

**FUNDING STRUCTURE AND PERFORMANCE OF MICROFINANCE
INSTITUTIONS IN INDIA: AN EMPIRICAL ANALYSIS OF INDIAN
MICROFINANCE INSTITUTIONS (MFIS)**

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Abstract

Microfinance has been widely accepted as a strategic measure against poverty and its success has been established. When we are talking about microfinance, we are essentially dealing with the problem of catering to people who have been excluded from formal financial services and are in severe poverty. Microfinance has a greater role to play in India where approximately 40% of people live in extreme poverty. At the top of these is the fact that private investors have realised the unexplored potential of sector as a huge number of poor population remains to be covered. Fine financial sustainability and healthy repayment rates have also encourage private investment in microfinance institutions. Recent years have witnessed increasing participation of such investors in the sector. This can be seen as a positive development as the problem of availability of funds is curbed, however, this raises concerns of misdirection and alteration in motive of microfinance organisations which are mostly unregulated in India. Microfinance Institutions (MFIs) need a huge amount of funding to finance their growth. Funds can be procured from different sources, namely, grants, donations, equity capital and debt, deposits, etc. In India, finance for MFIs comes heavily from debt. Very small portion of funds for the sector comes from the deposits. Given this scenario, this paper examines how source of funding impact the performance of MFIs. Sources of funds considered in the analysis are shareholder funds, grants and loans, and performance has been measured on financial and social performance variables. Results of the analysis exhibit a significant difference in performance of MFIs using different sources of funds.

Keywords: Microfinance, Funding Structure, Source of Funds, Microcredit

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Introduction

Microfinance industry, earlier referred to as microcredit, has come of age to be known by its present name as the product basket now includes more financial products such as micro savings, micro insurance, money transfer, etc. Various research studies provide sufficient evidence to establish that microfinance is by far the most effective institutional innovation to address the issues of poverty in developing countries (Brau et al., 2009; Haque & Yamao, 2009; Haque, 2008; Hiatt & Woodworth, 2006; Tilakaratna & Wickramasinghe, 2005; Pitt and Khandker, 1998; Khandker, 1998).

Microfinance Institutions (MFIs) differ from other business organisations in that they have two sets of objectives to achieve, social and financial objectives (Hartarska & Nadolnyak, 2007). Social objectives require providing financial services to maximum possible number of poor people at affordable price, and financial objective mandates financial self-sustainability. While the social objective is supposed to supersede the financial objective, there are apprehensions that in order to maintain sustainability, MFIs compromise their social objectives by lending to less poor. However, empirical studies have not found conclusive evidence on that (Mersland & Strom, 2010; Christen & Drake, 2002; Rhyne, 1998).

The two objectives are not mutually exclusive, but co-existing as the high degree of sustainability helps MFIs gain access to more funds. MFIs expand their activities and reach more number of poor, and provide innovative products and services at affordable price, hence serving their social objective as well (Rhyne, 1998).

MFIs largely rely on external funding support from donors/investors. In order to commit their funds to an MFI, funders/donors need to develop trust in an MFI. Humphrey and Schmitz (1996) note that trust plays a significant role in various forms of exchanges that take place in financial markets. To win the trust of funders/donors, MFIs need to follow transparency in their performance reporting. Gutiérrez-Nieto & Serrano-Cinca (2009), through their quality-loyalty model of microfinance, provide that transparency serves as an antecedent of trust of microfinance funders. Transparency is the degree of visibility and accessibility of MFI information (Zhu, 2004). It increases visibility of MFIs to their funders, and hence, increases the number of donors who provide funds to them (Tucker, 2001).

Shareholder ownership has been an issue of debate in microfinance literature. In 1992, PRODEM, a Bolivian NGO-MFI transformed into a for-profit shareholder-owned company named Banco Sol. This incident raised the concerns of mission drift (Rhyne, 1998). Also, initial public offering of Banco Compartamos in Mexico, and SKS microfinance in

India further contributed to the concerns. These incidences resulted in a few people making huge financial gains out of a microfinance that has a mission of uplifting poor (Rosenberg, 2007).

Though, mission drift has been a concern, there are positives associated with shareholder funded MFIs as well. Researchers have advocated that shareholder funded MFIs are able to observe the best governance practices (Rock et al., 1998; Otero and Chu, 2002; Helms, 2006). Grant and loans based MFIs, which are not for profit, have been considered weaker structures as they lack owners with a financial stake in the firm (Jansson and Westley, 2004). Due to the above points, MFIs funded by grants and loans exhibit inferior financial performance compared to shareholder firms. Ledgerwood and White (2006) and Fernando (2004) had proposed for the transformation of MFIs into SHFs. On the other hand, not for profit MFIs have benefit of reducing adverse selection of customers and avoiding moral hazard (Hansmann, 1996; Desrochers and Fischer, 2002; Mersland, 2009). It means that shareholder funded MFIs should exhibit better financial performance but in terms of social performance, not for profit MFIs should do better. On the contrary, Mersland and Strom (2009) found no difference in financial and social performance of shareholder funded and non shareholder funded MFIs.

In line of the above discussion, it is importance to validate whether shareholder funded MFIs have achieved better performance on financial and social performance. Therefore, this paper compares the performance of two groups of MFIs operating in India based on their funding sources. First group consists of MFIs that receive funding from shareholder as well as loans or other sources. The second group comprises MFIs that rely solely on loans and grants.

Research Methodology

Sample and Data

The microfinance industry is not regulated by legislation in India and there are no mandatory periodical disclosure requirements for MFIs. However, in competitive markets, seeking funds from donors/investors mandates periodical financial disclosure. MFIs depend heavily on donors'/investors' funds and therefore, engage in voluntary financial disclosure through microfinance information exchange (MIX). MIX promotes microfinance transparency by collecting financial, operational, and social performance data from over 2000 MFIs around the world, reviewing it for coherence and consistency, and reclassifying according to international financial reporting norms. MIX serves as the information platform

for investors, networks and service providers in the microfinance industry. It was incorporated in 2002 in Washington, DC, by Consultative Group to Assist Poor (CGAP) and operates as a non-profit organisation.

There are over 1000 MFIs operating in India (George, 2011). However, only about 150 MFIs report their financial data to MIX across all years. Out of these only 90 MFIs, that reported their financial data for the year 2010, were considered to form the sample. MIX rates MFIs based on quality and quantity of their information reporting. A five levels diamond rating is used by MIX to categorise MFIs based on level of disclosure. Out of 90 MFIs as mentioned above, 71 MFIs which were rated three diamonds and above were included in the sample for this study. MFIs below three diamond rating were expected to have gaps in their data reporting, therefore, excluded from the sample. Following table presents a brief description of diamond rating system maintained by MIX.

Table 1: Microfinance Information Exchange Transparency Levels

Diamond	Extent of Information Disclosure
Diamond 1	General information
Diamond 2	Diamond 1 + outreach data (at minimum, data for two consecutive years)
Diamond 3	Diamond 2 + financial data (at minimum, data for two consecutive years)
Diamond 4	Diamond 3 + audited financial statements (at minimum, audited financial statements including auditors' opinion and notes for at least two consecutive years)
Diamond 5	Diamond 4 + rating or other due diligence report (at minimum ratings/evaluation, due diligence and other benchmarking assessment reports or studies for one of the two years reported)

(Source: Mix Market Database 2011)

Variables

Microfinance Institutions (MFIs) differ from other business organisations in that they have two sets of objectives to achieve, social and financial objectives (Hartarska & Nadolnyak, 2007). Following the previous studies, financial performance of MFIs was measured by profitability and sustainability indicators; and social performance was measured using breadth and depth of outreach (Bruett, 2005; Lafourcade et al., 2006; Hartarska, 2005; Cull et al., 2007; Mersland and Strom, 2009, 2008). Financial performance was measured by return on assets (ROA), operating self-sufficiency (OSS) and yield on gross portfolio (yield).

In line with previous studies, social performance was measured on two dimensions, breadth and depth of outreach. While number of active borrowers indicates breadth of outreach, the depth is measured by average loan size per borrower. Organisational efficiency was measured by the operating expenses ratio (OER) and the cost of credit per borrower (CPB). Firm size was measured using total assets (TA).

Return on assets (ROA) measures the capacity of an MFI to use its assets to generate a return. MFIs operate in four organisational forms which include Non-governmental organisations, Non-banking financial corporations, Village Banks and Credit Unions. ROA was used instead of return on equity to measure the economic performance as it eliminates the effect of different capital structures (Tchakoute-Tchuigoua, 2010; Bruett, 2005).

Operating Self Sufficiency is the capacity of the MFI to cover its costs with its available revenue. It measures performance of MFI in terms of self-sufficiency and indicates how well an MFI can cover its costs through operating revenues. It measures a management's ability to run the organisation and cover operating costs without making use of subsidies.

Two dimensions of outreach, breadth and depth have been used widely in microfinance literature to measure social performance of MFIs (Mersland & Strom, 2009, 2010; Hartarska, 2005; Cull et al., 2007; Hartarska and Nadolnyak, 2007). Breadth of outreach is measured by number of active borrowers i.e. number of individuals that have an outstanding loan balance with the MFI. Depth of outreach concerns the MFIs' objective of providing credit to the poorest section of society. Cull et al. (2007) defined the depth in terms of average loan per borrower where a low average loan indicated loans to poorest segments, and high average loan meant that relatively better off sections of people were being catered to. A weak depth of outreach indicates failure to reach the poorest borrowers (Schreiner, 2002).

Organisational efficiency refers to the efficiency of management to run the organisation and mainly deals with the costs incurred in extending credit to the borrowers (Tchakoute-Tchuigoua, 2010). Two measures, namely, operating efficiency and cost per borrower are used in this study. Operating efficiency refers to operating cost to gross portfolio ratio indicating the necessary cost for an MFI to provide credit to borrowers. Cost per borrower gives a clear measurement of the efficiency of the institution by showing the average cost to serve a borrower over a year. The lower the ratio, the more efficient is the institution. Firm specific variables influence the performance of a firm. The study uses total assets to indicate the size of the firm.

Table – 2 Variables Used in the Study

Performance	Category	Variable	Definition
Financial Performance	Economic Performance	Return on Assets	(Adjusted Net Operating Income - Taxes)/ Adjusted Average Total Assets
	Operational Self-sufficiency	Operating Self-sufficiency	Financial Revenue/ (Financial Expense + Impairment Losses on Loans + Operating Expense)
	Financial Revenue	Yield on Gross Portfolio	Adjusted Financial Revenue from Loan Portfolio/ Adjusted Average Gross Loan Portfolio
Social Performance	Breadth of Outreach	Number of Active Borrowers	Number of borrowers with loans outstanding, adjusted for standardized write-offs
	Depth of Outreach	Average Loan	Average outstanding loan per borrower
Organizational Efficiency	Efficiency Ratio	Operating Cost to Revenue	Operating Cost/Average Gross Portfolio
	Cost per borrower	Cost Per Borrower	Operating Cost/Average Number of Active Borrowers
Firm Specific Variable	Size of Firm	Total Assets	Natural logarithmic of total assets adjusted for Inflation and standardized provisioning for loan impairment and write-offs

Data Analysis and Findings

The sample of 71 MFIs was divided into two parts based on their source of funding. In the first group MFIs funded by shareholders as well as loans and grants were included. On the other hand, the second group included the MFIs that receive financial support through loans and grants only. The sample included 33 MFIs funded by shareholders and 38 MFIs funded by donations and grants.

Descriptive statistics reveal shareholder funded MFIs are larger in size as would be expected. Average loan for shareholder funded MFIs is higher compared to other MFIs. A higher loan size is supposed to indicate the tendency of MFIs to serve less poor borrowers. Shareholder funded MFIs have a lower return on assets compared to their counterparts. The yield on portfolio is equivalent for both categories of MFIs. In terms of operational self sufficiency non shareholder funded MFIs marginally outperform their counterparts.

Table 3: Descriptive Statistics

Variable	Category of MFIs	N	Mean	Std. Deviation
Return on Assets	Shareholder Funded	32	0.005	0.035
	Non Shareholder Funded	33	0.017	0.055
Operating Self Sufficiency	Shareholder Funded	32	1.087	0.200
	Non Shareholder Funded	33	1.170	0.275
Yield on Gross Portfolio	Shareholder Funded	32	0.274	0.069
	Non Shareholder Funded	33	0.253	0.081
Number of Active Borrowers	Shareholder Funded	33	711090	1337985
	Non Shareholder Funded	38	197141	535372
Average Loan	Shareholder Funded	33	253	406
	Non Shareholder Funded	38	137	32.85
Operating Cost	Shareholder Funded	32	0.147	0.093
	Non Shareholder Funded	33	0.131	0.109
Cost per borrower	Shareholder Funded	32	27.718	18.963
	Non Shareholder Funded	32	16.937	13.329
Total Assets	Shareholder Funded	33	133739551	221003015
	Non Shareholder Funded	37	34133978	100666941

Operating cost for shareholder funded MFIs is higher. This may be due to the fact that shareholder funded MFIs are mostly regulated by the law and hence are required to comply to various disclosure and operations terms which adds to the cost. On another cost efficiency measure, shareholder funded MFIs have inferior performance. Cost per borrower for shareholder funded MFIs is higher compared to their counterparts.

Portfolio at risk for shareholder funded MFIs is higher compared to non-shareholder funded MFIs. In terms of breadth of outreach, shareholder funded MFIs perform far better than non-shareholder funded MFIs.

Means of variables of the two groups were compared for significant differences using independent sample t-test. One of the assumptions for using t test is normality of data. Data for the variables was checked for normality and necessary operations were performed on data to satisfy the assumption. To begin with, outliers were removed from the data, and wherever removal of outliers didn't solve the purpose, log transformations were used. The results have been shown in Table 4 below.

Table 4: Results of Independent Sample t-test at 5% significance level

Variable	t value	p value
Log of Total Assets	4.086	0.00*
Log of Number of Borrowers	2.995	0.00*
Log of Return on Assets	-.901	0.37
Log of Operating Self Sufficiency	-.836	0.40
Log of Operating Cost	.685	0.49
Average Loan	1.762	0.04*
Yield on Portfolio	1.111	0.27
Cost per borrower	2.631	0.01*
Portfolio at Risk	.445	0.65

***significant at 5% level of significance**

For the purpose of analysis, shareholder funded group was numbered the first group and non-shareholder funded group was named the second group. Therefore, a positive t value indicates a higher mean value of the variable for shareholder funded group and *vice versa*. Significant difference is noted in firm size, number of borrower, average loan and cost per borrowers. Significantly higher total assets for shareholder funded MFIs indicates larger firm size of shareholder funded MFIs. Shareholder funded MFIs have a profit orientation and they better governed which leads to large firm size. MFIs based on grants and loans are less likely to have a large firm as they lack have to rely on donations which may lack consistency.

Shareholder funded MFIs have significantly higher outreach as well which is contrary to the assumptions made in literature. This indicates that shareholder funded MFIs follow an aggressive approach in reach more and more borrowers, while non-shareholder funded MFIs

choose to serve smaller groups of people. Also, this can be attributed to the fact that shareholder funded MFIs are mostly regulated and borrowers put more faith in such MFIs.

No significant difference in returns on assets, operational self-sufficiency and yield on portfolio. This is supported by the findings of Mersland and Strom (2008) who did not find any association between shareholder funding and these financial performance indicators. This means that being shareholder funded does not improve financial performance. Crespi et al. (2004) had also found no difference in profitability of shareholder MFIs and not for profit MFIs.

A significantly higher average loan for shareholder funded MFIs indicates possibility of mission drift. Social objective of microfinance requires MFIs to reach maximum number of poorest people. If MFIs keep on serving the same set of MFIs they might be serving people who have grown better off over time. Also, there is a tendency in shareholder funded MFIs to lend to better off people to minimise repayment risk by borrowers. Cost per borrower is significantly higher for shareholder funded MFIs. This may be due to the fact that shareholder funded MFIs are mostly regulated by the law and hence are required to comply to various disclosure and operations terms which adds to the cost.

Conclusion

The paper aimed to compare financial and social performance of two groups of MFIs. Performance of shareholder funded and non-shareholder funded MFIs was compared to understand which model was performing better on the two performance parameters. After analysing the data for 71 MFIs operating in India, it is found that there is not much difference in financial performance of the two groups. While the size of shareholder funded MFIs is larger than non-shareholder funded MFIs, the former has low cost efficiency. Shareholder funded MFIs is found to be serving more number of borrowers, however, there is a possibility of mission drift as the average loan size for shareholder funded MFIs higher than their counterparts. In Indian context, where commercialisation of microfinance sector is growing, shareholder funded MFIs are dominating the market. Most of these are regulated and hence attract more borrowers due to backing of regulatory framework. Though shareholder MFIs are reaching more number of borrowers, the effectiveness of breadth of outreach is questionable as the other social objective of reaching the poorest is not being achieved. This research can be extended to include more aspects of funding such as capital structure to better understand benefits and drawbacks associated with the two types of MFIs.

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