

Determinants of Sustainability of the Micro-Finance Sector in India

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ABSTRACT

India takes pride in the largest microfinance programme in the world. This paper aims to fill a void by exploiting data from third party agencies to study the efficiency parameters influencing financial health of MFIs (microfinance institutions). The authors use the “goodness of fit” test to find out the important factors determining the performance capabilities of microfinance institutions. Performance parameters OER (operating efficiency ratio), OSS (operational self sufficiency), ROE (return on equity), and ROA (return on assets) are tested with financial and social performance indicators to understand if any correlation exists. The study finds that the only significant factor affecting sustainability of MFIs is OER in India. OSS, ROE, and ROA had no significant impact on sustainability of these MFIs during the study period. Understanding the viability of microfinance and the factors that affect it can guide the design of policies that ensure benefits for the poor.

KEYWORDS

Microfinance, Operating Expense Ratio, Social and Financial Performance of MFIs, Sustainability of MFIs

INTRODUCTION

Globally, financial inclusion is a major policy concern with governments across the world (Thankom and Kamath, 2015). India is one of the fastest growing economies in the world today growing at the rate of 7 to 9% p.a. Lack of access to credit is generally seen as one of the main reasons why many people in India and other developing economies remain poor. Usually, the poor have no access to loans from the banking system, because they cannot put up acceptable collateral and/or because the costs for banks of screening and monitoring the activities of the poor, and of enforcing their contracts, are too high to make lending to this group profitable. (Eijkel *et al.*, 2011). Over the past few decades, microfinance has emerged as one of the effective sources of finance for socio-economic development in the world and is recognized as an essential tool of financial inclusion (Soumaré *et al.*, 2020). Microfinance institutions continue to play an ever-increasing role in the socio-economic development of the world at large and the less developed countries in particular. (Memom *et al.*, 2021)

India takes pride in the largest microfinance programme in the world. The industry is growing at a significant rate and is now considered as a sub sector of the finance services industry. The

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goal of microfinance is to give low-income people an opportunity to become self-sufficient by providing a means of saving money, borrowing money and insurance (Sarumathi and Mohan, 2011). Microfinance institutions (MFIs) enable the poor to undertake income-generating activities to improve their livelihoods and can help them cope with shocks and uncertainties (Fofana et al., 2015). The focus of microfinance is to facilitate the shift from induced development from the above to initiated development from below (Tripathi and Tripathi, 2014).

We are currently witnessing a global debate over whether MFIs adhere to their initial socio-economic mission or are shifting towards prioritizing the achievement of their financial goals (Widiarto and Emrouznejad, 2015). Most MFIs claim to have a dual mission of reaching poor clients and being financially sustainable (Mersland and Strom, 2009). For most MFIs, one objective is to contribute to economic development. This implies reaching out to more clients especially among the poorest population; the main outreach "frontiers" of microfinance (Johnson et al., 2006). The second goal is to achieve this in a manner that is financially sustainable. Microfinance in India is a dynamic sector, but this sector has been difficult to study because of lack of sufficient and reliable information.

In several studies done globally, it has been generally established that various microfinance initiatives have succeeded in making a difference in the lives of the target population. However, doubts have always been raised over the financial sustainability of microfinance institutions. Huge gaps can be identified, especially if we consider the role of MFIs in low-income countries (Efendic and Hadziahmetovic, 2017). A review of literature done on the Indian microfinance sector exposes that there are scanty studies done focusing on the financial health of MFIs, largely due to the common perception of MFIs as not for profit organizations. MFIs need to be economically viable and sustainable in the long run, but economic implications of long-term sustainability are not being considered (Srinivasan et al., 2006). Sustainability of MFI provides a promising direction for improved access to financial services; promotes investment, spurs asset accumulation and economic activities at grass root level; and helps the poor uplift from poverty (Masanyiwa et al., 2022.)

This paper aims to fill the void by exploiting data from third party agencies, namely SIDBI (Small Industries Development Bank of India) which has managed to get credit grading of MFIs done based on inputs through various credit rating agencies and published a unique panel data set. The objective of this paper is to study the efficiency parameters influencing financial health of MFIs. This becomes necessary to get a deeper understanding of the core factors which are significant in determining performance capabilities of MFIs in India and elsewhere. To understand this, we have used a data set of 28 MFIs located all over India which is 12.55% of the 23 MFIs listed in the Sa-dhan microfinance directory published in 2016-17.

In this paper we assess the factors influencing financial sustainability and profitability using a sample of 28 microfinance institutions. In so doing, we aim at contributing to the important discussion of improving the financial health and performance of the Indian microfinance sector. The motivation for conducting this research is primarily to fill an identified research gap in this area. To the best of our knowledge, this is the first study investigating the factors determining the financial efficiency of MFIs in India. This becomes additionally important as India has now started integrating microfinance into her poverty alleviation strategy, so understanding the viability of microfinance and the factors that affect it can guide the design of policies that ensures benefits for the poor.

EMPIRICAL LITERATURE REVIEW

The micro finance institutions participation in several developing economies is escalating from time to time. Sanderatne, (2003) showed that operational efficiency and low administration costs have a significant bearing on the financial performance of MFIs in several countries. Analyzing the relationship between financial performance and corporate governance in microfinance institutions, Mersland and Strom, (2007) demonstrated that split roles of CEO and chairman, a female CEO, and competition are important explanations. CEO/chairman duality is associated with a lower ROA

and higher operational costs, while a female CEO with higher ROA and lower operational costs. Examining the performance of Euro-Mediterranean microfinance institutions. SoltaneBassem, (2009) identified the trade-offs between outreach and sustainability of MFIs and concluded that external governance mechanisms help to achieve better financial performance. Cull et al., (2007) who studied the financial performance of 124 micro finance institutions in 49 countries found that MFIs that focus on providing loans to individuals perform better in terms of profitability. Coleman and Oes, (2008) measuring profitability by only ROA found that governance plays a critical role in the performance of MFIs. Lensienk et al., (2008) using stochastic frontier analysis from a sample of more than 1300 observations concluded that outreach and efficiency of MFIs are inversely correlated and found that efficiency of MFIs is higher if they focus less on the poor and/or reduce the percentage of female borrowers. Taking an international sample of 89 MFIs, Serrano-Cinca et al. (2014) discovered that only 13 show a higher level of social efficiency in comparison to financial efficiency. Their study concluded that when faced with a choice between social and financial efficiency, MFIs choose financial performance in order to be able to continue with their social aims. Aseefa et al., (2010) document strong negative effects of competition on performance of MFIs: competition is negatively related with outreach and associated with rising default rates. Ayayi and Sene, (2010) analyzed a sample of 217 MFI of various legal forms and originating in 101 countries and showed that the quality of loans portfolio, interest rate, and productivity have positive impacts on the financial viability of MFIs. After studying 173 MFIs in 18 Asian countries, Nawaz and Iqbal, (2015) observed that corporate governance has no significant impact on financial stability of MFIs of Asia. On the other hand, Kayembe et al (2021) found a strong positive and statistically significant impact association between good corporate governance and MFI sustainability in Malawi. Odowa and Ali (2019) found that the operational self-sufficiency of MFIs in Ethiopia is positively and significantly affected by the average loan balance per borrower and the size of the MFIs. Wasiaturrehman et al (2020) concluded that bigger loan size and non-performing loans have a negative influence on MFIs outreach. In Thailand sustainability is affected by the efficiency of Thai MFI staff members in managing borrowers and the MFIs' ability to use their short-term assets to generate cash or revenue Hemtanonl and Gan (2022)

In India, Rai and Rai, (2012) using Multiple Linear Regression analysis found that the capital/asset ratio, operating expenses/loan portfolio and portfolio at risk > 30 days were the main factors which affect the sustainability of microfinance institutions. Roy, 2011 examined the profitability of MFIs in the Indian state of Assam in terms of ROA and ROE and found evidence of higher profitability.

DATA ISSUES AND METHODOLOGY

Conceptual Framework

This paper uses “goodness of fit” test or the Pearson correlation in SPSS test to find out the important factors determining the performance capabilities of microfinance institutions. Generally, the necessity of the social role has seemed to eclipse the concern of financial health of these enterprises. While there exist various social performance assessment tools and institutionalized rating processes, the assessment of financial performance has yet to gain ground and is bereft of such a multitude of options and methodologies. We feel that financial sustainability is of critical importance. Though the aspiration for sustainable MFIs has been often articulated, there was also an opinion that most microfinance institutions working in this field have been unsustainable (Abdulai, 2017; Hossain and Khan, 2016; Rajdev and Bhatt, 2013). This is largely attributed to the poor perception of micro borrowers' risk and creditworthiness, and the diseconomies of scale in making small loans. A big problem in conducting this kind of study with MFIs in India is that due to lack of mandatory disclosure requirements and paucity of proper legislation governing MFIs, it is difficult to get reliable and data on the financials.

This paper uses data from a third party agency SIDBI (Small Industries Development Bank of India) which has managed to get credit grading of MFIs in India done based on inputs through four rating agencies: CRISIL (Credit Rating Information Services of India Limited), CARE (Credit

Analysis and Research Limited), ICRA (Credit Rating Information Services of India Limited) and SMERA (Small and Medium Enterprises Rating Agency). While comparisons of the methodologies applied by the rating agencies do reveal minor differences in MFI assessment, these have been ignored for the purpose of the present study. Utilizing a comparatively large and unique data set based on grading reports spanning two years we are able to study how the identified four financial parameters influence the performance of MFIs. Overall performance of the MFI i.e. financial and the social conduct is identified by the rating agencies and denoted by M factor (financial) and C factor (social). The econometric analysis relies on secondary data collected and investigated through Pearson chi square tests.

Performance Parameters OER (Operating Efficiency Ratio), OSS (Operational Self Sufficiency), ROE (Return on Equity) and ROA (Return on Assets) are tested with these two performance indicators to understand if any correlation exists. The attempt was to find out if any significant factor exists that has an impact on efficiency of MFIs. The indicators used to assess performance for this study are based on unadjusted financial data. No adjustments for inflation, provision for loan loss, subsidies or cost of funds have been considered.

Sampling Selection of MFIs

The focus of the current study is an empirically investigation of factors affecting sustainability among 28 MFIs in India. Sa-dhan's latest MFI directory published in 2016-17 lists 223 MFIs (Microfinance Institutions) all over India. For the purpose of this research, secondary data analysis is done based on 28 MFIs' reports published by SIDBI (Small Industries Development Bank of India) and the sample constitutes 12.55% of the total universe. The selected MFIs are some of the largest contemporary MFI programmes operating in India. All of them have wide experience of working with microfinance clients for over 10 years each. This means that they are now in the mature stage. All reporting MFIs are regulated Furthermore, our sample is quite representative of the MFIs practicing microfinance in India in a business-oriented manner. These 28 MFIs are registered under various legal forms like society (6), trust (5), Section 8 companies (5), NBFCs (Non-banking Financial Corporations) (4) and NBFC MFIs (8). The period covered is 2015-16 and 2016-17. The reports of SIDBI (Small Industries Development Bank of India) utilized are for the period of 2016 and 2017 to get the latest scenario of the progress of the MFIs.

RESULTS AND INFERENCES

Specifically, this paper studies the determinants of financial and social performance on a sample of 28 MFIs in India over a period of two years. The data has been collected from the MFI grading reports put up by SIDBI (Small Industries Development Bank of India) in the public domain. There are two assessment grade factors to assess the overall performance of MFIs in grading system: one in sustainability and profitability which is denoted by "M" factor and the other is code of conduct assessment COCA known as "C" factor. Financial and operational efficiency variables like ROA, ROE, OSS AND OER are tested with the "M" factor and social parameters like quality of services i.e., code of conduct is denoted by "C" factor of MFI grade given to MFIs by credit rating agencies published in the SIDBI (Small Industries Development Bank of India) reports applying the Pearson chi-square test. Achieving overall productivity and self-sufficiency is the MFIs is assumed to be sum total of achieving efficiencies at the financial and operational levels. The overall performance capacity of MFI which is the grade (M&C) accredited by agency with all these factors ROA, ROE, OSS AND OER and social code of conduct are tested separately to find out the most significant factor(s) that affect the sustainability of the MFIs.

Our study finds that the only significant factor affecting sustainability of MFIs is OER in India. Out of all the variables used for the study, there is no correlation found between any of variables except for OER. It is statistically significant with M factor and C factor of MFIs which is labeled

Table 1. Financial profitability and sustainability parameters

		OSS	ROE_1	ROA_1	OER_1	RatioOutNLP
OSS	Pearson Correlation	1	.282	-.074	-.383	-.060
	Sig. (2-tailed)	-	.242	.764	.105	.807
	N	19	19	19	19	19
ROE_1	Pearson Correlation	.282	1	-.193	-.273	-.076
	Sig. (2-tailed)	.242	-	.428	.258	.756
	N	19	19	19	19	19
ROA_1	Pearson Correlation	-.074	-.193	1	.116	-.036
	Sig. (2-tailed)	.764	.428	-	.635	.882
	N	19	19	19	19	19
OER_1	Pearson Correlation	-.383	-.273	.116	1	-.109
	Sig. (2-tailed)	.105	.258	.635	-	.657
	N	19	19	19	19	19
RatioOutNLP	Pearson Correlation	-.060	-.076	-.036	-.109	1
	Sig. (2-tailed)	.807	.756	.882	.657	-
	N	19	19	19	19	19
RatioOutGLP	Pearson Correlation	.078	.015	-.069	-.392	.799**
	Sig. (2-tailed)	.750	.950	.779	.097	.000
	N	19	19	19	19	19
GRMPER	Pearson Correlation	.198	.282	-.342	-.539*	.258
	Sig. (2-tailed)	.417	.243	.152	.017	.287
	N	19	19	19	19	19
GRCPER	Pearson Correlation	.113	.231	-.291	-.548*	-.109
	Sig. (2-tailed)	.646	.342	.226	.015	.657
	N	19	19	19	19	19

in the table above as GRMPER & GRCPER. This means that the overall performance of MFIs is highly related to operating expense ratio and with the closeness of negative sig. level of 0.017 for GRMPER and 0.015 for GRCPER shows that both the variables are inversely related. Thus, as OER is decreased, performance of MFIs could be highly enhanced.

DISCUSSION AND IMPLICATIONS

Subsidized credit has long been believed to be the panacea for the eradication of poverty for decades (Agarwal and Sinha, 2010). Microfinance has now emerged as a diverse and growing industry in India. Thousands of MFIs exist, right from grass root self-help groups to commercial banks which provide various financial services to millions of low-income households and micro enterprises. However, lending to the poor involves high transaction cost and risks associated with information asymmetries and moral hazards (Stiglitz and Weiss, 1981). In numerous studies done across the world, it is generally believed that various microfinance initiatives have been able to make a difference in the lives of the target population (Gopaldaswamy, 2016; Agarwal and Sen, 2009; Shetty, 2008; Afrane,

Table 2. Correlation between profitability, outreach and code of conduct parameters

		RatioOutGLP	GRMPER	GRCPER
OSS	Pearson Correlation	.078	.198	.113
	Sig. (2-tailed)	.750	.417	.646
	N	19	19	19
ROE_1	Pearson Correlation	.015	.282	.231
	Sig. (2-tailed)	.950	.243	.342
	N	19	19	19
ROA_1	Pearson Correlation	-.069	-.342	-.291
	Sig. (2-tailed)	.779	.152	.226
	N	19	19	19
OER_1	Pearson Correlation	-.392	-.539*	-.548*
	Sig. (2-tailed)	.097	.017	.015
	N	19	19	19
RatioOutNLP	Pearson Correlation	.799**	.258	-.109
	Sig. (2-tailed)	.000	.287	.657
	N	19	19	19
RatioOutGLP	Pearson Correlation	1	.343	.094
	Sig. (2-tailed)	-	.151	.703
	N	19	19	19
GRMPER	Pearson Correlation	.343	1	.101
	Sig. (2-tailed)	.151	-	.680
	N	19	19	19
GRCPER	Pearson Correlation	.094	.101	1
	Sig. (2-tailed)	.703	.680	-
	N	19	19	19

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

** . Correlation is significant at the 0.01 level (2-tailed).

Defining variables:

OSS – Operational Self Sufficiency

ROA –Return on Assets

ROE – Return on Equity

OER – Operating Efficiency Ratio

Ratio of Outreach to GLP – Ratio of Outreach to Gross Loan Portfolio

Ratio of Outreach to NLP – Ratio of outreach to Net Loan Portfolio

GRMPER – Grade "M" Performance Indicator for measuring the performance capacity

GRCPER - Grade "C" Performance Indicator for measuring the social code of conduct

2002). However, increasing doubts have been raised over the financial sustainability of microfinance institutions. In India so far debates on microcredit performance so far have almost ignored the financial aspects. While undoubtedly microcredit has emerged as a fancy new dogma to combat poverty there is very little literature on microfinance efficiency.

MFIs need to be economically viable and sustainable in the long run (Agarwal and Sinha, 2010) but economic implications of long-term sustainability are not being considered. At least in India, it

Figure 1. Correlation between profitability (M factor) and OER

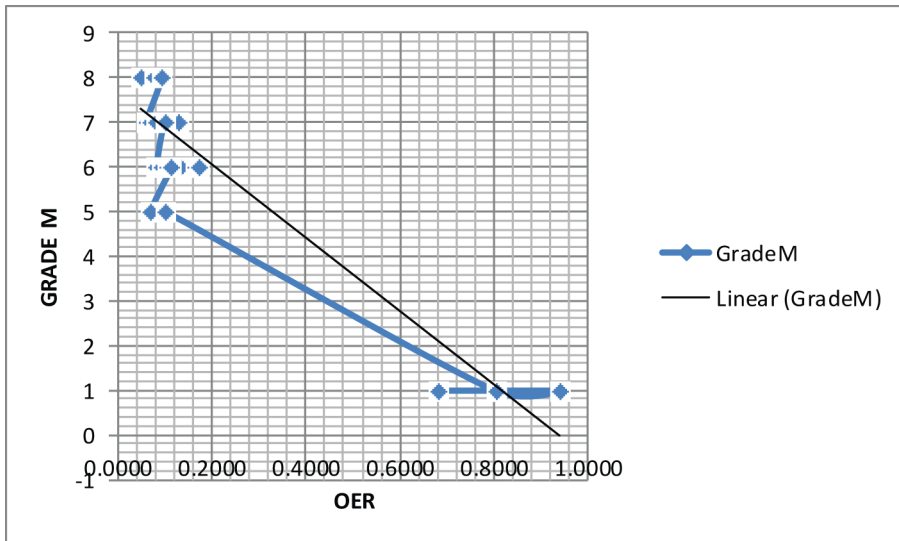
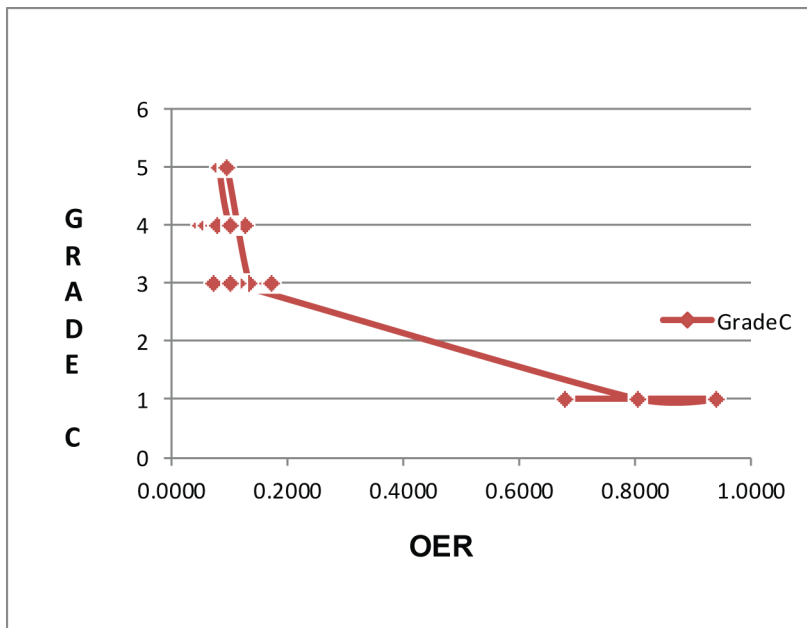


Figure 2. Correlation between code of conduct (C factor) and OER



looks like there is no working model to analyze the financial performance and thereby sustainability of microfinance institutions. This problem is exacerbated by the absence of a dedicated legislation on the functioning and management of microfinance institutions. In addition, the absence of a regulatory mechanism for financial disclosures by microfinance institutions abets the problem. The present study is a modest attempt to isolate the factors that really matter in the performance of various microfinance institutions operating in India. Given the reality that MFIs are the users of extremely scarce capital, and

the intended beneficiaries are from the marginalized sections of society, it is of the utmost importance that these units should be run efficiently. MFIs must be able to sustain themselves financially in order to continue pursuing their noble objectives, through reasonably good financial performance.

OER is the only and significant factor affecting efficiency and sustainability of the MFIs covered in this study. Thus, improving on operating efficiency measures whereby OER can be reduced assumes paramount importance. There is a need for better governance and control on expenses on the part of the MFIs. Somewhere fixed components like salaries to staff can be reduced by collaborating the functions and on the other side variable components can be controlled by reducing the number of visits and transportation. If the time duration in loan servicing or recovery is increased marginally, personnel cost optimization can be achieved, for example if collection takes place every month instead of fortnightly or weekly, it reduces the collection cost. Babajide, (2012) while studying MFIs in Nigeria has also suggested the same thing. MFIs need to improve top management characteristics just as much as ordinary firms. Good corporate governance has been identified as a key bottleneck in strengthening MFIs' financial performance and increasing their outreach (Bakker and Nijhoff, 2014; Mersland and Strom, 2007; Helms, 2006; Otero and Chu, 2002; Labie, 2001).

Another definite suggestion is to reduce the interest rates charged to the borrowers. While this may impact revenues in the short run, lower interest rates would help to increase the consumer base. It has been found in the course of the present research that non repayment of loans is partially due to high interest rates which makes people incapable of paying. The other side of the picture is that the microfinance market is a unique market that makes use of 'soft' information and cultivates strong MFI-client relationships. MFIs provide financial services to the bottom strata of society who are not considered creditworthy by the commercial banks. These institutions have been acclaimed for overcoming the problem of information asymmetry and for advancing loans without collaterals they are able to do this as they establish strong personal relationships with clients and indulge in group lending that becomes a kind of social collateral.

Additionally, the appointment of staff from the local areas would reduce the cost and expenses. These people would also have the advantage of familiarity with the local language. Another solution could be to appoint agents with minimal or qualifications for disbursement and recovery of loans. This would reduce the costs for loan collection and loan disbursement. On the other hand, the document processing could continue to be centralized with the help of qualified people. Borrowers extending payments overdue dates should be made to bear the additional collection cost as penalty.

Perhaps the most difficult part lies in educating the borrowers about entrepreneurship skills, so that the credit made available to them is more gainfully employed. This is the most critical challenge especially since not too many viable and sustainable livelihoods exist in these areas. Periodical assessment of business and monitoring the same will further help the clients. Operational efficiency also includes recovery of loans at minimum collection cost. So, in order to reduce the losses, there is a need for periodic assessment of clients' business and the risk associated with the same.

Leveraging digital models can help in reducing the operational cost and developing the consumer base. Digitalization, if made simpler and more adoptable, can increase the outreach to a greater extent. Digitalization has helped Musoni, Kenya to increase its outreach by 11000 loans worth USD25 million. The main reasons for the dominance of the parallel unorganized sector in Indian loan disbursement have been easy availability of loans without many documents and payment in easy installments.

As is the case with any global industry, microfinance needs established and time-honored standards by which MFIs can be judged. Common standards allow for microfinance administrators and board members to gauge accurately the performance of their institution. Also, industry-wide standards for MFIs can make reporting to donors, lenders, and investors easier and provide the language that enables MFIs to communicate with other participants in the industry. Therefore, the challenge of microfinance institutions (MFIs) in India and elsewhere commonly known as "banks for the poor", involves putting in place systems that enable this.

CONCLUSION

In a country like India, poverty remains to be one of the biggest policy concerns. Microfinance, the provision of small-scale financial services, has long been perceived as an important tool for fighting poverty and accelerating economic growth (Sinha, 2010). The present study is an attempt to analyze the financial performance of various microfinance institutions operating in India. Hence, to improve the performance of MFIs there is a need to better understand the core factors which are significant in determining the performance capabilities of MFIs. The motivation for conducting this research is primarily to fill an identified research gap in this area. It assumes significance as MFIs must be able to sustain themselves financially in order to continue pursuing their lofty objectives, through good financial performance. Against this backdrop the sustainability of MFIs needs to be critically looked at even from a social performance standpoint. It remains important that, in order to reach higher efficiency, MFIs should achieve successful outputs in both dimensions: social impact and financial sustainability. (Efendic and Hadziahmetovic, 2017). The outcome achieved in poverty alleviation by MFIs cannot be an occasion and given the widespread prevalent nature of poverty, requires an uninterrupted long-term commitment from these enterprises.

Given the fact that, major players of microfinance sector of Asia along the primary social goals have also started focusing on business outcomes, our results are revealing and have important implications for governments, researchers, and regulators of MFIs. These findings could also be considered while appraising MFIs performance. The somewhat small sample size does become a significant limitation of this study. However, further research with a greater sample size consisting of international MFIs would be of immense value and would enable comparison between levels of efficiency and its determinants among different countries. Since the analysis of efficiency determinants is hard, it would be worthwhile to enlarge this research and to analyze which determinants have direct influence on both social and financial efficiency.

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