish and Norwegian agencies for development, DANIDA and NORAD). In the Compartamos case, where private individual shareholders captured over $150 million from the IPO, it has been fiercely debated whether donor grants received by Compartamos over the years have now made their way into private pockets (Rosenberg, 2007).

If we assume that donors have a preference for poorer clients, it should be relatively unproblematic for them to provide funds to COOPs as long as the members are below a defined poverty level. Thus, several donors are involved in expanding the outreach of rural COOPs, like for instance the Swedish Cooperative Centre in Uganda, Malawi, and Tanzania (www.utangranser.se). However, most donors will probably find it difficult to partner with COOPs serving middle class members.

If we accept that, in theory, donors prefer to partner with NPOs and COOPs with poor members, how can we explain the increasing number of donors recommending NPOs to transform into SHFs? We believe that the answer is found in understanding the combined effect of the 11 variables studied in this article, but recommend additional research aimed at
better understanding donor behavior. However, *ceteris paribus*, the following proposition should hold:

Proposition # 5:

*The ownership-cost related to asymmetric information between the MFO and the donors is lower in NPOs and COOPs serving poor members than in SHFs.*

5. THE COST OF OWNERSHIP-PRACTICE

Hansmann (1996) argues that: “*ownership has two essential attributes: exercise of control and receipt of residual earning. There are costs inherent in each of these attributes*” (Hansmann, 1996, p. 35). In what follows, we analyze six cost-variables related to the practice of ownership.

The cost of controlling managers

With a few exceptions (e.g. PT Bank Dagang Bali in Indonesia), the owners and managers of MFOs are separate bodies, with the former delegating most decision-making authority to the latter. This separation of ownership and management leads to agency costs (Fama and Jensen, 1983b, Fama and Jensen, 1983a, Jensen and Meckling, 1976). Hansmann (1996) defines these agency costs as: “*the sum of the costs incurred in monitoring [the management] and the costs of managerial opportunism that result from the failure or inability to monitor with complete effectiveness*” (Hansmann, 1996, p. 38). We start by analyzing the monitoring costs, followed by a study of the costs of managerial opportunism.

Ownership variable # 1: The cost of monitoring the management
The cost of monitoring management can, according to Hansmann (1996), be divided into three areas: 1) owners’ costs in informing themselves about operations; 2) the cost of communicating between the owners; and 3) the cost of communicating owners’ decisions to the management. These costs depend on the importance, frequency, and duration of the relationship between the owner and the firm.

Members of COOPs entrust their valuable savings, make frequent use of the services, and often continue being members of the organization over a long period of time. Normally, members live relatively close to each other and in the neighborhood of the COOP. This could indicate that COOPs have an advantage compared with other forms of MFO. However, a major problem in larger COOPs is the high number of owners, which leads to a substantial duplication of effort in being informed. The high number of owners also leads to a problem of “free riders,” where each and every one has little incentive to control management effectively. Therefore, cooperatives generally require costly and bureaucratic processes to keep the members informed and alert (Normark, 1996). There is the additional challenge that many members of cooperatives have low levels of literacy and numeracy, and limited knowledge about monitoring managers and banking operations. Therefore, even though members have personal incentives to monitor management, the overall monitoring costs in COOPs, particularly in large COOPs, are high.

Some argue that NPOs don’t have the costs involved in monitoring management since there are no owners to inform or communicate with. The fact is quite different. Most organizations, including NPOs, delegate monitoring to boards (Fama and Jensen, 1983b). Board members in NPOs are mostly middle and upper class professionals (Labie, 2001). Some of these give high importance to their duties, but generally NPOs struggle to recruit board members who are...
willing to dedicate the time and effort needed to oversee operations effectively (Labie, 2001).

To balance the need for professional board members, some NPOs have members from international donors sitting on their boards (e.g. several of the FINCA affiliates). While this might improve the oversight of operations, it also increases the costs of communications, travels, board fees, etc.

Most SHFs have few owners. This reduces the cost of monitoring; however, with more than one owner, the cost of the duplication of effort cannot be avoided. One element pushing the cost up is the number of owners situated in the north when most MFOs operate in the south, and often ownership is shared between distant owners, e.g. European and American (Goodman, 2005). Nevertheless, there are good reasons to believe that the costs of monitoring managers in SHFs are generally lower than in COOPs and NPOs.

Proposition # 6:

*The ownership-cost related to monitoring managers is higher in COOPs and NPOs than in SHFs.*

**Ownership variable # 2: The cost of managerial opportunism**

When ownership and control are separated, it is impossible to prevent managers completely from getting involved in self-dealing transactions – those not fully aligned with owners’ interests. Owners with strong incentives, e.g. owners with pecuniary incentives, to monitor management can reduce these agency costs. This logic is implicit in most ownership literature, and is highlighted by microfinance policy makers advocating the need for owners with their own personal money at stake (Helms, 2006, Jansson et al., 2004).
However, history has proven that large groups of firms, like nonprofit hospitals and savings banks, have been able to survive without having owners with personal pecuniary incentives in place to control management. This indicates that there must be alternative governance mechanisms to ownership control that keep managers working hard. The oft-mentioned alternative mechanisms are: competition, legal and moral constraints, public regulation, incentive pay aligned with owners’ interests, and the management labor market (Hansmann, 1996, Denis, 2001, Jensen, 1993).

It should not be forgotten that most MFOs operate in countries ripe with corruption, where the legal frameworks are mixed, law enforcement is weak, and effective government regulation is uncertain. Therefore, there are good reasons to believe that the effects of some alternative governance mechanisms are more limited in most microfinance markets. Mersland and Strøm (Forthcoming) found that increased levels of competition in microfinance markets induced efficient operations and reduced interest rates. However, as mentioned, competition in most markets is still weak. Adding to this is the challenge related to the lack of managerial capacity in the industry (C-GAP, 2004), which reduces managers’ incentives to improve performance. Since no better options are available for the owners, managers can continue to produce slack results.

Increased use of incentive pay could solve some MFO governance challenges. However, aligning the interest of banking managers too much with the interests of owners with pecuniary incentives is problematic in banking firms, since this could induce managers to take higher risks at the expense of depositors and other debt holders (John and John, 1993).
Calomiris and Kahn (1991) suggest that, since deposits can be withdrawn on demand, the managers should get an incentive to control expenses. Hollis and Sweetman (2007) confirm this argument. Using data on the nineteenth-century Irish loan funds, they find that operating expenses as well as salaries increased, with lower levels of funding financed by deposits. Data from the MIX 2006 benchmarks may indicate a similar situation today, as indicated in table three.

Table 3: Median efficiency ratios in MFOs in relation to level of financial intermediation

<table>
<thead>
<tr>
<th></th>
<th>Operating expense ratio</th>
<th>Personnel expense ratio</th>
<th>Total assets (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non financial intermediation</td>
<td>25,5%</td>
<td>13,9%</td>
<td>4 427 864</td>
</tr>
<tr>
<td>Low financial intermediation</td>
<td>17,9%</td>
<td>10,5%</td>
<td>6 511 754</td>
</tr>
<tr>
<td>High financial intermediation</td>
<td>15,7%</td>
<td>7,2%</td>
<td>12 827 330</td>
</tr>
</tbody>
</table>

Table three illustrates that higher levels of financial intermediation seem to result in lower costs. In the microfinance industry, this situation has normally been explained as economies of scale, as indicated in the table. However, it may be that the microfinance industry and its policy makers have overlooked the potential of having depositors as an important governance mechanism to lower the cost of managerial opportunism. This opposes common guidelines which deny NPOs the right to mobilize deposits. It should therefore spur interest among researchers.

Labie (2003) suggests that organizational culture and cross-control between managers plays a major role in controlling NPO managers. Others suggest that having a clear mission, a well-defined target public, and close alignment with important stakeholders, particularly the customers, will reduce agency costs (Lapenu and Pierret, 2005). We share these views. However, a lack of ownership control cannot be fully balanced with other governance
mechanisms. Thus, in line with (Rasmussen, 1988), we propose that SHFs have an advantage compared to COOPs and NPOs.

Proposition # 7:

The ownership-cost related to managerial opportunism is higher in COOPs and NPOs than in SHFs.

Ownership variable # 3: The cost of collective decision making

When ownership is shared between different owners, there are likely to be different opinions regarding policies and strategies. The universal approach to dealing with this problem is to adopt a voting scheme. However, regardless of being able to reach a decision with the help of a predefined voting scheme, heterogeneity in interests between owners results in increased costs of collective decision making. These costs can, according to Hansmann (1996), be divided into three groups: 1) decisions taken which are not aligned with all owners’ interests; 2) the considerable time and effort it takes to participate in the decision making process; and 3) resolving conflict between owners.

In theory, investors have a single, well-defined objective: to maximize the financial returns on their investments. However, owners of SHFs are a heterogeneous group consisting of profit seeking investors, “green” investors, donors with holistic motivation, and multilateral agencies like the IFC of the World Bank (Ivatury and Reille, 2004, Goodman, 2005). When these seek to align their preferences, the cost of collective decision making increases. As far as we know, no study is available regarding the cost of collective decision making in SHFs with owners having heterogeneous objectives. And yet, particularly in transformed SHFs, where the original NPOs have teamed up with commercial investors, we assume that the cost
of collective decision making can often be high. Elisabeth Rhyne (2001) describes how different owners in Banco Sol in Bolivia (transformed from Prodem) at certain stages struggled to maintain control, with one block pushing hard for faster profits while another was seeking to maintain Banco Sol’s unique identity. This power play is costly. Nevertheless, to improve monitoring and decrease agency costs, policy advocates continue to recommend the inclusion of profit-minded investors as a counterweight to domination by the original NPO (Jansson et al., 2004). Whether the benefit of including profit-minded owners outweighs the cost of having owners with diverging interests should be the subject of further research.

In COOPs, there is a diverging interest between net-borrowers and net-depositors (Cuevas and Fischer, 2006, Ledgerwood, 1999). Balancing the interests of depositors and borrowers – with depositors pushing for increased deposit interest rates and minimizing risk in lending, and borrowers pushing for reduced interest rates and increased lending risk – is a costly and difficult task. Still, Falkenberg (1996) suggests that the diverging interests between net-borrowers and net-depositors can be an effective mechanism to reduce the costs in cooperative enterprises. Having some owners claiming higher interest rates on their deposits and other owners claiming reduced interest rates on loans can generate slim and efficient operations. The data reported in table one from the MIX 2006 Benchmarks may support Falkenberg’s proposition. Here, the median operating expense ratio to loan portfolio in COOPs is 14%, compared to 20.8% in SHFs and 27.7% in NPOs. However, since loan amounts considerably differ, additional research is needed for confirmation. Besides, since COOPs need to invest in time-consuming communication processes between members and management to maintain success, they can easily develop into bureaucracies or management controlled organizations (Spear, 2004, Normark, 1996, Cornforth, 2004, Rasmussen, 1988).
Thus, we suggest that the cost of collective decision making is higher in COOPs than in SHFs.

Since NPOs are governed by missions and bylaws and not by owners, it can be argued that the cost of collective decision making here is limited. However, missions change and their interpretations vary. Trustees and founders often diverge in opinion, and board meetings can be temperamental. Therefore, we find it difficult to propose whether the cost of collective decision making is higher or lower in NPOs than in SHFs.

Proposition # 8:

*The cost of collective decision making is higher in COOPs than in SHFs.*

**Ownership variable # 4: The costs related to access to equity capital**

The type of ownership influences access to equity capital. NPOs have no other sources to draw upon other than excess earnings and uncertain funding from donors, while COOPs can also turn to their members. Further growth in NPOs is hampered by a severe equity constraint (Gibbons and Meehan, 2002), and the ability of COOPs to attract extra capital from their generally poor members is limited. The possibility of increased access to equity capital is a major reason for transforming from NPOs to SHFs (Fernando, 2004).

SHFs are unrivalled when it comes to possible access to equity capital. There are a limitless number of sources and the available capital is almost infinite. Many commercial investors have entered or are about to enter the microfinance industry (Ivatury and Abrams, 2005, Ivatury and Reille, 2004, Goodman, 2005, Abrams and Stauffenberg, 2007). By mid-2004, commercially oriented, but still donor dominated, investment funds had invested nearly US
$1.2 billion as loans or equity in about 500 MFOs. Most of these investments were concentrated in a small number of SHFs (Ivatury and Abrams, 2005).

Proposition # 9:

The ownership-cost related to access to equity capital is higher in NPOs and COOPs than in SHFs.

The costs related to capital “lock-in”

Capital “lock-in,” defined as the difficulty of disinvesting capital, can be studied from at least two angles: capital efficiency and service availability.

Ownership variable # 5: The costs of capital efficiency as a result of capital “lock-in”

If NPOs are inferior in accessing equity capital, they are even more sluggish when it comes to reducing capital investment when demand declines. As competition increases, some NPOs risk being overcapitalized. Nimal A. Fernando, the microfinance specialist of the Asian Development Bank, raises the question as to whether the NPOs BRAC and ASA in Bangladesh have too much cash on their hands. 2 Another example is Diaconia FRIF in Bolivia, with total capital of more than USD 13 million, of which nearly 98% is equity. To illustrate: Diaconia FRIF’s equity is about 2/3 of Banco Sol’s, while their loan portfolio is less than 10%. 3

While an SHF can easily move capital from managers’ hands to owners’ hands, the capital placed in an NPO is either lost or stays with the institution until its dissolution. Similar to a

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2 Question raised by Mr. Fernando on the 25th of September 2006 at the devfinance@ag.ohio-state.edu discussion list.

SHF, a COOP can pay dividends, either in cash or as rebated prices on services, and thereby reduce its capital investment. However, this is not easily done since COOP managers tend to be powerful (Rasmussen, 1988). Hence, on average, SHFs are also more effective in capital disinvestment than COOPs.

Proposition # 10:

*The ownership-cost related to capital efficiency as a result of capital “lock-in” is higher in NPOs and COOPs than in SHFs.*

Ownership variable # 6: The costs of service availability as a result of capital “lock-in”

“Lock-in” of capital can be an advantage for poor households. When capital cannot be moved, the services cannot easily be taken away from the customers. When SHFs decide to close operations or shift to more profitable market segments, NPOs will normally tend to stay in business even if their financial return is far below a regular market return. This is also true for COOPs who cannot abandon their own members.

The risk of capital divestment is similar to what, in the microfinance industry, is termed “mission drift” (Woller, 2002). Christen (2001) reported little evidence of mission drift in transformed SHFs in Latin America, whereas Woller (2002) argued that mission drift is inherently more evident in SHFs than NPOs. What should also be kept in mind is that today’s owners of an SHF are not necessarily tomorrow’s. As opposed to NPOs and COOPs, shares in SHFs can be sold. Besides, most investors, including those seeking a double bottom line, naturally seek opportunities with increased returns. This indicates that there can be a cost related to serving the poorest, and since NPOs and COOPs cannot easily divest or change market segments, they tend to stick with their customers even if profits are slack. However,
Mersland and Strøm (Forthcoming) did not find that NPOs are better in outreach compared to SHFs. Still, the benchmarks from table one seem to indicate that NPOs serve poorer clients. Their median loan amount is less than half compared to SHFs and 82.1% of their customers are women. At the same time their financial return is low, with a ROA of 0.2%. The COOPs in the dataset are not representative for most rural-based, small COOPs; however, since COOPs are totally bound to their members, divestment or “mission drift” are a minor concern for them.

Also, studies from other sectors, like US health centers, indicate that nonprofits perform better than the for-profits in serving the underserved (Khoury et al., 2001). Thus, taken together, the following proposition should hold.

Proposition # 11:

*The ownership-cost related to service availability as a result of capital “lock-in” is lower in NPOs and COOPs than in SHFs.*

6. COMPARING OWNERSHIP TYPES

Table four summarizes the analysis in sections four and five. Based on an extension of Hansmann’s (1996) theory, we propose that cost-variables related to microfinance market contracts generally favor NPOs and COOPs, whereas most cost-variables related to the practice of ownership favor SHFs. These propositions are a starting point for better understanding the cost of ownership in MFOs and should become the subject for further research.
Table 4: Ownership costs in Cooperatives and Nonprofits compared to Shareholder Firms

<table>
<thead>
<tr>
<th>Proposition number</th>
<th>COST VARIABLES:</th>
<th>COOPs</th>
<th>NPOs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Cost of market contacts:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Limited competition</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>2</td>
<td>&quot;Lock-in&quot; market power</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>3</td>
<td>Asymmetric information, MFO-borrowers</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>4</td>
<td>Asymmetric information, MFO-depositors</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>5</td>
<td>Asymmetric information, MFO_donors</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td></td>
<td><strong>Cost of ownership:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cost of monitoring</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>7</td>
<td>Cost of managerial opportunism</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>8</td>
<td>Cost of collective decision making</td>
<td>Higher</td>
<td>?</td>
</tr>
<tr>
<td>9</td>
<td>Access to equity capital</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>10</td>
<td>Capital efficiency as a result of capital &quot;lock-in&quot;</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>11</td>
<td>Service availability as a result of capital &quot;lock-in&quot;</td>
<td>Lower</td>
<td>Lower</td>
</tr>
</tbody>
</table>

6. CONCLUSIONS AND IMPLICATIONS

We have studied the cost of ownership in microfinance organizations. Our analyses indicate that the costs of microfinance market contracts are generally higher in SHFs than in COOPs and NPOs, while the costs of ownership-practice are comparatively lower. The cost-variables analyzed are not all of similar importance, and local contexts will influence this. However, the proposed lower costs of ownership-practice in SHFs provide strong support for the continued promotion of this ownership type, as well as welcoming new investors into the industry. Nevertheless, such promotion should not be done at the expense of COOPs and NPOs who, according to the theory, can more effectively mitigate the costs of market contracts. Such mitigation is highly relevant since most MFOs operate in severely inefficient markets. It is probable that the development of markets with a mixture of ownership types would best serve the customers.

Comparing this theory with current policies indicates that policy makers consider the costs of ownership-practice to be more important than costs related to market contracts. Whether this
is based on a comprehensive analysis or ideological preferences remains unanswered. We propose that the costs of market contracts have not been sufficiently included when advocating ownership policies in the microfinance industry. Certainly the problems related to asymmetric information between depositors and MFOs are being debated. However, the response to these problems, through prudent regulations, supervision, and deposit insurance schemes, seems to be inadequate. In developing economies suffering from very weak institutional frameworks as well as imperfect markets and incomplete information (Todaro and Smith, 2006), installing prudent regulations seems far-fetched.

Several policy papers seem to be guided by agency theory applied to the relationship between owners and management. In addition to this, we recommend future policy papers and academic research to broaden their theoretical perspectives. A better understanding of NPOs and COOPs and their possible role in market economies is needed. Adequate use of stakeholder theory to help identify ‘Who’ and ‘What’ really counts in MFOs can help (Mitchell et al., 1997, Freeman, 1984, Freeman, 1994).

We argue that ownership costs are intrinsic and thus cannot be completely neutralized. However, they can partly be balanced. Particularly in the microfinance industry, the use of hybrid ownership forms where NPOs are major owners in SHFs is common. Also common are NPOs being fully governed by international donors similar to the owners of SHFs. Besides, some international lenders to NPOs may provide long-term uncollateralized loans, where the rate of interest depends on the profits and the lender can be given a position on the board. These examples illustrate that practitioners are aware of the costs related to ownership. Such balancing measurements may offer particular promise in meeting the multiple needs of MFOs. Thus, researchers should study the impact and side effects of such measurements.
The history of savings banks can provide important insight to understand the existence of NPOs in the microfinance industry better. As NPOs today, the first savings banks were also in need of equity capital from donors, either wealthy philanthropists, local authorities, or community funds like corn chambers meant for lean years. The NPO ownership type, still present in most savings banks, gave the donors the assurance they needed to support the new initiatives. However, as the banks grew and started to depend more on commercial funding and deposits, the nonprofit form was kept, but now as a response to asymmetric information between depositors and the banks (Hansmann, 1996, Hansmann, 1989, Pampillon, 2003, Ograda, 2003, Pohl, 2003, Rønning, 1972). One question which remains unanswered is why transformation of NPOs into SHFs is needed today when it wasn’t needed before. Legal frameworks provide part of the answer. Thus, a revision to adapt the legal frameworks to NPOs’ and COOPs’ needs seems appropriate. The history of savings banks and their continued success in several markets should demonstrate that being commercially oriented and mobilizing savings is not necessarily incompatible with being an NPO.

Imperfect markets and exploitation of customers are likely to continue in most developing countries for several decades. At the same time, some donors will continue to search for partners with less intrinsic motivation to exploit them. Hence, we expect COOPs and well-performing NPOs to continue to play an important role in the microfinance industry. However, this is only possible if adequate legal and policy support is given. Historically, support of novel ownership forms has been important to underpin the growth of pro-poor banking systems like the savings banks in England and Norway, and the cooperative and mutual banks in Germany and the USA (Teck, 1968, Hollis and Sweetman, 1998, Rønning, 1972). Therefore, if COOPs and NPOs are to continue playing a dominant role in the industry,
alongside the needed SHFs, they will need better policy and legal support. Further research on
how to understand and support NPOs and COOPs better is needed.
REFERENCES:


PERFORMANCE AND TRADE-OFFS IN MICROFINANCE ORGANIZATIONS – DOES OWNERSHIP MATTER?†‡

Roy Mersland* and R. Øystein Strøm†


Keywords:
Microfinance, performance, outreach, trade-offs, transformation, ownership, corporate governance

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ABSTRACT

Policy advocates argue for the transformation of non-government Microfinance Organizations (MFOs) into shareholder owned firms. This paper investigates whether the proposed superiority of shareholder owned MFOs is empirically supported. The findings indicate that the difference between shareholder owned MFOs and non-government MFOs is minimal. Our results contradict established paradigms and policy guidelines in the industry. However, the results are not necessarily surprising since ownership theories support our findings. So do also studies from the general banking markets as well as historical studies. Adaptation of legal frameworks allowing well-performing NGOs to mobilize savings appears to be a better option than transformation.
1. INTRODUCTION

Does the type of ownership a Microfinance Organization (MFO) has make a difference to its performance? Since Prodem in Bolivia was transformed into Banco Sol in 1992, it has been argued that an evolutionary organizational process that transforms non-government MFOs into shareholder owned firms (SHFs) is required (Pischke, 1996). Accounts of successful transformations have been shared (Fernando, 2004), and guidelines on how to transform have been published (Ledgerwood and White, 2006, White and Campion, 2002). The arguments are that SHFs can be regulated by banking authorities, accept deposits, provide a larger range of better quality services, be independent from donors, attract private equity capital and benefit from superior corporate governance because they are privately owned. The claim is clear; SHFs perform better than NGOs. Nevertheless, the issue of transformation has so far created more discussion than action. Of the thousands of NGOs, only about 43 have transformed into SHFs (Hishigsuren, 2006). Now is the time to test the assumed superiority of SHFs compared to NGOs in microfinance markets. Does the type of ownership matter?

A priori, one would consider that SHFs are more profit oriented than NGOs. Similarly, that NGOs should care more about reaching the poorest clients than SHFs. This view is put forward by several policy advocates and illustrated in Rock et al (1998). However, more than a decade ago Dichter (1996) observed (and disliked) the fact that many NGOs in microfinance were driven by the same economic rationalism as profit-oriented banks. Furthermore, not all SHFs are in the microfinance business for profit. They may have a social mission equivalent to NGOs. These two factors suggest that the claimed performance difference between ownership types is not as clear cut as assumed.
Performance in microfinance markets is multidimensional. To allow a comparison of NGOs and SHFs we use Schreiner’s (2002) highly conceptual terms to discuss the performance of MFOs. Schreiner’s framework is also used by USAID when evaluating MFOs’ performance (Woller, 2006). In his framework Schreiner proposes six aspects of social benefits for microfinance clients. The six aspects can all be considered performance dimensions in a MFO. The six dimensions are: cost, depth, breadth, length, scope and worth, where Cost is defined as the sum of monetary costs and transaction costs to clients, Depth is defined as clients’ poverty level or other social preferences like for instance the percentage of women reached, Breadth is defined as the number of clients served, Length is defined as the time frame of the supply of services and Scope is defined as number of types of financial contracts supplied. Worth estimates to what the degree the clients value the services. Worth is omitted from our discussion since it is subjective and according to Schreiner the most difficult to define and measure. Schreiner’s (2002) underlying assumption is that more socially oriented MFOs can trade-off narrow breadth, short length and limited scope with greater depth, while less socially oriented MFOs compensate shallow depth with wide breadth, long length and ample scope. Rock et al. (1998) identify more socially oriented MFOs with NGOs, and the less socially oriented MFOs with SHFs.

We outline ownership theories and hypotheses before we test for the argued differences between the SHF and the NGO in three ways. Firstly, the average of empirical specifications of the five dimensions of performance are compared and tested for significant differences. Then, the specified dimensions are used to predict the organisational type of either NGO or SHF in multivariate logit regressions. Lastly, we test the results for robustness using adjusted values instead of the original variables.
A dataset with high-quality information from 200 non-government or shareholder MFOs in 54 countries is used to carry out the statistical tests. The organisations share a willingness to open their accounts to careful scrutiny by third party rating agencies and to make their reports public. The organisations thus represent the more commercial oriented strata of MFOs.

The findings indicate that the difference in performance between SHFs and NGOs is minimal. NGOs are not more socially oriented than SHFs, nor are SHFs more profit oriented than NGOs. SHFs’ superiority in scale and scope do not seem to be related to ownership type, but to the legal constraints which impede most NGOs from mobilizing savings.

The rest of this paper is organized as follows: Section two introduces microfinance policies and ownership theories. Section three outlines the hypothesis and identifies statistical measurements. Information about our dataset is provided in section four. In section five the findings are presented and discussed. Section six concludes.

2. MICROFINANCE POLICIES AND OWNERSHIP THEORIES

A review of microfinance policy reports reveals that most of them highlight the strengths of SHFs and the weaknesses of NGOs. In particular, they emphasis that NGOs are less commercial and professional because they lack owners with the pecuniary incentive to monitor management (Berenbach and Churchill, 1997, C-GAP, 2003, Chavez and Gonzalez-Vega, 1994, Christen and Rosenberg, 2000, Greuning et al., 1998, Hardy et al., 2003, Jansson et al., 2004, Staschen, 1999, Drake and Rhyne, 2002). The implicit message is that SHFs benefit from better governance, can access more funding and thus perform better than NGOs.
However, an alternative hypothesis may be that SHFs and NGOs do not perform differently, because they may use the same business model to compete and serve customers in the microfinance market. In fact, different ownership forms are common in the banking and insurance industries (Mayers and Smith, 1983, Hansmann, 1996). In mature bank-markets where different ownership types co-exist, researchers find little evidence to suggest that ownership type influences operational efficiency (Altunbas et al., 2001, Crespi et al., 2004, ESBG, 2004). In a recent large European study Iannotta et al. (2007) found that investor owned banks have higher profitability, but have higher operating costs than non-investor owned banks. In historic terms pro-poor banking has generally been dominated by mutual and non-profit ownership, not by investor ownership (Cull et al., 2006, Hansmann, 1996). The question remains; why do policy makers advocate a shareholder charter for MFOs?

Ownership theories

Most research on the effect of ownership on firm performance is rooted in agency theory indicating that there are agency costs stemming from the separation of ownership and control (Jensen and Meckling, 1976, Fama and Jensen, 1983). These costs can be minimized depending on how ownership is organized and practised. According to this theory, owners with pecuniary incentives are more able to reduce agency costs. The implicit conclusion is that in ownerless non-profit organizations like NGOs, agency costs are higher. However, agency theory also predicts that the non-profit organizations can have an offsetting benefit of reducing customer adverse selection and moral hazard (Hansmann, 1996, Desrochers and Fischer, 2002), since they may be closer to the customers and better able to tap into local information networks. In microfinance where customers generally have lower levels of education, it makes good sense that Macey and O’Hara ((2003) suggest that the relationships with depositors and borrowers are as important to the success of the bank as the manager’s
and the board’s relationship with its owners. Furthermore, in microfinance where donors are major stakeholders, the principal-agent relationship can equally be applied to the relationship between the MFO and the donor. Donors may have more problems entrusting their money to MFOs owned by profit motivated investors. Therefore, agency costs in microfinance have a multiple nature, one between owners and managers, one between the MFO and its customers, and one between the donors and the MFO.

The theory of ownership of enterprise framed by Hansmann (1996) further develops the agency theory in relation to ownership. According to Hansmann, different costs occur depending on who owns an enterprise. Hansmann argues that costs stem from *market based contracts* between the enterprise and its stakeholders like employees, customers, donors, debt holders, and from the *practice of ownership* between management and the owners as well as between the owners themselves. The argument is that these ownership-costs can be minimized depending on how the ownership is organized. From the theory it can be derived that due to owners’ pecuniary incentives, investor owned firms minimize ownership costs stemming from the practice of ownership compared to NGOs. However, compared with SHFs, NGOs are better at mitigating the costs stemming from the market contracts. Hence, according to Hansmann (1996) co-operative and non-profit enterprises can operate successfully in more imperfect markets like those where most MFOs operate.

The fact that most equity holders in SHFs are NGOs, donors or socially oriented investors (Ivatury and Abrams, 2005, Ivatury and Reille, 2004, Goodman, 2005) indicates that the type of ownership probably matters less in microfinance than in other industries. However, certain stakeholders such as banking authorities, some debt holders, depositors and some profit-focused investors are often unique for SHFs. Furthermore, the fact that shareholders are free
to sell their shares and that several of today’s equity holders have a limited time horizon to their investments, indicates that managers of SHFs experience a different type of ownership control than may occur in NGOs.

In summary, we observe that the theories do not bring clear predictions regarding the efficiency of different ownership types in microfinance markets. However, the lack of clear prediction can be interpreted as theoretical support for the existence of the multiple ownership types that we observe in the microfinance markets as well as in regular banking markets.

**Microfinance studies on ownership and performance**

The literature on the performance of MFOs has generally not been concerned with the effect of ownership type. However, Hartarska (2005) in her study on corporate governance in East European MFOs included ownership type as an independent variable in her model. Similarly, Cull et al. (2007) included ownership type as a control variable in their study on the influence of lending methodologies on performance. In none of these studies did ownership type have a significant influence on the performance of MFOs. In another study Hartarska and Nadolnyak (2007) found that regulation affected neither social nor financial performance in MFOs. Since most countries don’t allow NGOs to become regulated, the Hartarska and Nadolnyak study is of particular relevance for this study.

**3. HYPOTHESIS AND MEASUREMENTS**

As outlined in the former section, ownership theories do not provide clear prediction regarding preferred ownership type in microfinance markets. However, Schreiner (2002) assumes that more socially oriented MFOs trade off narrow breadth, short length and limited scope with greater depth, while less socially oriented MFOs trade off shallow depth with wide
breadth, long length and ample scope. Assuming the NGOs involved in microfinance to be generally more socially oriented than SHFs, as indicated in several policy reports and illustrated in Rock et al. (1998), we derive our main hypothesis:

Main Hypothesis

NGOs are more socially oriented than SHFs.

If NGOs are more socially oriented than SHFs, they should have greater depth, shorter length, narrower breadth and more limited scope than SHFs. Regarding differences in costs, the Schreiner (2002) framework does not provide prediction.

We identify measurements able to explain each of the five selected dimensions. We recognize that no single measurement or simple combination of measurements is able to fully explain the completeness of any of the five selected performance dimensions. Alongside the identification of the measurements, we indicate expected performance differences between NGOs and SHFs. When not otherwise indicated, ratio definitions are from Microrate and IADB (2002).

1) Costs to clients

Cost to clients is the sum of monetary costs and transaction costs. We omit transaction costs and concentrate on monetary costs to the clients which become revenue for the MFO. The revenue ratio including most, but not necessarily all, monetary costs to clients is the income yield. In an MFO, the income yield is a function of debt costs, operational costs, loan loss costs and equity costs. We identify measurements for each as follows:
Debt Costs

We use the cost of funds ratio as a measure together with the debt/equity ratio. However, because some firms have negative ratios due to negative equity, we also include the debt/assets measure. Due to legal constraints restricting most NGOs to intermediate deposits as well as the general policy preference in the industry for SHFs, we expect debt costs to be higher in NGOs than in SHFs.

Operational Costs

We employ the operating expense ratio as a measure. Implicit in the policy recommendations is that owners with pecuniary incentives are better able to induce efficient operations. Thus, we expect operational costs to be higher in NGOs than in SHFs.

Loan Losses

In accounting reports, loan losses can be found as write-offs and portfolio at risk and it is the combination of the two which ultimately informs us of the loan losses. Less ownership control indicates that NGOs lack some incentives to follow-up defaulters. At the same time, NGOs, due to their social mission, should be more inclined to accept clients’ reasons for defaulting. Yet, for profit-motivated organisations, there can sometimes be a trade-off between slightly increased loan losses and reduced operational costs. Nevertheless, we expect loan losses to be higher in NGOs than in SHFs.

Equity Costs

Equity cost is measured as return on equity (ROE). Equity costs are influenced by managers’ interest in securing their own future and reputation, but also depend on the owners’ pecuniary incentives. Other factors constant, equity costs should be higher in SHFs than in NGOs.
2) Depth

Depth is defined as clients’ poverty level or other social preferences such as the percentage of women reached. An imperfect, but useful and much used proxy for measuring poverty levels among clients is average outstanding loan per client. The percentage of women reached is measured as the percentage of the outstanding portfolio lent to women and as a dummy variable indicating whether the MFO practices a conscious gender bias or not. We expect the NGOs to reach poorer clients and relatively more women than the SHFs.

3) Breadth

Breadth of outreach is the number of clients served. Clients can be both savings clients and loan (credit) clients. Since NGOs in most cases cannot mobilize deposits due to legal constraints, their number of savings clients should in most cases be zero. Excluded from the opportunity to fund loans with savings, together with the difficulty in accessing debt indicate that the number of credit clients as well as the total number of clients should be lower in NGOs than in SHFs.

4) Length

Length of outreach is the time frame of the supply of microfinance. Length is difficult to measure, but profit is a proxy because it signals the ability to sustain the business over time. Since SHFs should have the benefit of lower costs and larger scale, they should be able to enjoy higher profitability and sustain longer than NGOs. Due to considerable variation in debt/equity ratios, profit in the microfinance industry is best measured as ROA and not the ROE.
5) Scope of outreach

Scope of outreach is the number of types of financial contracts supplied. Since the mobilization of deposits is generally reserved for regulated entities, NGOs should, due to the difficulty of becoming regulated, generally not offer voluntary savings. When it comes to the number of credit products being supplied, NGOs are also disadvantaged due to the lack of scale and resources.

In summary, the Schreiner (2002) model implies that NGOs trade off more depth with less breadth, length and scope compared to SHFs. We investigate this by comparing average specifications of the five outreach dimensions in table 3 and 4 for the subgroups of SHF and NGO. Furthermore, if the SHF and NGO differ in dimensions of performance, we should be able to predict organisational type from these performance dimensions. In particular, depth should be an important prediction variable. We study this in a simple logit model where the dummy variable “ownership type” is the binary dependent variable containing the SHF and the NGO types.

Definitions of variables used in the analysis are given in table 1.
Table 1: Variable definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definitions (when available from (Microrate and IADB, 2002))</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>A Debt cost: The cost of funds at the end of a given period, that is COF = (Interests and fee expense on funding liabilities)/(Average funding liabilities). Debt/equity ratio: The ratio of debt to equity at the end of a given period. Debt/Assets: The ratio of debt to total assets.</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>B Operational cost: The ratio of the operating expenses to the average loan portfolio, thus OER = (Operating expenses)/(Average total loan portfolio).</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>C Loan losses: Write-Off ratio: The ratio of loans that has been written off and accepted as a loss, that is WOR = (value of loans written-off)/(average loan portfolio). Portfolio at Risk (PaR 30): The percentage of the total loan portfolio with more than 30 days in arrears.</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>D Equity cost: Return on Equity (ROE)</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>Average loan amount: The average outstanding loan amount per loan client at the end of a given year, thus, ALA = (Gross outstanding portfolio)/(Number of active credit clients). Conscious gender bias? Does the MFO report having a conscious gender bias? 1 being yes. Women percentage: The percentage of the clients being female or if this is not available, the percentage of the portfolio held by women.</td>
</tr>
<tr>
<td><strong>Breadth</strong></td>
<td>Total number of clients: The total number of clients active with the MFO. Number of credit clients: The number of credit clients at the end of the period.</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>Return on Assets: The return on assets (ROA) at the end of a given period.</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>Total voluntary savings: The clients’ total voluntary savings with the MFO as appeared in the balance sheet at the end of a given period and includes demand and fixed deposits. Loan products: The number of loan products offered by the MFO.</td>
</tr>
</tbody>
</table>

4. DATASET

The dataset has been constructed using rating reports made public at the [www.ratingfund.org](http://www.ratingfund.org).

Reports made by the following five rating agencies are included: MicroRate, Microfinanza, Planet Rating, Crisil and M-Cril. The methodologies applied by the rating agencies have been compared and no major differences in how they assess MFOs have been found. All the five agencies are approved official rating agencies by the Rating Fund of the Consultative Group to Assist the Poor (C-GAP) ([www.ratingfund.org](http://www.ratingfund.org)).

The fact that MFOs in the sample are rated means a certain selection bias in that the data is skewed towards the better performing MFOs. However, this is an advantage in our comparative analysis since much background “noise” like very small MFOs or development
programmes without the intention to apply microfinance in a business-like manner have been filtered out. This allows for more realistic comparisons of ownership types. Of the rated MFOs, most rating categories are represented in the data. On a uniform rating scale from 0-100%, the average rating grade is 52.8% with a standard deviation of 17.8%.

The rating reports making up the database are from 2000 to 2006 with the vast majority being from the last three years. The rating reports contain financial information for up to four years. The year the rating took place is reported as year 0, while the previous years are reported as year – 1, year -2 and year -3. As required, all numbers in the dataset have been annualized and converted to US$s using prevailing official exchange rates. The rating agencies differ in the information they make available in the reports. Thus, a different N on different variables and in different years is reported.

The dataset consists of 132 NGOs and 68 SHFs. Of the SHFs, 13 are banks and 55 are non-bank financial institutions (NBFIs). Both banks and NBFIs are usually, but not always, regulated by local banking authorities and allowed to intermediate some kinds of public deposits. Regional distribution of the MFOs in the dataset is provided in table 2.

<table>
<thead>
<tr>
<th>Region</th>
<th>SHFs</th>
<th>NGOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America and the Caribbean</td>
<td>25</td>
<td>59</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Asia</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>Africa</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68</strong></td>
<td><strong>132</strong></td>
</tr>
</tbody>
</table>

5. RESULTS AND DISCUSSIONS

Trade-offs in outreach?
With the specifications suggested in table 1, tables 3 and 4 show the averages of the five dimensions, while an ANOVA F test gives the significance level of the difference between the two group means. In each year, the extreme values for the debt/equity ratio have been filtered out, that is, cases with values above 20 and below zero are removed. Note that the dataset only contains data from year 0 on Conscious gender bias, the Women percentage and number of Loan products. Thus, these are only reported in year 0.

### Table 3: The average and standard deviation of the five dimensions of performance in shareholder owned firms (SHF) and non-governmental organisations (NGO), years 0 and -1

<table>
<thead>
<tr>
<th></th>
<th>SHF</th>
<th>NGO</th>
<th>F-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt/Equity ratio</td>
<td>3.646</td>
<td>2.137</td>
<td>115</td>
</tr>
<tr>
<td>Std</td>
<td>3.978</td>
<td>2.725</td>
<td>0.003</td>
</tr>
<tr>
<td>N</td>
<td>64</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Debt level</td>
<td>0.512</td>
<td>0.587</td>
<td>131</td>
</tr>
<tr>
<td>Std</td>
<td>0.319</td>
<td>0.283</td>
<td>0.096</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>0.267</td>
<td>0.295</td>
<td>130</td>
</tr>
<tr>
<td>Std</td>
<td>0.220</td>
<td>0.184</td>
<td>0.341</td>
</tr>
<tr>
<td>Cost of Funds Ratio</td>
<td>0.082</td>
<td>0.081</td>
<td>120</td>
</tr>
<tr>
<td>Std</td>
<td>0.059</td>
<td>0.087</td>
<td>0.951</td>
</tr>
<tr>
<td>Write-Off ratio</td>
<td>0.013</td>
<td>0.020</td>
<td>98</td>
</tr>
<tr>
<td>Std</td>
<td>0.017</td>
<td>0.043</td>
<td>0.318</td>
</tr>
<tr>
<td>PaR 30</td>
<td>0.057</td>
<td>0.052</td>
<td>130</td>
</tr>
<tr>
<td>Std</td>
<td>0.072</td>
<td>0.073</td>
<td>0.643</td>
</tr>
<tr>
<td>ROE</td>
<td>0.119</td>
<td>0.070</td>
<td>109</td>
</tr>
<tr>
<td>Std</td>
<td>0.235</td>
<td>0.389</td>
<td>0.407</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>701,230</td>
<td>562,292</td>
<td>699,577</td>
</tr>
<tr>
<td>Std</td>
<td>657,560</td>
<td>0.000</td>
<td>130</td>
</tr>
<tr>
<td>Conscious gender bias?</td>
<td>0.296</td>
<td>0.452</td>
<td>115</td>
</tr>
<tr>
<td>Std</td>
<td>0.461</td>
<td>0.500</td>
<td>0.054</td>
</tr>
<tr>
<td>Women percentage</td>
<td>0.677</td>
<td>0.758</td>
<td>55</td>
</tr>
<tr>
<td>Std</td>
<td>0.300</td>
<td>0.237</td>
<td>0.235</td>
</tr>
<tr>
<td>Clients</td>
<td>40900</td>
<td>17352</td>
<td>131</td>
</tr>
<tr>
<td>Std</td>
<td>98703</td>
<td>24891</td>
<td>0.011</td>
</tr>
<tr>
<td>Credit clients</td>
<td>25666</td>
<td>16839</td>
<td>131</td>
</tr>
<tr>
<td>Std</td>
<td>52383</td>
<td>24775</td>
<td>0.110</td>
</tr>
<tr>
<td>ROA</td>
<td>0.026</td>
<td>0.040</td>
<td>129</td>
</tr>
<tr>
<td>Std</td>
<td>0.088</td>
<td>0.094</td>
<td>0.313</td>
</tr>
<tr>
<td>Voluntary savings</td>
<td>5058490</td>
<td>26892</td>
<td>150334</td>
</tr>
<tr>
<td>Std</td>
<td>17479664</td>
<td>1450</td>
<td>0.002</td>
</tr>
<tr>
<td>Loan products</td>
<td>5,138</td>
<td>3,492</td>
<td>128</td>
</tr>
<tr>
<td>Std</td>
<td>4,391</td>
<td>2,234</td>
<td>0.001</td>
</tr>
</tbody>
</table>

|                         | Year -1   |           |        |
| Debt/Equity ratio       | 3.294     | 1,673     | 107    |
| Std                     | 3,150     | 1,700     | 0.000  |
| N                       | 54        | 56        |        |
| Debt level              | 0.526     | 0.549     | 121    |
| Std                     | 0.308     | 0.298     | 0.648  |
| Operating portfolio expense ratio | 0.285     | 0.320     | 114    |
| Std                     | 0.234     | 0.206     | 0.326  |
| Cost of Funds Ratio     | 0.080     | 0.082     | 100    |
| Std                     | 0.061     | 0.111     | 0.936  |
| Write-Off ratio         | 0.025     | 0.024     | 104    |
| Std                     | 0.039     | 0.035     | 0.875  |
| PaR 30                  | 0.064     | 0.061     | 112    |
| Std                     | 0.080     | 0.086     | 0.827  |
| ROE                     | 0.045     | 0.004     | 109    |
| Std                     | 0.261     | 0.495     | 0.583  |
| Average loan amount     | 680,869   | 626,179   | 886,786|
| Std                     | 627,311   | 0.000     | 112    |
| Clients                 | 27449     | 12350     | 15945  |
| Std                     | 72211     | 0.034     | 118    |
| Credit clients          | 20450     | 12200     | 16908  |
| Std                     | 49582     | 0.109     | 118    |
| ROA                     | 0.003     | 0.032     | 114    |
| Std                     | 0.121     | 0.115     | 0.141  |
| Voluntary savings       | 2969318   | 12893     | 84654  |
| Std                     | 8435670   | 0.000     | 115    |
Table 4: The average and standard deviation of the five dimensions of performance in shareholder owned firms (SHF) and non-governmental organisations (NGO), years -2 and -3

<table>
<thead>
<tr>
<th></th>
<th>SHF</th>
<th>NGO</th>
<th>F-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std</td>
<td>N</td>
</tr>
<tr>
<td>Year -2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>2,985</td>
<td>2,938</td>
<td>52</td>
</tr>
<tr>
<td>Debt level</td>
<td>0,485</td>
<td>0,339</td>
<td>54</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>0,305</td>
<td>0,280</td>
<td>51</td>
</tr>
<tr>
<td>Cost of Funds Ratio</td>
<td>0,076</td>
<td>0,052</td>
<td>46</td>
</tr>
<tr>
<td>Write-Off ratio</td>
<td>0,021</td>
<td>0,036</td>
<td>49</td>
</tr>
<tr>
<td>PaR 30</td>
<td>0,064</td>
<td>0,089</td>
<td>52</td>
</tr>
<tr>
<td>ROE</td>
<td>0,022</td>
<td>0,280</td>
<td>50</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>709,543</td>
<td>633,130</td>
<td>39</td>
</tr>
<tr>
<td>Clients</td>
<td>26575</td>
<td>70398</td>
<td>46</td>
</tr>
<tr>
<td>Credit clients</td>
<td>17650</td>
<td>41548</td>
<td>51</td>
</tr>
<tr>
<td>ROA</td>
<td>0,000</td>
<td>0,106</td>
<td>53</td>
</tr>
<tr>
<td>Voluntary savings</td>
<td>205263</td>
<td>5150219</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year -3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>3,031</td>
<td>3,164</td>
<td>37</td>
</tr>
<tr>
<td>Debt level</td>
<td>0,517</td>
<td>0,367</td>
<td>40</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>0,495</td>
<td>0,658</td>
<td>33</td>
</tr>
<tr>
<td>Cost of Funds Ratio</td>
<td>0,092</td>
<td>0,077</td>
<td>32</td>
</tr>
<tr>
<td>Write-Off ratio</td>
<td>0,015</td>
<td>0,021</td>
<td>31</td>
</tr>
<tr>
<td>PaR 30</td>
<td>0,070</td>
<td>0,085</td>
<td>38</td>
</tr>
<tr>
<td>ROE</td>
<td>-0,101</td>
<td>0,688</td>
<td>38</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>680,869</td>
<td>627,311</td>
<td>53</td>
</tr>
<tr>
<td>Clients</td>
<td>21495</td>
<td>55388</td>
<td>32</td>
</tr>
<tr>
<td>Credit clients</td>
<td>15148</td>
<td>34393</td>
<td>37</td>
</tr>
<tr>
<td>ROA</td>
<td>-0,016</td>
<td>0,180</td>
<td>40</td>
</tr>
<tr>
<td>Voluntary savings</td>
<td>1666170</td>
<td>3607646</td>
<td>42</td>
</tr>
</tbody>
</table>

Comments are made on all years together. The depth variables are the Average loan amount, the Conscious gender bias, and the Women percentage. Thus, if the depth is higher in NGOs, we expect to find a lower Average loan amount and higher values on the gender variables. We found a significant difference in the Conscious gender bias variable, but when it comes to Average loan amount and Women percentage, the expressed bias does not show up in practice. Note that N differs considerably between these two variables. The fraction of loans provided to women is surprisingly high in SHFs, about two thirds. Thus, the depth hypothesis is not supported.
Do we find the trade-offs with other dimensions? We found significant differences in debt costs. The debt/equity ratio is significantly higher in SHFs than in NGOs in all years. Likewise, the scope is lower in NGOs. We found significant differences in Voluntary Savings as well as in the number of Loan products. The differences are as predicted in our hypothesis. For the breadth dimension, we found significant differences for all clients, but for credit clients only for years -2 and -3. Probably, we need to consider the debt cost, breadth and scope together. Since NGOs are normally not regulated, they cannot accept deposits. This institutional aspect may explain the significant differences on the variables. Without access to deposits, NGOs have a smaller capital base to fund lending. Therefore we expect both the debt/equity ratio and the voluntary savings to be lower in NGOs.

On the other hand, we find some interesting similarities. For instance, the operating expense ratio is not significantly different in any year, and the ratio is in fact lower in SHFs only for the two most recent years. Thus, we cannot say that SHFs are managed in a more cost-effective manner than NGOs. A second similarity concerns equity costs, specified as ROE. These shows no significant difference in any year, and are lower in year -3 in SHFs. Furthermore, the length dimension, specified as ROA, is consistently higher in NGOs than in SHFs. But again, the differences are too small to be significant. However, the hypothesis was the reverse of what we found. Thus, it seems like the NGO does not sacrifice business opportunities in order to supply credit to poor clients. Perhaps, as a supplier with fewer products, it benefits from specialization.

Do these differences together confirm the trade-off hypothesis? No. The significant differences seem to conform more to the way the SHF and the NGO are regulated. Since most NGOs are not regulated by banking authorities, they cannot offer services to depositors. This
is in line with Hartarska and Nadolnyak (2007) who find that regulation per se does not affect the sustainability or outreach of the MFO, but it can have an indirect benefit if this is the only way for a MFO to access savings and thereby access funding.

If our hypothesis derived from Schreiner’s framework is correct, we would expect to see significant differences between the ownership types especially for depth. Yet, we find such a difference only for the intention of serving women, but this did not transform into a higher female share of loans or smaller loans from the NGO. Otherwise, the similarities between the two ownership groups indicate that both have found a sustainable business model for the microfinance market.

**Predicting ownership type**

We now test our hypothesis by considering performance dimensions simultaneously in logit regressions. While the comparisons of means are a partial analysis, the effects may show up more explicitly when all dimensions are considered together.

In table 5 we report results from logit regressions. The SHF and the NGO constitute the binary dependent variable ownership type. Since SHF is coded 0 and the NGO 1, a positive sign indicates a higher probability for detecting the NGO, a negative sign will pick out the SHF. Thus, from our hypothesis derived from Schreiner’s framework, we expect the depth to show a positive relationship to ownership type, while the other dimensions should show negative signs. Specifically, the ROA should be negative.

For the regressions, we have included only those variables that are continuous. These correspond to those variables for which we have observations for each year. For each
dimension, we have also restricted the inclusion of variables to only one, except for the cost dimension, where from table 1 we have several sub-groups. In these regressions, there are no control variables. Later, we perform robustness tests to check the results. Table 5 reports the estimates for ownership type.

Table 5: Logit calculations of organisational predictions. Years 0 to -3 when the binary variable ownership type contain SHF, coded as 0, and NGO, coded as 1

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>-1</th>
<th>-2</th>
<th>-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt level</td>
<td>-0.612</td>
<td>-0.949</td>
<td>-1.482</td>
<td>-2.128*</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>3.769**</td>
<td>2.407*</td>
<td>1.868*</td>
<td>2.615</td>
</tr>
<tr>
<td>Par 30</td>
<td>6.793</td>
<td>7.935*</td>
<td>5.217</td>
<td>7.745*</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.344</td>
<td>-0.455</td>
<td>-0.232</td>
<td>0.964</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Credit clients</td>
<td>0.000*</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>ROA</td>
<td>3.753</td>
<td>6.695*</td>
<td>2.912</td>
<td>0.954</td>
</tr>
<tr>
<td>Total voluntary savings</td>
<td>0.000**</td>
<td>0.000**</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.260</td>
<td>0.246</td>
<td>0.996</td>
<td>1.201</td>
</tr>
<tr>
<td>Observations</td>
<td>148</td>
<td>144</td>
<td>136</td>
<td>91</td>
</tr>
<tr>
<td>Classified correctly (%)</td>
<td>79.1</td>
<td>79.2</td>
<td>79.4</td>
<td>79.1</td>
</tr>
<tr>
<td>Omnibus Chi-sq (8) test</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>0.399</td>
<td>0.377</td>
<td>0.369</td>
<td>0.449</td>
</tr>
</tbody>
</table>

The omnibus $\chi^2(8)$ test is a Wald test for the null hypothesis that all coefficients in the equation are zero. We can reject this hypothesis in all specifications. The Nagelkerke $R^2$ measure shows how much is explained. This measure gives values that are usually much smaller than those in linear regression models. Therefore, the statistic shows satisfactory results. Also, the percentage of cases correctly classified indicates that the overall regression performs well. Hence, the power of our statistical model is strong.

Table 5 shows that our measure of depth, average loan amount, is not significant in any regressions. Overall, few significant results are obtained, indicating that it is difficult to pick out the type of ownership from the Schreiner (2002) dimensions. The negative debt level (year -3) and the positive operating portfolio expense ratio (years 0 to -2) have the correct
signs according to this hypothesis. So do the results for PaR30. But in table 5 the ROA (length dimension) is everywhere positive and also significant in year -1. This is contrary to the hypothesis that SHFs are more profit-oriented. Thus, although costs and risk are higher in the NGO, the NGO type of organisation seems to have developed a business model that has an ROA equivalent to or better than the SHF. This indicates that contrary to the hypothesis of longer SHF sustainability, the NGO should be as sustainable in the long term as the SHF.

Robustness checks

Are our results upset when other specifications are used? We run robustness tests when the debt/equity ratio is used instead of the debt level, (see table 6), and tests when ROE and ROA are removed in table 7. In the table 6 regressions, the extreme values of the debt/equity ratio are filtered out, that is, cases with negative values and ratios higher than 20 are removed.

Table 6: Logit calculations of ownership type. Years 0 to -3 when the binary dependent variable ownership type contains SHF, coded as 0, and NGO, coded as 1. Debt/equity ratio is used instead of debt level

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>-1</th>
<th>-2</th>
<th>-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>-0.097</td>
<td>-0.168*</td>
<td>-0.056</td>
<td>-0.021</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>3.576**</td>
<td>2.225</td>
<td>1.899</td>
<td>1.093</td>
</tr>
<tr>
<td>PaR</td>
<td>6.642</td>
<td>7.815*</td>
<td>4.215</td>
<td>10.725</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.368</td>
<td>-1.149</td>
<td>-0.265</td>
<td>1.244</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Credit clients</td>
<td>0.000*</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>ROA</td>
<td>3.319</td>
<td>7.978**</td>
<td>2.748</td>
<td>0.092</td>
</tr>
<tr>
<td>Total voluntary savings</td>
<td>0.000**</td>
<td>0.000*</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.323</td>
<td>0.159</td>
<td>0.416</td>
<td>0.036</td>
</tr>
<tr>
<td>Observations</td>
<td>145</td>
<td>142</td>
<td>134</td>
<td>82</td>
</tr>
<tr>
<td>Classified correctly</td>
<td>79.3</td>
<td>80.0</td>
<td>69.4</td>
<td>78.0</td>
</tr>
<tr>
<td>Omnibus Chi-sq (8) test</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>0.402</td>
<td>0.393</td>
<td>0.351</td>
<td>0.430</td>
</tr>
</tbody>
</table>

The results from table 6 parallel those in table 5 to a large extent, although we obtain fewer significant coefficients. The operating portfolio expense ratio, which was important in table 5, is very close to significance in years -1 and -2. The depth variable, average loan amount, is
not significant, and while the cost dimension variables, debt/equity ratio and operating portfolio expense ratio, are as predicted, the length variable ROA is positive and does not support the hypothesis. It is also interesting to note that the coefficient values are at about the same size level in both tables. This indicates that our results are robust.

We also performed tests of the relation with ROE and ROA alternatively removed in year 0. The reason is that these variables may be highly correlated. However, the tests in table 7 show that coefficients are barely altered, indicating that our results are robust.

Table 7: Robustness logit calculations of organisational predictions, varying ROE and ROA Year 0.

<table>
<thead>
<tr>
<th>Dependent Bank-Nf-NGO</th>
<th>All variables removed</th>
<th>ROE removed</th>
<th>ROA removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt level</td>
<td>-0.612</td>
<td>0.311</td>
<td>-0.854</td>
</tr>
<tr>
<td>Operating portfolio expense ratio</td>
<td>3.769**</td>
<td>2.264*</td>
<td>3.753**</td>
</tr>
<tr>
<td>Portfolio at Risk (PaR 30),</td>
<td>6.793</td>
<td>8.193*</td>
<td>6.303</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.344</td>
<td></td>
<td>0.097</td>
</tr>
<tr>
<td>Average outstanding loan amount</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Credit clients</td>
<td>0.000*</td>
<td>0.000</td>
<td>0.000*</td>
</tr>
<tr>
<td>ROA</td>
<td>3.753</td>
<td>5.161**</td>
<td></td>
</tr>
<tr>
<td>Total voluntary savings</td>
<td>0.000**</td>
<td>0.000**</td>
<td>0.000**</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.260</td>
<td>-0.495</td>
<td>0.062</td>
</tr>
<tr>
<td>Observations</td>
<td>148</td>
<td>179</td>
<td>149</td>
</tr>
<tr>
<td>Classified correctly</td>
<td>79.1</td>
<td>74.8</td>
<td>78.5</td>
</tr>
<tr>
<td>Omnibus Chi-sq (8) test</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>0.399</td>
<td>0.354</td>
<td>0.405</td>
</tr>
</tbody>
</table>

Last, we performed several tests that are not reported. Instead of ROE and ROA, we used the adjusted values presented in some rating reports. Instead of the average loan amount, we adjusted the figure by GDP per capita. Instead of the debt level, we used the cost of funds. None of these tests contradict the results already found in tables 5 and 6. The reason for not using adjusted variables in the first place is the loss of observations. This is important, since statistically speaking, the number of observations is already low. The same is the case for control variables. But with the satisfactory robustness results, we consider these shortcomings of minor importance.
Taken together, the Schreiner (2002) dimensions are not successful in differentiating between ownership types. The hypothesis is rejected. NGOs are not more socially oriented than SHFs.

6. CONCLUSION

We have studied whether ownership type influences the performance of microfinance organizations. Our overall conclusion is that it doesn’t. NGOs are not more socially oriented than SHFs, nor are SHFs more commercial oriented than NGOs. We concur with Dichter (1996) when he observed that many NGOs involved in microfinance are driven by the same economic rationality as any other bank. We have tested the hypothesis that greater depth in the NGO is traded off against lower length, breadth and scope of operations. We could not support the hypothesis in partial tests of equality of means in sub-groups of NGOs and SHFs, or in multi-variate logit regressions, where the dependent variable is the ownership type containing the NGO and the SHF. In the partial analysis, the differentiating variables are associated with the access to deposits, which many NGOs are denied, and in the logit regressions, the depth variable average loan is nowhere significant, and significant variables contradict the hypothesis. The overall conclusion is that our hypothesis is rejected. NGOs are not more socially oriented than SHFs. Instead, we believe that the NGOs in our sample have found a viable business model that gives NGOs sustainability. The reason is that the ROA is on par, or better, than in SHFs. This indicates that other mechanisms like for instance competition as well as pressure from other sources of finance like donors and debt holders may drive the performance of MFOs as much as ownership. Thus, a more comprehensive understanding of corporate governance in relation to MFOs seems needed.
The NGOs in our sample represent commercial and business oriented organizations willing to be rated by third party rating agencies. This is not representative for all NGOs in microfinance. Nevertheless, our empirical study does not support policy advocates’ preferences for SHFs. Also NGOs can be sustainable, well performing MFOs. Recommending NGOs to become SHFs seems to be premature. A revision of policy guidelines is recommended. Adaptation of legal frameworks allowing well-performing NGOs to mobilize savings appears to be a better option than transformation, if the objective is to increase NGOs’ scale and scope.

Our results contradict established paradigms and policy guidelines in the industry. However, the results are not necessarily surprising. As indicated in the theory section, ownership theories do not predict a clear preference for one type of ownership in the microfinance market. This is further supported by findings in general banking markets as well as the pro-poor banking history, indicating that mutual and non-profit ownership can compete successfully with investor ownership. Furthermore, our results are in line with recent findings in Cull et al (2007) and Hartarska (2005). Nevertheless, we welcome more studies to confirm or question our findings. Furthermore, we call for studies on how to adapt legal frameworks so as to allow well-performing NGOs to mobilize savings. We also encourage qualitative and quantitative studies to compare the governance systems and their effect in SHFs and NGOs.
REFERENCES


PERFORMANCE AND GOVERNANCE

IN MICROFINANCE INSTITUTIONS‡

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Keywords:

Microfinance, MFI, governance, performance, boards, ownership

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ABSTRACT

We examine the relationship between firm performance and corporate governance in microfinance institutions (MFI) using a self-constructed global dataset on MFIs collected from third-party rating agencies. Using random effects panel data estimations, we study the effects of board and CEO characteristics, firm ownership type, customer-firm relationship, and competition and regulation on an MFI’s financial performance and outreach to poor clients. We find that financial performance improves with local rather than international directors, an internal board auditor, and a female CEO. The number of credit clients increase with CEO/chairman duality. Outreach is lower in the case of lending to individuals than in the case of group lending. We find no difference between non-profit organisations and shareholder firms in financial performance and outreach, and we find that bank regulation has no effect. The results underline the need for an industry specific approach to MFI governance.
1. INTRODUCTION

In this paper, we investigate the impact of governance mechanisms on microfinance institutions’ (MFIs) dual missions of financial sustainability and providing banking services to micro-enterprises and low-income families. We identify three dimensions to this problem: a vertical dimension between owners and management, a horizontal dimension between the MFI and its customers, and an external governance dimension. Recommendations for better governance are made primarily for the first and third dimensions. For example, Rock et al. (1998), Otero and Chu (2002), and Helms (2006) suggest importing best practices in governance from developed countries, such as board independence and shareholder ownership. Van Greuning et al. (1999) and Hardy et al. (2003) argue for better MFI regulation.

However, problems of credit risk assessment and repayment\(^1\) make governance of firm-customer interactions potentially more important in banking than in other industries (Adams and Mehran, 2003b). This is the focus in the present study. For example, if an MFI has a high percentage of female loan clients, should it adjust its governance accordingly? Group lending is seen as a method to ensure repayment (Armendariz de Aghion and Morduch, 2005). Is an MFI’s financial performance enhanced when the MFI supplies its customers primarily with group loans?

We use recently released data from third-party rating agencies, yielding a unique dataset of 278 MFIs from 60 countries between 1998 and 2007. Thus, we respond to Morduch (1999) and Hartarska’s (2005) requests for the use of better data in the analysis of microfinance questions.

\(^1\) Two factors make an MFI’s loan portfolio different from that of a bank. First, it is generally semi- or uncollateralised. Second, repayment time is generally short. Thus, an MFI faces the risk of steep deterioration of its portfolio in a matter of only a few weeks.
Microfinance is high on the public agenda after the UN Year of Microcredit in 2005 and the awarding of the Nobel Peace Prize to Mohammad Yunus and the Grameen Bank in 2006. Nevertheless, microfinance still reaches only a fraction of the world’s poor (Robinson, 2001; Christen et al., 2004). Helms (2006) and the Consultative Group to Assist the Poor (CGAP 2004, 2006) consider the lack of strong MFIs to be a major constraint on the further development of the microfinance industry, and CSFI (2008) identifies governance as a major obstacle to MFI growth.

Few studies have been published on corporate governance in MFIs. Hartarska (2005) investigates the relationship between governance mechanisms and financial and outreach performance, using three surveys of rated and unrated Eastern European MFIs between 1998 and 2002. Governance mechanisms include board characteristics, CEO compensation, and ownership type. Hartarska (2005) includes several institutional and firm control variables and finds that a more independent board gives a better return on assets (ROA). However, a board with employee directors results in lower financial performance and outreach. The difference in financial performance and outreach between various ownership types is negligible.

Cull et al. (2007) also investigate MFI financial performance and outreach by focusing on lending methodology. They use data from 124 MFIs around the world and find that financial performance improves, up to a point, with individual loans, and that MFIs concentrate more on individual loans. Governance variables, such as board characteristics or ownership type, are not considered.

2 Ownership type refers to the various legal incorporations found in MFIs, ranging from shareholder-owned firms to cooperatives.

3 Lending methodology refers to the way loans are given. The categories used are individual loans, group loans, and village banks, which are larger groups of approximately 20 members.
Our study is therefore justified by the neglect of the MFI-customer dimension, the limited number of academic studies available, our large and comprehensive global dataset, and the fact that some governance mechanisms, like competition and internal board auditor, remain unexplored in the literature.

Our findings indicate that most corporate governance mechanisms have little impact on MFIs’ financial and outreach performance. However, results show that financial performance improves when the board is informed by an internal auditor and has local directors, and when the CEO is a woman. For outreach, measured by the number of credit customers and average loan amount, CEO/chairman duality increases the number of credit clients. Outreach is reduced with individual lending. Generally, there is no difference between non-profit organisations and shareholder firms in either financial performance or outreach. Similarly, bank regulation also does not seem to have an impact on financial and outreach performance.

This paper proceeds as follows. Section 2 develops our hypotheses. Section 3 presents an overview of the data sources and estimation method, and descriptive evidence is reported in Section 4. Section 5 presents econometric evidence. Section 6 concludes and proposes a new research agenda.

2. GOVERNANCE AND PERFORMANCE IN MFIs

Governance is about achieving corporate goals. The first goal of MFIs is to reach more clients in the poorer strata of the population, and the second goal is financial sustainability. We analyse the relationship between governance mechanisms and both outreach and financial performance. Financial performance is assessed in terms of overall profitability, through such measures as
return on assets (ROA⁴), operational self-sufficiency (OSS⁵), revenues (portfolio yield), and operational costs (Christen, 2000). Using these measures enables us to pinpoint more clearly under what conditions a particular governance mechanism is effective. The outreach measures are the MFI’s average outstanding loan and the number of credit clients served (Schreiner, 2002). Table 1 summarises the dependent variables.

Table 1: Descriptive statistics for dependent variables used in the analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.015</td>
<td>0.126</td>
<td>-0.898</td>
<td>0.790</td>
<td>891</td>
<td>(Net operating income)/(Average annual assets)</td>
</tr>
<tr>
<td>OSS</td>
<td>1.119</td>
<td>0.384</td>
<td>0.076</td>
<td>2.949</td>
<td>614</td>
<td>(Revenue from operations)/(Financial expense + loan loss expense + operating expense)</td>
</tr>
<tr>
<td>Portfolio yield</td>
<td>0.391</td>
<td>0.202</td>
<td>0.033</td>
<td>1.825</td>
<td>895</td>
<td>(Interest revenue)/(Average loan portfolio)</td>
</tr>
<tr>
<td>Operational costs</td>
<td>0.314</td>
<td>0.263</td>
<td>0.028</td>
<td>3.507</td>
<td>867</td>
<td>(Operating expenses)/(Average loan portfolio)</td>
</tr>
<tr>
<td>Average loan</td>
<td>788</td>
<td>1377</td>
<td>2</td>
<td>24589</td>
<td>895</td>
<td>(Loan portfolio)/(Number of credit clients)</td>
</tr>
<tr>
<td>Credit clients</td>
<td>12805</td>
<td>26861</td>
<td>74</td>
<td>394374</td>
<td>905</td>
<td>Number of credit clients</td>
</tr>
</tbody>
</table>

The table confirms the high (nominal) portfolio yield usually experienced in MFIs. Thus, an average of nearly 40% is not surprising in these markets. All returns in the regression analysis are adjusted for inflation. Thus, we use real rates for ROA \([(ROA – inflation) / (1 + inflation)]\) and portfolio yield. The average loan reflects the “micro” in microfinance. The lowest loan amount is US $2.22, the average loan amount is US $788, and the median is US $441. The maximum amount of approximately US $25,000 is an extreme case, which is twice the amount of the next largest loan. We filter out the extreme cases above US $10,000 and adjust the remaining loans to purchasing power parity GDP (World Economic Outlook, IMF).

⁴ Debt/equity levels differ considerably between MFIs. Hence, ROA is more appropriate than ROE (return on equity) when measuring financial results across different institutions. ROA is calculated based on operational profits before donations and taxes.

⁵ OSS is a widely used proxy for institutional sustainability. Table 1 gives its definition.
Incentive problems in a bank have at least two dimensions: one between the owner(s) and management (including the board), and the other between the MFI and its customers (Macey and O’Hara, 2003). Overviews by Becht et al. (2003) and Hermalin and Weisbach (2003) show that governance in the owner-board dimension is important in general, while Rock et al. (1998), Otero and Chu (2002), and Helms (2006) underline its importance specifically in microfinance. In the MFI-customer dimension, an MFI is subject to problems of credit risk assessment and repayment because credit clients typically have little or no collateral (Armendariz de Aghion and Morduch, 2005). Microfinance initiatives find new ways to deal with these problems through group lending, character lending, and the gradual building of a credit history. In group lending, using either solidarity groups or village banks, the MFI delegates much of the screening and monitoring efforts to the group. In contrast, the customers’ relationship with the MFI is more direct in individual lending. Furthermore, the special nature of banks as providers of a financial infrastructure often requires public regulation of the bank-customer relationship. Studying the governance of MFIs therefore requires three considerations: the relationship between the owner(s) and the board, the relationship between the MFI and its customers, and the external conditions of competition and regulation.

Table 2 summarises the independent variables, their definitions, and the hypotheses relating to financial performance and outreach.
Table 2: Definitions of independent variables and their hypothesised sign with respect to financial performance (FinP) and outreach firm performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Explanation</th>
<th>Hypothesis</th>
<th>FinP</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/chairman duality</td>
<td>CEO and chairman are the same person</td>
<td>+/-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>International directors</td>
<td>International directors divided by board size</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Internal board auditor</td>
<td>A dummy with the value 1 if the MFI has an internal auditor reporting to the board</td>
<td>+</td>
<td>-/+</td>
<td></td>
</tr>
<tr>
<td>Board size</td>
<td>The number of directors</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SHF</td>
<td>A dummy indicating a shareholder firm when 1</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Female CEO</td>
<td>A dummy indicating a female when 1</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Individual loan</td>
<td>A dummy with the value 1 if loans are made mainly to individuals</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Competition</td>
<td>A self-constructed measure of the local level of competition</td>
<td>-</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Bank regulated</td>
<td>A dummy with the value 1 if the MFI is regulated by banking authorities</td>
<td>-/+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Urban market</td>
<td>A dummy with the value 1 if the market served is urban only</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MFI age</td>
<td>Years of experience as an MFI</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Portfolio at risk</td>
<td>The fraction of the portfolio with more than 30 days in arrears</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Firm size</td>
<td>The natural logarithm of assets</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Human Development Index (HDI)</td>
<td>A composite country index covering life expectancy, education, and income (GDP per capita)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The remainder of this section discusses the three dimensions of governance. First, the owner-board dimension concerns board composition and ownership type. Board composition variables are CEO/chairman duality, international directors, internal auditor, and board size. Ownership type is a dummy variable for a shareholder-owned MFI.

CEO/chairman duality may be a sign of CEO entrenchment (Hermalin and Weisbach, 1991, 1998), in which the CEO can pursue policies that yield private benefits. The Cadbury Committee (1992) advises against this duplication in roles. However, duality may enhance decision-making effectiveness. This ambiguity may explain why Brickley et al. (1997) do not find that firms with a CEO-chairman separation outperform those with CEO/chairman duality. Oxelheim and Randøy (2003) find that firm performance improves with the presence of international directors.
Steinwand (2000) recommends an internal auditor in the MFI who reports directly to the board. Ideally, the internal auditor provides the board with independent, objective assessments on the MFI operations. This should improve financial and social performance.

A larger board may induce members to free-ride in their monitoring responsibility, allowing the CEO greater independence. Yermack (1996) and Eisenberg et al. (1998) report that larger boards are associated with lower firm performance, measured as Tobin’s $Q$ or ROA. Hartarska (2005) confirms the result in ROA regressions for MFIs. Adams and Mehran (2003a) present contrary evidence from banking firms in the USA. Many MFIs are non-profit organizations (NPOs). Handy (1995) proposes that board members in NPOs offer their reputation as collateral and Speckbacher (2008) argues that NPOs need larger boards because they lack owners with monetary incentives to monitor their investments. Similar to Hartarska’s findings (2005), we expect a larger board to reduce firm performance.

Legal incorporation or ownership type may play a role in MFI performance. Similar to regular banking (Rasmussen, 1988; Hansmann, 1996), ownership of MFIs differs significantly (Labie, 2001; Mersland, forthcoming). NPOs are often considered to be weaker structures because they lack owners with a financial stake in operations (Jansson and Westley, 2004), which leads to lower financial performance than that of shareholder firms (SHFs). Accordingly, Ledgerwood and White (2006) and Fernando (2004) argue for the transformation of NPOs into SHFs. However, NPOs are believed to be more effective at reaching poor customers. These findings imply that SHFs should show better financial performance but reach fewer poor clients than NPOs. However, Mersland and Strøm (2008) find that SHFs and NPOs perform equally well. The incentive problems between owners and managers may be more pronounced in NPOs, but NPOs have the compensatory benefit of reducing adverse selection of customers and avoiding moral hazard (Hansmann, 1996; Desrochers and Fischer, 2002; Mersland, forthcoming) because they are better able to tap into local information networks. Evidence in Caprio and
Vittas (1997) and Cull et al. (2006) confirms this. Many SHFs are not run according to the shareholder value model, since they may be committed to reaching the poor (Reille and Forster, 2008). If this were true, we would expect to confirm the findings of Valnek (1998), Crespi et al. (2004), and Mersland and Strøm (2008) that NPOs perform as well as SHFs.

Allen and Gale (2000) caution about the effectiveness of monitoring; they note that the board’s monitoring is often ineffective due to the firm’s financing out of retained earnings. Owners may find it advantageous to yield control to the CEO. They show that this is more relevant when the business uncertainty is greater and the divergence is smaller between the interests of the CEO and of the owners. This may be relevant for the microfinance field because the information asymmetry between the board and the CEO is likely to be large, and because the owners, board, and managers may share the same goals. Many MFIs are monitored by an agent and not a principal, since they are funded by back-donors or taxpayers. Furthermore, many MFIs often struggle with identifying board members who have an appropriate background and who are willing and able to dedicate the necessary time to monitor management effectively (Labie, 2001). Thus, we expect governance in the owner-board dimension to be less important than in the MFI-customer dimension.

This encourages an emphasis on the CEO in the MFI-customer dimension. One of the innovations in microfinance has been the targeting of female customers (Armendariz de Aghion and Morduch, 2005). Female customers constitute approximately 73% of our data. We presume that a female CEO is better at obtaining information from predominantly female customers than is a male CEO, and we expect that this improved knowledge influences the MFI’s operational costs and overall profitability and outreach.

The loan methodology, group or individual lending, is another aspect of the MFI-customer dimension. Armendariz de Aghion and Morduch (2005) point out that group lending may
increase the repayment rate because it leads to positive assortative matching. In other words, the best credit risk groups naturally come together as a result of local knowledge of trustworthiness. When this is the case, we should expect group lenders to show better firm performance. However, Cull et al. (2007) find that individual lenders enjoy the highest financial returns, whereas group lenders show greater outreach to poorer customers. We expect these empirical findings to hold in the present study.

Stakeholders on the board arguably influence the governance of an MFI. Hartarska (2005) finds that employee directors are negatively related to financial performance and outreach. In our data, stakeholder representation is surprisingly low, ranging from 2% for debt-holder representation to 11% for customers. Employee directors are found in 7% of MFIs, and donor directors in 9%. We also find that no stakeholder group improves firm performance or outreach (unpublished data).

External governance mechanisms, such as product market competition and regulation, may be relevant for microfinance. In general, the more intense the competition, the less owners need internal governance mechanisms (Hart, 1983; Schmidt, 1997). However, Nickell (1996) argues that because increased competition may reduce costs, the negative effect of lower product prices may be outweighed. Therefore, the effect on performance is uncertain. Petersen and Rajan (1995) argue that the bank earns rent on survivors in long-term relationships. When relationships are undermined by competition, banks terminate lending to risky and costly customers. This can reduce outreach, and Berger and Udell (1998) confirm this for smaller firms, and McIntosh and Wydick (2005) do likewise for MFIs.

Many MFIs are not regulated. Van Greuning et al. (1999) recommend a step-wise regulatory approach that reflects the heterogeneity of MFIs and their operating conditions. A regulated MFI is more likely to earn customers’ trust, which should lead to improved financial
performance. On the other hand, regulation is associated with costs like security requirements, investments in information technology, and the stifling of MFI innovations. Thus, such costs may outweigh the benefits (Hardy et al., 2003). When regulated, the MFIs gain access to low-cost depositor funding. Hence, the effect on financial performance is uncertain, as is the effect on outreach. Hartarska and Nadolnyak (2007) confirm that regulation has no direct effect on social and financial performance of MFIs, but may indirectly affect outreach if regulated MFIs are allowed the mobilisation of savings.

These considerations indicate the importance of taking into account firm-specific control variables. Therefore, in the present study, we include the following: weights of urban and rural lending, MFI experience, portfolio risk, and firm size. The 2004 Human Development Index (Human Development Report, 2006) is used to control for country-specific effects.

3. DATA ISSUES AND METHODOLOGY

The dataset contains information from risk assessment reports from five microlender rating agencies, MicroRate, Microfinanza, Planet Rating, Crisil, and M-Cril, and their reports can be found at www.ratingfund.org. All five are approved as official rating agencies by the Ratingfund of the C-GAP. Their rating methodology reveals no major difference in MFI assessment relevant to variables used in this study.

The rating agency obtains, at most, four years of financial data, along with data on the MFI’s characteristics, such as board size and composition, at each rating. The reports in the database cover 278 MFIs from 60 countries\(^6\) gathered from 2000 to 2007, with the vast majority from

\(^6\) The country list is available from the authors upon request.
the last four years. When necessary, all entries in the dataset have been annualised and dollarised using official exchange rates.

The use of rating data may introduce sample selection bias. Few larger regulated microfinance banks are included in the dataset, since they have funders who demand traditional credit ratings offered by agencies such as Standard & Poor’s. Moreover, neither the virtually endless number of small savings and credit cooperatives nor development programs offering microcredit solely as a social service are included. The 278 MFIs in the dataset represent commercial and professionally oriented institutions that have decided to be rated to improve access to funding, benchmark themselves against others, and increase transparency (see www.ratingfund.org). We consider our data, which were collected by third parties, to be more reliable than self-reported data sources like Mixmarket (www.mixmarket.org) or questionnaires. Compared to the MFIs included in Mixmarket Annual MFI Benchmarks (2006), the MFIs in our sample are younger (7 vs. 9 median years), smaller (median total assets $2.9 million vs. $6.2 million), have fewer credit clients (4,900 vs. 10,000), and have smaller loan portfolios ($2.1 million vs. $4.4 million), yet the median average loan is approximately the same ($433 for our dataset vs. $456 for the Mixmarket data). Comparing averages between the two is not meaningful, since the Mixmarket data contain more of the very large MFIs. Overall, our data seem sufficiently representative. Specifically, we avoid a large firm bias.

The panel data are structured such that annual observations of the financial variables are available for up to four consecutive years; however, because the governance variables are often reported only once, they must be assumed to be constant over the whole period. For example, board variables are constant. We estimate coefficients using the random effects method (Greene, 2003) from the model:
\[ y_{it} = X_{it}' \beta + (\alpha + u_i) + \varepsilon_{it} \]  

(1)

Here, \( \alpha \) is the mean of unobserved heterogeneity, \( u_i \) is heterogeneity specific to firm \( i \), \( \varepsilon_{it} \) is the remaining firm-year heterogeneity, \( y_{it} \) is the dependent variable, and \( X_{it}' \beta \) is the vector of explanatory variables and the vector of coefficients, respectively. This formulation implies that the constant term in the regression must be interpreted as the average firm-year heterogeneity.

The random effects method transforms the original data. For example, using \( y_{it} \), the dependent variable for the \( i^{th} \) case in year \( t \), the transformed \( y_{rit} \) is:

\[ y_{rit} = \frac{1}{\sigma_z} \left( y_{it} - \bar{y}_i \right) \text{ where } \theta = 1 - \frac{\sigma_z}{\sqrt{\sigma_z^2 + T\sigma_u^2}} \]  

(2)

Here, \( \bar{y}_i \) is the individual firm average and \( \sigma_z \) is the standard deviation of the residual \( \varepsilon_{it} \), which is assumed to be constant. \( \sigma_u \) is the standard deviation of firm heterogeneity, and it is also assumed to be constant. \( T \) is the number of years of data, which, in this case, equals four.

We calculate these standard deviations by first running a generalised least squares (GLS) regression assuming a random effects structure, carry out the transformations above, and then run a three-stage least squares procedure (3SLS; Greene, 2003) on the transformed data. The full procedure produces roughly the same coefficients as the original GLS regression, but the standard errors are smaller. Since the posited relationships, if they exist, are linear, the 3SLS is a valid method. One advantage of the 3SLS is that this method does not require assumptions of distributional form.
4. DESCRIPTIVE EVIDENCE

Table 3 shows the main values of the explanatory variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/chairman duality</td>
<td>0.147</td>
<td>0.355</td>
<td>0.000</td>
<td>1.000</td>
<td>238</td>
</tr>
<tr>
<td>International directors</td>
<td>0.576</td>
<td>1.216</td>
<td>0.000</td>
<td>6.000</td>
<td>210</td>
</tr>
<tr>
<td>Internal board auditor</td>
<td>0.496</td>
<td>0.501</td>
<td>0.000</td>
<td>1.000</td>
<td>226</td>
</tr>
<tr>
<td>Female CEO</td>
<td>0.235</td>
<td>0.425</td>
<td>0.000</td>
<td>1.000</td>
<td>234</td>
</tr>
<tr>
<td>Board size</td>
<td>7.391</td>
<td>3.765</td>
<td>2.000</td>
<td>33.000</td>
<td>248</td>
</tr>
<tr>
<td>SHF</td>
<td>0.285</td>
<td>0.452</td>
<td>0.000</td>
<td>1.000</td>
<td>277</td>
</tr>
<tr>
<td>Bank regulation</td>
<td>0.317</td>
<td>0.466</td>
<td>0.000</td>
<td>1.000</td>
<td>278</td>
</tr>
<tr>
<td>Competition</td>
<td>4.414</td>
<td>1.626</td>
<td>1.000</td>
<td>7.000</td>
<td>256</td>
</tr>
<tr>
<td>Individual loan</td>
<td>0.536</td>
<td>0.500</td>
<td>0.000</td>
<td>1.000</td>
<td>261</td>
</tr>
<tr>
<td>Urban market</td>
<td>0.363</td>
<td>0.482</td>
<td>0.000</td>
<td>1.000</td>
<td>267</td>
</tr>
<tr>
<td>MFI age</td>
<td>9.201</td>
<td>7.327</td>
<td>0.000</td>
<td>79.000</td>
<td>964</td>
</tr>
<tr>
<td>Portfolio at risk (30)</td>
<td>0.071</td>
<td>0.105</td>
<td>0.000</td>
<td>0.980</td>
<td>839</td>
</tr>
<tr>
<td>Human Dev. Index</td>
<td>0.684</td>
<td>0.120</td>
<td>0.338</td>
<td>0.863</td>
<td>274</td>
</tr>
</tbody>
</table>

The table shows that the number of observations of most independent variables is much smaller than for the dependent variables in table 1 because the former often represent fixed firm characteristics.

The mean of many of the variables can be interpreted as the percentage of firms in the category. Thus, 28.9% are shareholder-owned firms. Based on international comparison, the average board size of 7.33 directors is low. In addition, CEO/chairman duality is low. Half of MFIs in our sample have an internal auditor reporting to the board, which is also low given the importance given to this measurement in microfinance policy.

23.5% of CEOs are women. This is a very high percentage, which may reflect the high percentage of female customers (73%). More than half of the MFIs emphasise individual loans.

7 58.1% of the sample consists of non-profit, non-governmental MFIs, and the remainder is cooperatives, state banks, and “other” institutions.
This is a surprising finding because group lending is considered to be one of the hallmarks of microfinance.

Banking authorities regulate 34.9% of MFI firms. Our seven-point competition measure shows that the firm’s average subjective experience of competition is high. The measure is based on on-site evaluations by raters, which we transform into a common 1-7 scale.

The urban market variable shows that 36.3% of MFIs concentrate efforts solely in urban markets. This is a surprisingly low percentage, considering the difficulties in reaching rural areas (Helms, 2006). 22.5% of MFIs serve only rural markets, and 41.2% serve both. We also see that the typical MFI is young, although one institution can trace its microfinance activity to 1923, when it began to give loans to small farmers. However, MFIs have generally had little time to build up a relationship with their customers.

The Human Development Index (HDI) minimum and maximum values show that firms come from a wide variety of country backgrounds. The inclusion of the HDI may capture some of their institutional differences.

Table 4 presents correlations between explanatory variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Int. dir.</th>
<th>Intern audit size</th>
<th>Board size</th>
<th>Femal Indiv.</th>
<th>Bank Regul.</th>
<th>Comp Marke age</th>
<th>PaR30 Assets</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/chair.</td>
<td>-0.128</td>
<td>0.054</td>
<td>-0.026</td>
<td>0.020</td>
<td>0.029</td>
<td>-0.089</td>
<td>-0.037</td>
<td>0.045</td>
</tr>
<tr>
<td>Internat. Dir.</td>
<td>0.174</td>
<td>-0.149</td>
<td>0.219</td>
<td>-0.010</td>
<td>-0.034</td>
<td>0.120</td>
<td>-0.062</td>
<td>-0.113</td>
</tr>
<tr>
<td>Internal auditor</td>
<td>-0.137</td>
<td>0.184</td>
<td>-0.002</td>
<td>0.096</td>
<td>0.168</td>
<td>0.199</td>
<td>-0.192</td>
<td>0.100</td>
</tr>
<tr>
<td>Board size</td>
<td>-0.206</td>
<td>0.169</td>
<td>-0.185</td>
<td>-0.008</td>
<td>-0.221</td>
<td>0.034</td>
<td>0.009</td>
<td>0.004</td>
</tr>
<tr>
<td>SHF</td>
<td>-0.170</td>
<td>0.144</td>
<td>0.503</td>
<td>0.020</td>
<td>0.114</td>
<td>-0.061</td>
<td>-0.081</td>
<td>0.198</td>
</tr>
<tr>
<td>Female CEO</td>
<td>-0.095</td>
<td>-0.059</td>
<td>-0.086</td>
<td>-0.123</td>
<td>-0.069</td>
<td>-0.062</td>
<td>-0.096</td>
<td>0.161</td>
</tr>
<tr>
<td>Individual loan</td>
<td>0.172</td>
<td>0.077</td>
<td>0.049</td>
<td>0.015</td>
<td>0.120</td>
<td>0.162</td>
<td>0.272</td>
<td></td>
</tr>
<tr>
<td>Bank regul.</td>
<td>0.014</td>
<td>0.191</td>
<td>0.066</td>
<td>-0.045</td>
<td>0.195</td>
<td>-0.174</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>-0.120</td>
<td>0.089</td>
<td>0.053</td>
<td>0.125</td>
<td>-0.053</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban market</td>
<td>-0.065</td>
<td>-0.243</td>
<td>-0.007</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFI age</td>
<td>0.180</td>
<td>0.424</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PaR30</td>
<td>0.106</td>
<td>-0.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>-0.085</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bold: Correlation is significant at the 0.05 level (2-tailed).

Bold and italics: Correlation is significant at the 0.01 level (2-tailed).
Many correlations are significant. The question is whether multi-collinearity is strong enough to invalidate the simultaneous inclusion of these variables in regressions. Kennedy (2008) states that multi-collinearity is a problem when the correlation coefficient is above 0.70, which is not the case here. In addition, since panel data estimation gives more data points, the multi-collinearity problem here is reduced even further (Hsiao, 2003).

5. ECONOMETRIC EVIDENCE

We report results from random effects panel data estimations of the relationships between financial performance and outreach, as well as the variables in the three dimensions of governance from Table 3.

Financial performance

Table 5 shows results from regressions with ROA, OSS, portfolio yield, and operational costs as dependent variables.
Table 5: Return on assets (ROA), operational self-sufficiency (OSS), portfolio yield (PY), and operational costs (OC) explained by board characteristics, internal and external governance mechanisms, and firm and economy characteristics. 3SLS random effects estimation of panel data spanning 1998 to 2007.

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>OSS</th>
<th>PY</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.418&quot;</td>
<td>-0.411&quot;</td>
<td>-0.104**</td>
<td>1.140**</td>
</tr>
<tr>
<td>CEO/chairman duality</td>
<td>-0.032</td>
<td>-0.154</td>
<td>0.118**</td>
<td>0.074</td>
</tr>
<tr>
<td>International directors</td>
<td>-0.010</td>
<td>-0.095**</td>
<td>0.010</td>
<td>0.037**</td>
</tr>
<tr>
<td>Internal board auditor</td>
<td>0.022</td>
<td>0.133*</td>
<td>-0.034</td>
<td>-0.018</td>
</tr>
<tr>
<td>Board size</td>
<td>-0.001</td>
<td>-0.005</td>
<td>-0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>SHF</td>
<td>-0.012</td>
<td>-0.129</td>
<td>-0.011</td>
<td>0.027</td>
</tr>
<tr>
<td>Female CEO</td>
<td>0.053**</td>
<td>0.215&quot;</td>
<td>0.059</td>
<td>-0.036</td>
</tr>
<tr>
<td>Individual loan</td>
<td>0.034</td>
<td>0.014</td>
<td>-0.026</td>
<td>-0.039</td>
</tr>
<tr>
<td>Competition</td>
<td>0.011</td>
<td>-0.011</td>
<td>0.022</td>
<td>0.004</td>
</tr>
<tr>
<td>Bank regulation</td>
<td>0.005</td>
<td>0.056</td>
<td>0.019</td>
<td>0.015</td>
</tr>
<tr>
<td>Urban market</td>
<td>0.001</td>
<td>0.090</td>
<td>0.066*</td>
<td>0.044</td>
</tr>
<tr>
<td>MFI experience</td>
<td>0.000</td>
<td>-0.010&quot;</td>
<td>-0.002</td>
<td>-0.003</td>
</tr>
<tr>
<td>Portfolio at risk (30)</td>
<td>-0.085</td>
<td>0.436**</td>
<td>-0.132&quot;</td>
<td>-0.131&quot;</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.026&quot;</td>
<td>0.119&quot;</td>
<td>0.006</td>
<td>-0.078&quot;</td>
</tr>
<tr>
<td>Human dev. Index</td>
<td>-0.100</td>
<td>-0.194</td>
<td>0.279</td>
<td>0.413*</td>
</tr>
<tr>
<td>Wald F (sign.)</td>
<td>0.002</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Firm years</td>
<td>342</td>
<td>303</td>
<td>343</td>
<td>352</td>
</tr>
</tbody>
</table>

The Wald test (Greene, 2003 p. 107) is here a test of the null hypothesis that the coefficients in the given equation are all zero. A low value indicates null hypothesis rejection. If \( R \) is the \( q \times K \) matrix of \( q \) restrictions and \( K \) coefficients, \( \hat{\gamma} \) the \( K \) vector of coefficients, and \( \mathbf{r} \) the vector of the \( q \) restrictions, the Wald \( \chi^2 \) statistic is \( \chi^2(q) = (\mathbf{r} - R\hat{\gamma})[R\sum_{X}R']^{-1}(\mathbf{r} - R\hat{\gamma}) \), where \( \sum_{X} \) is the estimated covariance matrix of coefficients.

Significant results at the 5% (10%) level are marked with ** (*)).

Variables are defined in Table 1.

ROA is inflation-adjusted. ROA0 is for the most recent rating year, ROA1 for the second most recent year. The same applies to OSS0, OSS1.

The models encompass explanatory variables from Table 3. The overall Wald statistic shows rejection of the hypothesis that all coefficients are equal to zero in all specifications. We comment on all regressions together. Although the signs of the coefficients are mostly as expected, it is striking that so few results are significant. However, interesting results appear in both significant and non-significant findings.

In the owner-board relationship, CEO/chairman duality is significant only in the portfolio regressions. Thus, we cannot say whether the MFI is better governed when the CEO is not also
the chairman, confirming the Brickley et al. (1997) result. Contrary to Oxelheim and Randøy (2003), we find that international directors reduce the MFI’s performance by reducing OSS and inflating costs. The Oxelheim and Randøy (2003) result may be because international directors bring a superior business orientation to Scandinavian firms. However, in MFIs, they may bring a culture of higher costs. The board is presumably better informed with an internal board auditor, and this should improve financial performance. This is confirmed for OSS. We cannot confirm Hartarska (2005) and the general literature that performance improves with a smaller board. Thus, the MFI board improves performance when it is local and better informed through the internal auditor.

Furthermore, it turns out that being an SHF does not improve MFI performance. The SHF variable is not significant in any regressions. This is not necessarily surprising. Crespi et al. (2004) find similar results when they compare savings banks and commercial banks in Spain. Furthermore, Mersland and Strøm (2008) find no differences in profitability between microfinance SHFs and NPOs.

In the MFI-customer dimension, the female CEO variable is significant and positive in ROA and OSS regressions. The results confirm findings in Welbourne (1999) and Smith et al. (2006) that women in management have a positive impact on firm performance. Because approximately 73% of the customers in our sample are women, the result may indicate that a female CEO reduces information asymmetry vis-à-vis customers more than a male CEO does. It may be that a female CEO knows better what products women want and sets terms that appeal to women. In this way, our results underline the importance of the MFI-customer relationship. It is also possible to infer from Table 4 that women self-select ownership types with superior performance. However, further analysis shows this to be unlikely: while female CEOs in our dataset are over-represented in NPOs, the average real ROA shows a negligible difference between this and other ownership types, specifically SHFs.
Individual loan is never a significant variable in our regressions. Non-significance in the ROA and OSS regressions indicates that sustainable financial performance can be achieved with both individual and group lending. The proposed comparative efficiency in group lending is not confirmed.

External governance mechanisms show a positive, significant result for competition in a portfolio yield regression. Thus, it appears that MFI performance can increase with more competition, an outcome mentioned by Nickell (1996), and may be due to first entrants becoming more efficient when new MFIs enter their market. However, the portfolio yield result is counter-intuitive and should be analysed further. We find no significant results concerning the impact of regulation, which is in line with Hartarska and Nadolnyak (2007).

We carry out additional regressions using various alternative specifications, and we find that they yield similar results to those reported in Tables 5 (unpublished data). New explanatory variables (female directors, stakeholders, the number of board meetings), alternative definitions (only rural instead of only urban in the market definition, MFIs per population as competition), filtering cooperatives, state banks, and “other” ownership type definitions all yield results that are consistent with those in Table 5. We conclude that our reported results are robust to several specifications.

The overall conclusion is that few traditional internal and external corporate governance mechanisms influence the financial performance of MFIs, with the exception of internal auditors and local directors. The positive effect of having a female CEO indicates the importance of supplementing board monitoring with attention to the MFI-customer relationship. These results are internally consistent. For instance, the positive impact of a female CEO is

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Data from the Mixmarket ([www.mixmarket.org](http://www.mixmarket.org)) are used; approximately 1,200 MFIs report to this service.
reflected in the negative impact of international directors, which is probably due to differences in client knowledge. We also find internal consistency in the SHF result. From Table 4, it appears that the SHF has a presumably better board structure than other ownership types; it has an internal auditor, a smaller board, and it is regulated. However, the SHF has more international directors and fewer female CEOs. The SHF, therefore, may be less able to tap into local information networks, and the overall result is that its performance is not better than other MFIs. Both theoretical and empirical studies show that a board should not be wholly independent of the CEO, but should also include internal directors who can increase the board’s access to local information. The female CEO may exert a similar effect in the MFIs.

An interpretation of the few significant results is that Allen and Gale (2000) are correct in maintaining that governance is of little importance for financial performance. Although the results confirm their emphasis on the CEO, their negative argument concerns the board, where we also find significance in international directors and the internal board auditor. Thus, despite the small number of significant results, we conclude that governance matters for the financial performance of microfinance institutions.

**Outreach**

Table 6 shows regressions of the effects of our variables on two measures of outreach – the average loan and the number of credit clients.
Table 6: Outreach performance, specified as average loan size and the number of credit clients, regressed on board characteristics, MFI innovations, and external variables. Random effects panel data 3SLS estimation for four years of observations.

<table>
<thead>
<tr>
<th>Basel</th>
<th>Average Credit Loan Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-2.825** -58.962**</td>
</tr>
<tr>
<td>CEO/chairman duality</td>
<td>-0.120 14.004**</td>
</tr>
<tr>
<td>International directors</td>
<td>-0.068 -0.201</td>
</tr>
<tr>
<td>Internal board auditor</td>
<td>-0.067 1.110</td>
</tr>
<tr>
<td>Board size</td>
<td>-0.028 0.801</td>
</tr>
<tr>
<td>SHF</td>
<td>-0.241 0.059</td>
</tr>
<tr>
<td>Female CEO</td>
<td>0.180 4.964</td>
</tr>
<tr>
<td>Individual loan</td>
<td>0.548** -6.641*</td>
</tr>
<tr>
<td>Competition</td>
<td>-0.020 1.410</td>
</tr>
<tr>
<td>Bank regulation</td>
<td>0.234 -0.673</td>
</tr>
<tr>
<td>Urban market</td>
<td>-0.170 1.442</td>
</tr>
<tr>
<td>MFI experience</td>
<td>-0.020* 0.221</td>
</tr>
<tr>
<td>Portfolio at risk (30)</td>
<td>0.331 1.784</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.209** 5.228**</td>
</tr>
<tr>
<td>Human dev. Index</td>
<td>0.999 -33.809**</td>
</tr>
<tr>
<td>Wald F (sign.)</td>
<td>0.000 0.000</td>
</tr>
<tr>
<td>Firm years</td>
<td>351 355</td>
</tr>
</tbody>
</table>

Average loan size is defined to be between US $0 to $10,000, and weighted using purchasing power parity GDP adjustments (IMF: World Economic Outlook). The number of credit clients is scaled by 1,000.

Governance mechanisms generally have little impact on outreach. In fact, only CEO/chairman duality and individual loan are significant. Thus, the CEO/chairman can increase the number of customers. This is mainly a firm size effect. An interaction variable of the duality dummy with firm size is positive and significant. By instituting duality, the MFI presumably pursues a managerial goal of firm size maximisation (Berle and Means, 1932).

A puzzling question is why the female CEO is not significant in outreach while she is important for financial performance. We argue that the female CEO is better informed, which should result in greater outreach. However, better information is presumably independent of average loan size and the number of borrowers, thus giving only insignificant coefficients.
Individual loans tend to be associated with higher average loan sizes and fewer credit clients. Group lenders have better outreach compared to individual lenders, confirming the results in Cull et al. (2007).

6. CONCLUSIONS

This paper responds to the need for more knowledge on corporate governance in MFIs (CSFI, 2008). Using a comparatively large and unique self-constructed dataset based on rating reports, the effects of owner-board relationships, firm-customer relationships, and external corporate governance on four measures of financial performance and two measures of outreach are studied in MFIs.

Panel data estimations show that financial performance improves when the board has local rather than international directors and when it employs an internal board auditor. Ownership type, however, does not affect financial performance. In the MFI-customer dimension, we find that the MFI is better served with a female CEO. The external mechanisms of competition and bank regulation have little impact on MFI performance. In outreach performance regressions, even fewer governance variables are significant. We find that outreach increases with CEO/chairman duality (the number of credit clients), but decreases with individual loans for both average loan size and the number of credit clients. The significance of results may improve with better data.

Several of this study’s findings and non-findings are puzzling, which motivates future research and the reconsideration of governance policy guidelines in the industry. We suggest the following five points.
First, a wholesale importation of best practices in governance mechanisms from mature markets is probably counter-productive at this stage of the industry’s development. Traditional board oversight and public regulation do not seem to be solutions to MFI governance, and the call for transforming NPOs into shareholder-owned firms lacks foundation. Instead, there is a need to better understand how the MFI can tap into local information networks, and how different incorporations operating in the same market influence MFI performance and overall customer satisfaction and outreach.

Second, the surprising effect of competition--that it may not bring customer benefits--highlights not only a need for new research, but also the need to search for governance mechanisms that do bring benefits to both the MFI and its customers. Perhaps studies of past pro-poor banking systems such as savings banks and cooperatives, which once operated in uncompetitive and unregulated markets similar to MFIs (Caprio and Vitas, 1997), can yield new governance knowledge for today.

Third, it is important to ask why individual lending reduces outreach, noting that MFIs tend to shift from group loans to individual loans (Armendariz de Aghion and Morduch, 2005). The results in Table 5 indicate that individual lending is not related to improved financial results, so why are MFIs shifting in their methodology when it lowers outreach? New dedicated studies are necessary to better understand the trade-offs in lending methodology.

Fourth, the negative effect of international directors on MFI financial performance warrant further research into the effect of international influence on MFI performance. Numerous international actors such as lenders, consultants, investors, networks, donors, and service providers are active in the microfinance industry. What is their impact? Does their presence hinder the MFI in its efforts to build relationships with local stakeholders?
Finally, the low stakeholder representation found in MFI boards deserves further study. Who is actually governing MFIs, and how do they govern? Are most MFIs fundamentally dominated by managers, and if so, does it matter?
REFERENCES


THE GOVERNANCE OF NON-PROFIT
MICRO FINANCE INSTITUTIONS:
LESSONS FROM HISTORY‡

Roy Mersland*

Forthcoming in Journal of Management and Governance

Key words:
Microfinance, MFI, non-profit organisations, governance, savings banks, history

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ABSTRACT

Microfinance is high on the public agenda, and better corporate governance has been identified as a key factor for enhancing the viability of the industry. However, recent literature on the subject struggles to identify the corporate governance mechanisms that influence the performance of the Micro Finance Institutions (MFIs). Guided by stakeholder and agency theories, this paper uses a historical parallel found in savings banks to present corporate governance lessons for MFIs, particularly non-profit MFIs, today. The findings indicate that monitoring by bank associations, depositors, donors, and local communities was important in securing the survival of savings banks. In addition, a willingness to expand their mission to serve wealthier customers alongside the poor helped the banks become financially viable. These findings could prompt a rethinking of microfinance governance, which stresses regulation, for-profit ownership, and traditional vertical board control. The paper argues that a broader and more stakeholder-based understanding of corporate governance is necessary. Moreover, the paper demonstrates that historical studies can provide governance lessons for today.
1. INTRODUCTION

Microfinance, the supply of banking services to the poor, is high on the public agenda and is attracting increased interest from academics. The development-enhancing aspect of microfinance has been recently recognised with the Nobel Peace Prize awarded to Mohammad Yunus and Grameen Bank. Microfinance is also increasingly becoming an investment opportunity. The total stock of foreign capital investment in microfinance more than tripled between 2004 and 2006, to US$4 billion, with the establishment of 40 new specialised international investment funds (Reille and Foster, 2008).

A new type of firm, called a Micro Finance Institution (MFI), has become the provider of microfinance services. A typical characteristic of an MFI is its dual mission to serve the poor and remain financially sustainable. Most MFIs are sponsored by donors, and incorporated as non-profit organizations or member-owned cooperatives (Mersland, Forthcoming).

A recent report identified corporate governance as a principal risk facing microfinance, threatening its role as both a business and a social service (CSFI, 2008). However, studies by Mersland and Strøm (Forthcoming) and Hartarska (2005) find that best practice governance mechanisms from regular firms in mature markets do not generally have much influence on the performance of the MFIs. Thus, there is a need for a different and more original approach to identify and better understand the governance mechanisms that can enhance MFIs’ long-term survival. In line with the recommendation in Mersland (Forthcoming), this paper uses a historical parallel found in nineteenth century savings banks to identify and present corporate governance lessons for MFIs today. To my knowledge, this type of historical study represents a novel approach in both the microfinance and in the corporate governance literatures.
This paper outlines how non-profit MFIs and savings banks share the ownership premise of being non-profit organizations. A non-profit organisation is influenced by several stakeholders, but no particular group or person can legally claim ownership or receive residual earnings from it (Hansmann, 1996, Mersland, Forthcoming). Thus, savings banks and non-profit MFIs are similar, both legally and economically. The paper therefore argues that particularly non-profit MFIs could potentially learn important governance lessons from the original savings banks. One challenge in the governance of non-profit organizations is the fact that managers serving as agents are supervised by donor organizations, who also serve as agents (Varian, 1990). Thus, traditional board governance may be less effective in non-profit MFIs (Glaeser, 2002). A broader perspective is required and attempted in this paper.

Microfinance is not a recent phenomenon. In fact, several pro-poor banking systems preceded it. Some, like savings banks and savings and credit cooperatives, continue to be important banking organisations throughout the world, while others, like Irish and English loan funds, have disappeared (Hollis and Sweetman, 1998). Caprio and Vittas (1997) explain how the financial systems in developing countries today can learn from the financial systems of Western countries in the nineteenth century.

Modern microfinance was born as a response to the frustrated development resulting from subsidised rural credit in the 1950s and 1960s (Adams and Fitchett, 1992). Thus, learning from history is inherent in its philosophy. However, the importance of learning from banking history is generally unexplored in the microfinance literature, though exceptions do exist. Fälting et al. (2006) drew a parallel between the early development of the Swedish savings banks. Hollis and Sweetman (1998) identify lessons to be learned from six different historic
European pro-poor banking systems (not the savings banks though), and these researchers (2004) also drew parallels with the seventeenth-century Irish loan funds. Seibel (2003) and Guinnane (2002) draw attention to how financial history demonstrates the need for appropriate legal frameworks in the development of pro-poor financial systems. However, no previous historical microfinance study has drawn attention to corporate governance.

In order to identify the governance mechanisms that enabled the survival of savings banks, this paper reviews the historical literature on the subject. The findings indicate that bank associations, mismatches in liability/asset maturity (deposits on demand), local communities, and donors risking their personal reputations were important tools to discipline managers and secure the survival of the banks. The banks operated under either a friendly regulatory regime or under no regime at all. In the initial years, the banks did not face much competition. However, competition gradually became a major factor in disciplining the managers, and it is considered one of the main causes for savings banks’ continued success in several markets today. The banks’ willingness to expand their mission by serving poor customers alongside the more wealthy helped their financial viability.

These findings could prompt a revision in thoughts on microfinance governance, which stresses regulation and traditional vertical board control. The lessons from the savings banks indicate that a broader and stakeholder-based understanding of corporate governance is necessary to secure the long-term survival of a pro-poor banking system. Besides, the pursuit of financial objectives should be pragmatic.

This paper proceeds as follows. Section 2 explores the early history of savings banks; Section 3 discusses theoretical views on microfinance governance; Section 4 identifies potential
corporate governance mechanisms in pro-poor banking and discusses their relevance to historic savings banks and modern non-profit MFIs; Section 5 discusses previous findings in order to identify lessons for today; and Section 6 concludes.

2. THE EARLY HISTORY OF THE SAVINGS BANKS

To understand the birth of savings banks, one must analyse their initial context. The ideological movement out of which savings banks were born was a search for new initiatives to improve the living conditions of the poor (Tucker, 1991, Rønning, 1972). Thrift and savings were introduced as means to avoid poverty and become rich (Tucker, 1991). Therefore, the establishment of the first savings banks was a response to a new doctrine of self-help (Horne, 1947). At the same time, this doctrine was convenient for the wealthy and the local authorities, who were able to continue a laissez faire policy of poverty assistance (Fishlow, 1961, Clemmensen, 1985).

Industrialisation was another driving force behind the establishment of savings banks. Low wage earners arriving in the cities needed a safe and convenient place to deposit their money. The existing commercial banks showed little interest in serving the wage earners with savings facilities (Teck, 1968). At the same time, the lack of regulation, in combination with banks’ reputation for speculation and exploitation of customers, made contracting with investor-owned commercial banks too risky for poor depositors (Hansmann, 1996, Hansmann, 1989).

The first savings banks emerged in the late eighteenth century in Europe. By the second half of the nineteenth century, there were hundreds of banks in most European countries, as well as in the US (Pampillon, 2003, Teck, 1968, Horne, 1947). The pattern was the same in all countries: banks were first established in the cities and spread to smaller villages after some
decades (Rønning, 1972, Clemmensen, 1985). The banks were not organised by the poor themselves, but by the upper class, often in coordination with the local authorities and the priesthood (Rønning, 1972, Pohl, 2003, Clemmensen, 1985, Horne, 1947). The initiators were motivated by a combination of altruistic philanthropy and the self-interest of letting the poor help themselves. During the initial years, the management of savings banks was typically based on the promoters’ voluntary work. Banks were only open a few hours during the month (Rønning, 1972, Clemmensen, 1985, Horne, 1947), and this low-cost operational mode made it possible for the savings banks to rapidly become financially sustainable.

Governments actively supported the establishment of savings banks. Subsidies in the form of sponsored earnings on public bonds, exemption on stamp duties, or permission to charge loan interest above the legal ceiling were common. However, they were not imperative in securing the banks’ operations, as most operations were carried out by volunteers, and operational income covered other costs (Pampillon, 2003, Rønning, 1972, Horne, 1947).

The investment policy of the savings banks followed two main patterns, referred to as the Continental and Atlantic models. The Continental model canalised the captured savings into local loans while the Atlantic model canalised the funds into public bonds only (Pampillon, 2003). The models used by different European countries are presented in Table 1. The Continental model is divided into two parts: the guaranteed model and the pure model whereas in the first a public entity (normally the local municipality) guarantees the deposits while the second does not contain a public guarantee scheme.
### Table 1: Savings banks models in different European countries (adapted from Pampillon, 2003)

<table>
<thead>
<tr>
<th>Atlantic</th>
<th>Guaranteed</th>
<th>Continental</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>Germany (municipality)</td>
<td>Germany (private)</td>
</tr>
<tr>
<td>Belgium</td>
<td>Austria (municipality)</td>
<td>Austria (private)</td>
</tr>
<tr>
<td>Ireland</td>
<td>Denmark (municipality)</td>
<td>Denmark (private)</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td>Spain</td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td>Finland</td>
</tr>
<tr>
<td>Luxemburg</td>
<td></td>
<td>Holland</td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td>Italy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portugal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sweden</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Norway</td>
</tr>
</tbody>
</table>

Savings banks have been criticised for their claim that they successfully reached the poorest members of the community (Fälting et al., 2006, Ograda, 2003, Rønning, 1972). For example, Fishlow (1961) presents evidence that, in some of the UK savings banks in 1830, only 11.2% of the deposits were made to accounts of less than £20, which represented nearly one year’s wage for a manufacturing operative or agricultural labourer. However, (Horne, 1947) argues that most of the customers in England belonged to the poorer classes, and for Germany, Guinnane (2002) claims that savings banks were able to fulfil their mission to reach the poorer classes relatively well, which ran parallel to serving the middle class. In Scandinavia the banks attracted deposits from both the poor and the not so poor and rapidly penetrated society. In 1884, 18.8% of the Norwegian population, 19.8% of the Swedish population, and 32.3% of the Danish population had their own account in a savings bank (Egge, 1972).

In the banks where deposits were recycled into loans, emphasis was placed upon safety. Most of the initial lending was supplied to relatively wealthy borrowers who could offer formal collateral (Fälting et al., 2006, Rønning, 1972, Clemmensen, 1985, Vittas, 1997). Over time, lending was gradually extended to include mortgages, as well as farming and manufacturing loans to less wealthy customers (Fälting et al., 2006, Guinnane, 2002).
Altogether it seems clear that in most savings banks the poor were served alongside the not so poor. Thus, instead of arguing that the inclusion of wealthier customers led to a drift away from the savings banks’ mission, one can argue that such a policy of inclusion was required for savings banks to survive as a financial system. Through the inclusion of wealthier customers, the savings banks managed to increase their assets, thereby improving their operational costs and enabling their long-term sustainability. Besides, loans funded by deposits of the poor were more secure in the hands of those who could offer formal collateral.

**Comparing the historic savings banks with today’s non-profit MFIs**

The brief description of the origins of the savings banks invites a comparison with today’s non-profit MFIs. First, both types of organisations have a mission to fight poverty, operating as non-profits without any legal owners. As with savings banks, the doctrine behind MFIs is self-help, and the promoters are people outside the target population. However, while the savings banks were promoted by the local elite, non-profit MFIs are mainly promoted by international donor organizations (C-GAP, 2006, Helms, 2006).

A major difference between the organisations is that savings banks focused on savings, whereas most non-profit MFIs focus on credit. Thus, capital for on-lending stems from local depositors in savings banks, while it stems from international donors and lenders in non-profit MFIs. The lack of savings mobilisation and the dependency upon outside funding has long been a major concern in microfinance (Helms, 2006), and the current international financial crisis has revived the debate.¹ MFIs struggle to reach the poorest customers (Helms, 2006).

¹ Currently (November 2008) the effect of the credit crunch and the international financial crisis on microfinance is being heavily debated (for example at the European Microfinance Week, 12-14 November, 2008 in Luxembourg). Preliminary conclusions seem to be that the crisis may actually increase the demand for microfinance services as wage earners will be pushed into self-employment. However, the crisis may hit hard
Yet, compared to savings banks, they have been more successful in issuing credit to the target population. The level of financial sustainability in savings banks was high due to the low cost of operations. However, many MFIs struggle to become financially sustainable. A recent survey of 704 MFIs by the Microbanking Bulletin (2007) reveals that 41% are not financially self-sustainable. Table 2 summarises the main similarities and differences between the two types of organisations.

Table 2: Comparison between the savings banks and non-profit MFIs

<table>
<thead>
<tr>
<th>Issue</th>
<th>Savings Banks</th>
<th>Non-profit MFIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>To fight poverty</td>
<td>To fight poverty</td>
</tr>
<tr>
<td>Doctrine</td>
<td>Self-help</td>
<td>Self-help</td>
</tr>
<tr>
<td>Promoters</td>
<td>Local individual philanthropists</td>
<td>International donors</td>
</tr>
<tr>
<td>Type of ownership</td>
<td>Non-profit</td>
<td>Non-profit</td>
</tr>
<tr>
<td>Dependence on subsidies</td>
<td>Low, but some</td>
<td>High, but decreasing</td>
</tr>
<tr>
<td>Level of sustainability</td>
<td>High</td>
<td>Low/Medium, but improving</td>
</tr>
<tr>
<td>Financial service in focus</td>
<td>Savings first and credit later</td>
<td>Credit only due to regulation</td>
</tr>
<tr>
<td>Capital for on-lending</td>
<td>From local depositors</td>
<td>From international donors and lenders</td>
</tr>
<tr>
<td>Success in reaching the</td>
<td>Questioned in credit delivery</td>
<td>Relatively good, but do not reach the very poorest</td>
</tr>
<tr>
<td>poorest</td>
<td>Relatively good in savings</td>
<td></td>
</tr>
</tbody>
</table>

3. CORPORATE GOVERNANCE LITERATURE AND THEORY

There have been two recent, rigorous studies on corporate governance in relation to MFIs. Hartarska (2005) uses different datasets spanning 46 to 144 observations from East European MFIs, while Mersland and Strøm (Forthcoming) use a global dataset including 278 rated MFIs from 60 countries. These studies explore the effect of traditional governance mechanisms such as board composition and size, managerial incentives, ownership type, and regulation. However, consistency in findings within and across studies is rare. Both studies struggle to identify significant governance influence. For example, consider the results from Mersland and Strøm (Forthcoming) presented in Table 3:

---

those MFIs that depend on international funding, thus the importance of being funded locally and with deposits will be revived.

130
Table 3: The effect of corporate governance on the financial performance of MFIs. Results from Mersland and Strøm (Forthcoming), Table 5

Return on assets (ROA), operational self-sufficiency (OSS), portfolio yield (PY), and operational costs (OC) explained by board characteristics, internal and external governance mechanisms, and firm and economy characteristics. Random effects panel data 3SLS estimation spanning the period 1998 to 2007.

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>OSS</th>
<th>PY</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.418*</td>
<td>-0.411*</td>
<td>-0.104**</td>
<td>1.140**</td>
</tr>
<tr>
<td>CEO/chairman duality</td>
<td>-0.032</td>
<td>-0.154</td>
<td>0.118**</td>
<td>0.074</td>
</tr>
<tr>
<td>International directors</td>
<td>-0.010</td>
<td>-0.095**</td>
<td>0.010</td>
<td>0.037**</td>
</tr>
<tr>
<td>Internal board auditor</td>
<td>0.022</td>
<td>0.133*</td>
<td>-0.034</td>
<td>-0.018</td>
</tr>
<tr>
<td>Board size</td>
<td>-0.001</td>
<td>-0.005</td>
<td>-0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Share Holder Ownership</td>
<td>-0.012</td>
<td>-0.129</td>
<td>-0.011</td>
<td>0.027</td>
</tr>
<tr>
<td>Female CEO</td>
<td>0.053**</td>
<td>0.215**</td>
<td>0.059</td>
<td>-0.036</td>
</tr>
<tr>
<td>Individual loan methodology</td>
<td>0.034</td>
<td>0.014</td>
<td>-0.026</td>
<td>-0.039</td>
</tr>
<tr>
<td>Competition index</td>
<td>0.011</td>
<td>-0.011</td>
<td>0.022*</td>
<td>0.004</td>
</tr>
<tr>
<td>Bank regulation</td>
<td>0.005</td>
<td>0.056</td>
<td>0.019</td>
<td>0.015</td>
</tr>
<tr>
<td>Urban market</td>
<td>0.001</td>
<td>0.090</td>
<td>0.066*</td>
<td>0.044</td>
</tr>
<tr>
<td>MFI experience</td>
<td>0.000</td>
<td>-0.010**</td>
<td>-0.002</td>
<td>-0.003</td>
</tr>
<tr>
<td>Portfolio at risk (30)</td>
<td>-0.085</td>
<td>0.436**</td>
<td>-0.132*</td>
<td>-0.131**</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.026**</td>
<td>0.119**</td>
<td>0.006</td>
<td>-0.078**</td>
</tr>
<tr>
<td>Human dev. Index</td>
<td>-0.100</td>
<td>-0.194</td>
<td>0.279</td>
<td>0.413**</td>
</tr>
<tr>
<td>Wald F (sign.)</td>
<td>0.002</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Firm years</td>
<td>342</td>
<td>303</td>
<td>343</td>
<td>352</td>
</tr>
</tbody>
</table>

As indicated in Table 3, Mersland and Strøm (Forthcoming) find that a female CEO and an internal auditor reporting to the board is associated with better financial performance, while international directors on the board increase costs and reduce operational self-sufficiency. Other governance variables are insignificant or inconsistent. Hartarska (2005) finds strong support for independent boards with limited employee participation. None of the variables significant in the two studies are explored in both.

The non-findings in the two studies are actually the most interesting. For example, both Hartarska (2005) and Mersland and Strøm (Forthcoming) find that neither regulation, nor a for-profit ownership structure advance MFIs’ performance. Hartarska and Nadolnyak (2007) confirm the finding that regulation has no effect, while Mersland and Strøm (2008) confirm that ownership of MFIs does not matter. Both Hartarska (2005) and Mersland and Strøm (Forthcoming) conclude that governance matters, but the traditional governance mechanisms...
seem to matter less in MFIs relative to firms in mature markets. They call for better data and the study of alternative governance mechanisms in order to better understand the effect of corporate governance in the microfinance industry.

Contrary to the findings in Hartarska (2005) and Mersland and Strøm (Forthcoming), the practitioner-oriented literature on governance in MFIs emphasises traditional, vertical governance, like the composition and role of boards (Rock et al., 1998, Otero and Chu, 2002). This body of literature also emphasises a need to transform from non-profit to for-profit ownership (Ledgerwood and White, 2006). The practitioner literature generally follows the logic of agency theory, where the aim is to reduce agency costs stemming from vertical relationships between owners and management (Jensen and Meckling, 1976, Fama and Jensen, 1983). MFIs are recommended to set up governance systems in order to mitigate agency costs by aligning top management with owners’ goals and putting controls into place (Rock et al., 1998, Otero and Chu, 2002, Helms, 2006). Despite the fact that Hartarska (2005) and Mersland and Strøm (Forthcoming) do not find empirical support for the effect of these recommendations, they are not necessarily wrong. However, they do not sufficiently account for the fact that most MFIs do not intend to be shareholder owned, have multiple goals, and do not have an inherent profit motive. Moreover, MFIs differ from regular firms in that they encounter horizontal agency problems between the bank and its customers (Adams and Mehran, 2003), and donor-funded MFIs face agency costs in their relationships with donors.

Thomsen (2008) and Hansmann (1996) suggest that the importance of owners monitoring management has been overstated. The degree of product market competition and customer-firm relationships seems to discipline managers more effectively than owners (Hansmann, 1996). The problem is exacerbated in microfinance, since the customer has little or no
collateral or credit history, low education level, and little knowledge of the MFI. Moreover, the regulatory ability of local regimes is generally low. Under such conditions, issues such as closeness to the customer and mutual trust are paramount. There is thus a need for a broader set of governance mechanisms that account for agency costs stemming from multiple stakeholders.

Stakeholder theorists widen the approach of agency costs in arguing that, in addition to responding to owners’ interests, manager must balance the needs of several stakeholders, such as employees, customers, local communities, authorities and debt holders (Freeman, 1984, Mitchell et al., 1997). For the non-profit MFIs as for the savings banks, stakeholder theory helps establish a broader understanding and identifies who and what counts in the governance of these organisations (Mersland, Forthcoming).

4. GOVERNANCE MECHANISMS IN THE SAVINGS BANKS AND THE MFIs

This section uses theory to identify and understand corporate governance mechanisms in pro-poor banking. For each mechanism identified, the historical literature on savings banks is studied in order to analyse its effect upon governance. The analysis of each mechanism is concluded by assessing whether it has affect in the governance of non-profit MFIs today. The mechanisms covered were identified through a review of the historic savings banks literature and are comprised of the following: the organisation’s mission, boards, donors, public regulation, apex associations, market competition, maturity mismatches in liabilities/assets, and the influence of local communities and governments.
The mission of the organisation

Non-profit organisations do not have owners and are accountable to their missions (Hansmann, 1996). Stakeholders influence a non-profit organisation’s mission and monitor its fulfilment. The stakeholders with the most bargaining power are those with the most influence over the organisation’s mission. A clearly defined and well-informed mission reduces the cost of disagreements and bargaining between stakeholders (Speckbacher, 2008).

The mission in the savings banks

A striking feature in the history of savings banks is the ability of the banks to change their mission at an early stage of development. Vittas (1997) explains how savings banks were created to serve the poor through saving services, but they quickly reoriented their services to include the middle class and facilitated credit when legislation allowed. However, most banks continued to serve the poor, expanding their mission rather than departing from it. This shift made savings banks more financially sustainable, and at the same time it helped them reach out to larger markets. Altogether the banks went through a process of reorientation. In the beginning, there was the belief that savings and thrift could eliminate poverty and that the poor would be easily recruited. This enthusiastic phase was soon replaced by a more realistic understanding of the possibilities. Many of the poor were not able or willing to save and handling only small customers led to high operational costs. Loans were issued to wealthier clients in order to be secured. There was no lack of critical voices as the savings banks expanded their mission, but the pragmatic approach was approved by all surviving banks.

Mission in the MFIs

As with the savings banks, modern microfinance experienced an enthusiastic first stage, culminating in the Nobel Peace Prize being awarded to Mohammad Yunus and Grameen
Bank in 2006. However, insiders in the industry have long been aware of the limitations (Dichter and Harper, 2007). Reaching the poorest is a struggle, and the impact from access to services is often low, especially for those with limited access to assets, knowledge, and networks before contracting loans (Hulme, 2000). Some MFIs are comfortably serving some wealthier clients alongside the poor, but as a whole the industry has still not reached the pragmatic stage and the mission drift debate remain lively (Morduch, 2000).

**Boards**

Boards are a generic corporate governance mechanism to minimise agency costs stemming from the separation of owners/donors and management (Fama and Jensen, 1983). Boards monitor, replace management, ratify major decisions, and bring in important networks and knowledge. Well-functioning boards ought to reduce agency costs and enhance organisational performance. However, the empirical evidence from for-profit firms indicates that, on average, boards matter little (Thomsen, 2008). Speckbacher (2008) argues that, since non-profit organisations lack owners, their boards play a more important role than those of for-profit firms. Board members of non-profit organisations offer their reputation as collateral to the public and try to minimise the risk of losing it (Handy, 1995).

**Boards in the savings banks**

Since the origin of savings banks, boards have overseen their operations (Teck, 1968, Fishlow, 1961, Rønning, 1972). Initially, board members would not have any direct or indirect business relationship with the bank, implying full independence. Later, however, it became normal in some banks to provide loans to board or founding members, and their children and servants were often depositors (Horne, 1947, Rønning, 1972). A board position was fully voluntary, and the boards were formed by the upper class including pastors and
time went by, the bourgeoisie were gradually replaced by professionals, such as lawyers,
accountants, and business managers (Clemmensen, 1985, Rønning, 1972). During the initial
years, the participation of the target group, the poor, in the board was unthinkable.

As the savings banks started serving also less poor customers, some banks struggled to
maintain the interest of their initial philanthropic founders (Rønning, 1972). This is illustrated
in the first annual report of the Cork Saving Banks in Ireland (founded in 1817):

‘this species of deposits [high amounts], if continued, could eventually close the Bank,
as no gentleman could be got to give their time gratuitously as managers to conduct the
money dealing of their equals and in many cases their superiors in rank and property’
(cited in Ograda, 2003, p. 35).

However, even if the savings banks struggled to maintain the interest of their board members
and gradually became more and more management dominated, it seems likely that they
indirectly continued to provide some basic monitoring in order to protect their own reputation.
Moreover, it seems likely that the banks capitalised upon the reputation of their founders.
Gradually other stakeholders, like representatives from local governments and later customers
and employees, were invited on the boards (Fälting et al., 2006, Guinnane, 2002).

Boards in MFIs

MFIs today follow a traditional separation of management and board. Board members of non-
profit MFIs are generally upper- or middle-class professionals. Similar to the savings banks,
many MFIs struggle to identify board members with an appropriate background who are able
and willing to dedicate the time that effective monitoring requires (Labie, 2001). Stakeholders
like donors, customers, employees, and debt holders are generally absent from MFI boards (Mersland and Strøm, Forthcoming).

**Donors**

Donors monitor organizations to verify that their donations are used in accordance with their wishes (Fama and Jensen, 1983). When donors are individuals, they have a direct agency relationship with the firm. However, when donors are organisations funded by back-donors or taxpayers, the firm is monitored by an agent rather than a principal (Varian, 1990).

**Donors to the savings banks**

Savings banks were founded by wealthy philanthropists who donated initial capital. However, this initial capital was rarely substantial (Hansmann, 1996). Still, donor involvement was important, and they often took seats on the board. The monitoring they offered, the social capital, and their reputations were more important than their financial capital (Fältling et al., 2006). Donations were largely confined to the formation of the banks. After their establishment, the banks were fully dependent upon operational income and voluntary work (Hansmann, 1996). After their initial donations, the donors contributed knowledge, reputation, and governance, but generally not additional funding.

**Donors to the MFIs**

While non-profit ownership of the savings banks was chosen in order to protect customers (Hansmann, 1996), most MFIs seem to have chosen non-profit ownership as a means to tap into donors’ pockets (Mersland, Forthcoming). The term ‘briefcase NGO,’ referring to organisations formed by private individuals, is well-known. The term also indicates that several donors practice slack control, permitting personal benefits to individuals.
Donors play a major role in the microfinance industry (C-GAP, 2006). Donations stem from international NGOs and the bilateral and multilateral donor communities. These organisations are funded by back-donors, either private philanthropists or taxpayers. Therefore, MFIs face the governance challenge that managers serving as agents are supervised by donors, who also serve as agents (Varian, 1990). This structure differs from that of savings banks, where the donors of initial capital were private individuals who often took a board position in addition. In contrast, few donors take board seats in MFIs (Mersland and Strøm, Forthcoming).

**Regulation**

Bank regulation has the potential to seriously affect the performance of a bank or an MFI. However, developing economies suffer from very weak institutional frameworks, imperfect markets, and incomplete information. Weak regulatory ability is a major reason for the existence of non-profit organisations. While privately-owned banks have strong incentives to invest in risky projects, a non-profit bank is less likely to employ depositors’ money in risky endeavours (Hansmann, 1996).

**Regulation in the savings banks**

Except that some countries obliged the savings banks to invest in public bonds, the banks were generally unregulated or operated under a friendly regulatory regime. The necessary trust was generated not by law, but by the reputation offered by the local elite who actively promoted the banks. Where regulation was introduced the objective was often to let the banks adhere to a few basic rules to insure that operations were concentrated on non-wealthy customers (Guinnane, 2002). In other countries the main purpose of regulation was to allow
the banks subsidised interest on public bonds or to exempt them from stamp duties (Fishlow, 1961, Rønning, 1972).

However, as the level of savings grew and investment in less secure assets became more common, legislators gradually responded with additional regulation (Fälting et al., 2006, Rønning, 1972). Yet the regulatory framework installed was friendly, intended to strengthen public confidence in banks. However, in some countries, like Spain and Denmark, where regulation was introduced as a means to enhance public trust, the result was often the opposite leading to withdrawal of deposits (Martinez, 1998) or lowered expansion (Hansen, 2001).

Regulation of MFIs
Many have issued calls for more prudent regulation of MFIs (C-GAP, 2003). Non-profit MFIs are generally unregulated and not allowed to intermediate deposits. The main argument is that, since non-profit organisations do not have owners with monitoring incentives, they are weaker and riskier (Jansson et al., 2004). As a consequence, non-profit MFIs are prompted to transform themselves into shareholder banks in order to become regulated. However, Mersland and Strøm (2008) find that ownership type doesn’t matter for MFI performance, and Hartarska and Nadolnyak (2007) and Mersland and Strøm (Forthcoming) find that regulation has no direct effect upon MFI performance, and can only indirectly help increase scale and scope if the MFI is allowed to mobilise deposits (Hartarska and Nadolnyak, 2007).

Apex associations
Moore and Stewart (1998) suggest that the use of collective self-regulation can help remedy agency costs in non-profits. National and voluntary associations of non-profits can improve managerial practices and organisational performance through self-policing. Since non-profit
organisations lack owners with strong monitoring incentives, Speckbacher (2008) argues that they are in special need of external reporting systems in order to reduce informational asymmetry between management and the various stakeholders. Such external reporting systems can be organised through auditing or self-regulation apex systems.

Apex associations in the savings banks

National apex associations were important in the early savings banks. The aim was typically threefold: first, to increase the overall power of negotiation with authorities and commercial competitors; second, to help the banks achieve economies of scale in service provisions (e.g. money transfer systems across the savings banks); and third, to act as a bank for the banks (Comin and Torres, 2003, Guinnane, 2002). In order to uphold membership in the association, minimum performance standards and self-regulation by the apex were common. Seibel (2003) points out that effective auditing carried out by the apex associations was an important mechanism in savings bank governance.

Apex associations among MFIs

Apex associations among MFIs are common (SEEPnetwork, 2005). They play a representative role and to some degree, they are also active in building the professional capacity of their members. In some networks, such as Red Financiera Rural in Ecuador and FINRURAL in Bolivia, they have installed a self-reporting monitoring system, though formal types of self-regulation are uncommon. The argument is that self-regulation cannot be prudent, as free riders are an obvious problem (C-GAP, 2003). Also, the networks of MFIs seldom serve their members with tangible services like wholesale lending, IT, or giro systems. As a consequence, the network becomes less important in the governance of the MFIs relative to the governance role of the savings bank associations.
Competition

Market competition is an external governance mechanism. In general, the more intense the competition, the less the owners need internal governance mechanisms (Schmidt, 1997, Hart, 1983). Hansmann (1996) argues that, in markets with trustworthy regulation and deposit insurance, ownerless savings banks can compete with their commercial peers due to the disciplinary effect of market competition.

Competition in savings banks

In their early years, savings banks did not encounter much competition. People in urban areas did not trust the commercial banks, and local savings banks were generally alone in offering banking services in rural areas. However, gradually more savings banks were established, implying greater competition (Clemmensen, 1985), and more trustworthy regulation of commercial banks made them an alternative for poorer customers (Hansmann, 1989). Furthermore, since the mid-nineteenth century, member-based savings and credit cooperatives in many countries became important competitors of savings banks (Wolff, 1919, Hansmann, 1996). Today, several observers argue that market competition is probably the number one mechanism enabling savings banks to continue as competitive organisations (Crespi et al., 2004, Altunbas et al., 2001).

Competition in today’s microfinance markets

Many microfinance markets, especially those in rural locations, still have no formal financial service supplier (Robinson, 2001, Christen et al., 2004). Where MFIs exist, markets are often characterised by a severe lack of competition, and most clients have limited bargaining power vis-à-vis microfinance providers. However, there are exceptions. In Bolivia, where
competition has been increasing, the average annual yield has decreased during the last
decade, from 50% in the leading MFIs to just above 20% (Porteous, 2006).

**Demand deposits**

Most savings in banks are in accounts where the depositor can withdraw money on demand. Most theoretical models assume that the role of such demandable debt is to provide flexibility to the depositors (Freixas and Rochet, 1997). Calomiris and Kahn (1991) offer an alternative explanation. They point out that allowing on-demand withdrawals implies a mismatch between the maturity of assets and liabilities. Such a financial structure is an optimal instrument for management control. In the event of bank trouble, depositors can immediately withdraw their money, causing the bank to fall. Calomiris and Kahn (1991) further point out that the disciplining mechanism works as long as the maturity of liabilities is less than the maturity of assets. Hollis and Sweetman (2007) tested Calomiris and Kahn’s (1991) theory on an historic case from Ireland. They found that institutions with more deposits were better at controlling expenses than those with less funding stemming from deposits.

**Demandable debt in savings banks**

Historians have long recognised the importance of demandable debt in disciplining managers of savings banks:

> ‘if the saver had any dissatisfaction with the way the organization was being managed, he simply terminated his relationship by withdrawing his funds’ (Teck, 1968, p. 33).

This is recognised by Hollis and Sweetman (1998), who point out that the importance of depositor monitoring on the sustainability of pro-poor banks should not be underestimated.
Savings in MFIs

Non-profit MFIs are generally not allowed to intermediate deposits and consequently excluded from offering savings and funding their portfolios locally. Instead non-profit MFIs are funded by donations and medium-term international debt. Thus, since micro-credit is lent on short terms, the maturity of MFIs’ debt generally exceeds that of their assets. As a result, non-profit MFIs lack the disciplinary effect stemming from monitoring by depositors or debt holders.

Local governments and communities

From a stakeholder’s perspective, local governments and communities have important influence on the firm’s opportunities and behaviour.

Local government and community influence on savings banks

Savings banks have always been tied to and promoted by local communities in general, and by the local authorities in particular. In most countries, the local authorities helped organise the banks, and they have often provided some of the initial capital. In several local communities, the first savings banks merged with existing social services. In Spain, the banks joined forces with the Montes de Piedad, a relief fund for the poor (Sanchez, 2003). In Norway, several savings banks were merged with the community corn chambers intended for lean years (Rønning, 1972). At the same time, however, it was important for the banks to remain private entities, rather than public. Hence, the local authority was only one stakeholder alongside others, and attempts to tie the banks more closely to the public sector were punished by massive withdrawals of deposits (Martinez, 1998).
Another feature tying savings banks to local communities has been the banks’ funding of charity work and community projects (Sanchez, 2003). Institutionalising the partial return of profits to local communities has created a mechanism by which the local community helps to steward the banks. In addition, similar to dividends of for-profit firms, the funding of local projects reduces the bank’s free cash flow and management’s power, creating a governance mechanism (Jensen and Meckling, 1976).

Local government and community influence on MFIs today

Today, few MFIs relate closely to the local authorities. The local authorities are more often seen as obstacles, creating difficulties in issuing permits or imposing taxes. In Peru, however, the Cajas Municipales represent an interesting exception. Over the last couple of decades, most of the Cajas have been successful MFIs (rating reports available at www.ratingfund.org).

In their contact with local communities, except the member based organizations, most MFIs enter into a traditional bank-customer contractual relationship. The community is seldom a driving force behind the establishment of a non-profit MFI, nor is it invited to take a more active stake in its governance. However, there are exceptions. In the Bolivian non-profit MFI Diaconia FRIF, they have a conscious strategy of being part of the Indian Aymara community. The staff is largely Aymara, and several of them are involved in different Aymara organisations. According to Diaconia FRIF, the close relationship with the Aymara community has been instrumental in securing its success.

5. DISCUSSION

The differences in governance mechanisms between the historic savings banks and today’s non-profit MFIs invite deeper discussion. The previous section is summarised in Table 4.
Table 4: The governance mechanisms of the historic savings banks and today’s non-profit MFIs

<table>
<thead>
<tr>
<th>Governance mechanism</th>
<th>Historic savings banks</th>
<th>Today’s non-profit MFIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>Pragmatic willingness to broaden the mission and include wealthier clients</td>
<td>Mission drift debate still ongoing</td>
</tr>
<tr>
<td>Boards</td>
<td>Composed of upper-class people who also took part in the management. Gradually the board became less important</td>
<td>Composed of upper-/middle-class professionals. Are considered important, but still most MFIs struggle to have active and competent boards</td>
</tr>
<tr>
<td>Donors</td>
<td>Took an active role in governance through board seats and personal reputation</td>
<td>Monitoring efforts vary, but few donors are willing to take on an active governance role or sit on boards</td>
</tr>
<tr>
<td>Regulation</td>
<td>Either unregulated or operated under friendly regulatory regimes</td>
<td>Unregulated because of non-profit ownership.</td>
</tr>
<tr>
<td>Apex associations</td>
<td>Were important in monitoring the banks and were a self-regulation mechanism. Also provided important services</td>
<td>Important, but still much less than in the savings banks. Do not provide much self-regulation and tangible services</td>
</tr>
<tr>
<td>Competition</td>
<td>Low or no competition in the beginning, but today this is considered to be the number-one governance mechanism</td>
<td>Still low competition, but increasing.</td>
</tr>
<tr>
<td>Mismatch in liability/asset maturity</td>
<td>Mismatch in liability/asset maturity important in disciplining the managers</td>
<td>Non-existent due to the regulatory regimes</td>
</tr>
<tr>
<td>Local communities and authorities</td>
<td>Were important stakeholders in the banks and took active part in their governance</td>
<td>The interaction with local authorities is generally low and the relationship with the communities is normally only of the customer-firm contract type</td>
</tr>
</tbody>
</table>

One of the most puzzling questions is why the non-profit ownership structure of savings banks was seen as a guarantee for avoiding excessively risky behaviour, whereas it is considered inappropriate and excessively risky today (Jansson et al., 2004). Hansmann (1996) argues that since savings banks face a non-distribution constraint, they are generally more trustworthy than for-profit banks. Part of the answer is likely found in the fact that many non-profit MFIs today have simply become ‘briefcases’ of their founders or managers. Another part may be that donors today are often too generous in their funding and too slack in their monitoring. The lack of a broader understanding of governance in general, and of non-profit ownership in particular, is also important.
It is a fact that the microfinance industry has many well-performing non-profit MFIs, demonstrating that non-profit ownership does not necessarily imply slack performance and donor dependence (Mersland and Strøm, 2008). However, since the current credit crunch is assumed to hit non-deposit taking MFIs relatively harder, it may become increasingly important to establish regulatory frameworks allowing well performing non-profit MFIs to intermediate deposits. Governance lessons from the savings banks may turn out to be particularly relevant. In this regard the recent initiatives in Bolivia are interesting, where non-profit MFIs, members of the apex FINRURAL, are about to become regulated and allowed to intermediate deposits.

The survival of savings banks can be attributed to pragmatism and their willingness to expand their missions. Several of the most commercial MFIs today will probably argue that this has also enabled their viability. Some, such as Procredit in Bolivia, provide loans above US$100,000 and are criticised by some for having left their original mission behind. However, Procredit states the opposite: most of their customers take very small loans, implying that they have expanded their mission but not abandoned it. However, few MFIs are as pragmatic as Procredit. The lesson from savings banks is that MFIs may need to become more pragmatic in order to survive over the longer term.

This study reveals that there is clearly much more to governance than boards. Of course boards are important for MFIs today as they were in the initial stage of savings banks, but other mechanisms must substitute and reinforce boards in the disciplining of managers. Upper class board members in the savings banks were gradually replaced by groups with a more direct stake in the banks. Whether the inclusion of stakeholders like customers,
employers, local communities, donors and debt holders could enhance the performance of non-profit MFIs should be subject for research efforts.

The Calomiris and Kahn’s (1991) model is important for understanding how agency costs in banking can be reduced. This is particularly true when there is no takeover market (a non-profit organisation cannot be taken over) and in an unregulated environment where the public has little confidence in the regulator’s willingness and ability to closely monitor the bank. However, it may sound too risky to introduce deposit intermediation in MFIs as a means to discipline managers through monitoring by depositors. And, of course, this would not be without any kind of pre-screening and monitoring of MFIs. However, microfinance customers operate in an informal economy, where they are already well acquainted with the need to monitor their deposits in informal rotating savings and credit associations (ROSCAs; (Bouman, 1995) or pre-payments made to the local construction shops. They are also well aware of the risks involved. For example, a study in Uganda revealed that 99% of the participants in ROSCAs had experienced losses (Wright and Mutesasira, 2001). Still, poor people prefer these schemes because the alternative of keeping cash at home is worse due to countless claims and needs (Rutherford, 2000). Thus, the alternative of allowing well-performing non-profit MFIs to offer deposit services, and thereby introducing a new stakeholder to monitor operations, sounds like a solid bet. Furthermore, savings banks offer historical evidence that it might work.

The lessons from savings banks present a message for donors. Their role is not only to donate, but to monitor. Donors generally avoid board seats in MFIs, probably due to the culture of the donors, who generally play the role of supporting local civil society rather than being part of it. However, MFIs are not advocacy organisations fighting for people’s rights. They are
banks, and those who provide them with funds should monitor their operations. Moreover, dedicated donors risk their reputation. Unfortunately, microfinance donors are organisations acting on behalf of back-donors and taxpayers, which makes fleeing from difficulties easier.

Though Mersland and Strøm (Forthcoming) could not confirm the governance effect of competition, the evidence from savings banks suggests that competition does discipline managers. We expect that as markets mature increased competition will bring along customer benefits as experienced in Bolivia. Besides, policy makers and regulators should not forget the fact that multiple types of providers offer additional customer benefits compared to a single type of bank. Guinnane (2002) points out that historically diversity in the type of banks was important in generating a type of competition that fostered sound management. In addition, Normark (1996) points out that a combination of organisational types operating in the same market enhances competition and customer benefits. Thus, differences in missions and ownership structures stimulate competition and drive the actors towards different market segments (Mersland, Forthcoming). However, this requires a supportive regulatory environment across organisational types.

An interesting aspect of the historic savings banks is their close relationship with local governments. Whether such a relationship would be positive in today’s politicised environment is uncertain. This should be a subject of further research effort, as should MFI’s ties to local communities. Will the geographical expansion observed in many MFI be beneficial in the long run? Would they be better off with a more integrated relationship with major stakeholders in a more limited local community where monitoring is more likely?
Apex bank associations were instrumental in both governing the savings banks through self-regulatory efforts and improving economies of scope through service provision. Even today, spin-off companies, such as giro centrals or investment funds, are important apex structures, providing important services to savings banks. For the MFIs, starting off with better self-regulation efforts, as they have done in Bolivia and Ecuador, could be a natural first step. Self-regulation cannot be a full substitute for prudent regulation by banking authorities, but it will be an extra mechanism playing a role in the overall governance system of MFIs. Besides this, independent MFIs will need to devise strategies to enable better economies of scope (e.g. IT systems). Thus, in the years to come, apex associations could probably play an increasingly important role, just as they did and continue to do for savings banks.

6. CONCLUSION

Microfinance is high on the public agenda. Better corporate governance of MFIs has been identified as a key to enhancing the viability of the industry. However, the recent literature on the subject has struggled to identify the corporate governance mechanisms influencing the performance of MFIs (Mersland and Strøm, Forthcoming, Hartarska, 2005). In line with recommendations provided in Mersland (Forthcoming), this paper uses a historical parallel found in savings banks to present corporate governance lessons for today’s MFIs. There are several similarities between nineteenth century savings banks and today’s non-profit MFIs. Both legally and economically, due to their non-profit status and non-distribution constraints, they are similar types of organisations. The corporate governance mechanisms affecting one type of organisation may therefore affect the other. Guided by stakeholder and agency theories, this paper reviews the historical literature on the subject to identify the important governance mechanisms that allowed savings banks to survive, and it analyses whether MFIs, particularly non-profit MFIs, can learn something from their example.
The findings indicate that monitoring by bank associations, depositors, donors, and local communities were important in disciplining managers and securing the survival of savings banks. External governance in the form of public regulation was generally absent, while product market competition became an increasingly major factor in disciplining the managers. The willingness to expand their mission to serve wealthier customers alongside the poor helped the banks to become financially viable.

This paper demonstrates that historical studies can lend governance lessons today. The findings could prompt a revision in the thought surrounding microfinance governance, which stresses for-profit ownership, regulation, and traditional vertical board control. The lessons from savings banks indicate that a broader and more stakeholder-based understanding of corporate governance is necessary. Stakeholders like depositors, donors, local communities, and bank associations can together provide a monitoring system that can enhance the long-term survival of MFIs. The findings also indicate that the need to transform ownership and limit regulation to for-profit MFIs could be mitigated, and a pragmatic attitude toward financial objectives may improve the financial viability of the MFIs.

The importance placed on microfinance as a development instrument, combined with the increasing inflow of capital to the industry, indicate a need to better understand governance systems for MFIs. Further studies are needed. In particular, future research could consider how a combination of organisational types enhances competition in the microfinance market and how competition affects MFIs’ performance. Studies are also needed on how donor monitoring, apex organizations, and mismatches in the maturity of liabilities and assets influence management behaviour and MFI performance. A historical study, similar to this, on
how member based cooperative MFIs can learn governance lessons from their nineteenth century cooperative peers (Wolff, 1919), is also recommended.
REFERENCES


C-GAP (2006) Good practice guidelines for funders of microfinance Washington, C-GAP.


EGGE, Å. (1972) Trekk ved sparebankvesenet og sparebanklovgivningen i slutten av forrige århundre, Gyldendal Norsk Forlag.


MERSLAND, R. & STRØM, R. Ø. (Forthcoming) Performance and governance in microfinance institutions. *Journal of Banking and Finance*.

