Findings and Recommendations

7.1 INTRODUCTION

Microfinance institutions are equally important for the growth of an economy. The motive of the microfinance institutions provides the loan to poor people till they generate employment and increase their standard of living. The empirical review of literature suggests that different performance aspects of microfinance institutions have been studied by researchers over the years. In general, microfinance institutions in India have at least three generic priorities: women empowerment, non-profit approach and focus on the rural area. The present study primarily focused on the performance appraisal of microfinance institutions. The performance of microfinance institution is measured by the financial and social sustainability of microfinance institution. The goal of social performance of microfinance institutions is reaching the poor people and becoming sustainable. Financial sustainability shows that MFI is able to generate the finance from its operations till MFI covers all its cost. For determining the financial and social sustainability of Indian MFI, different factors have been studied to identify the relationship between these factors and financial sustainability and social sustainability. The relationship measure has been examined through multiple regressions. So, the present study examined the impact of efficiency, outreach and other related factors like DER, CAR and PR on the financial sustainability of MFIs. The study also assesses the impact of financial sustainability and other related factors on the outreach of MFI. For determining the effect of determinants of financial sustainability on initial and growth stage of MFI proxy indicators is used for financial sustainability.

The study is divided into seven chapters. The first chapter is introductory which discusses the need; concept of microfinance institutions; the historical background of MFIs; the delivery methodology, the legal and regulatory frameworks of MFIs. The second chapter is a review of literature related to the performance of MFIs. The third chapter discusses the research methodology used in the present study. The fourth chapter gives an explanatory analysis of
financial and social performance measures of Indian MFIs. The fifth and sixth chapter covers the empirical analysis and the seventh chapter consists of the major findings of the study.

7.2 RESEARCH OBJECTIVES

The present study examines the factors which affect the financial sustainability of MFIs. This study contributes to the existing literature by examining the various factors which affect the performance of MFIs. To cover the broad objective, the present study intends to accomplish the following specific objectives:

a) To study the effect of MFIs outreach and other related factors on the financial sustainability of MFIs in India;

b) to study the effect of financial sustainability on the breadth of outreach;

c) to study the effect of MFIs efficiency on the financial sustainability of MFIs;

d) to study the effect of determinants of financial sustainability on the sustainability of MFIs at their start-up and growth stage of development; and

e) to offer workable recommendations and suggestions.

7.3 RESEARCH HYPOTHESES

Following research hypotheses are formulated to achieve the above-mentioned research objectives

H$_{01}$: Financial sustainability is not significantly affected by outreach and other related factors of MFI.

H$_{01}$a: Operational Self-Sufficiency is not significantly affected by outreach and other related factors of MFI.

H$_{01b}$: Return on assets is not significantly affected by outreach and other related factors of MFI.

H$_{01c}$: Return on equity is not significantly affected by outreach and other related factors of MFI.

H$_{02}$: Breadth of outreach is not significantly affected by the financial sustainability of MFI.

H$_{02a}$: Number of active borrowers is not significantly affected by the financial sustainability of MFI.

H$_{02b}$: Average loan size is not significantly affected by the financial sustainability of MFI.
\[ H_{03} \]: Financial sustainability is not significantly affected by the efficiency of MFI.

\[ H_{03a} \]: Operational Self-Sufficiency is not significantly affected by the efficiency of MFI.

\[ H_{03b} \]: Return on assets is not significantly affected by the efficiency of MFI.

\[ H_{03c} \]: Return on equity is not significantly affected by the efficiency of MFI.

\[ H_{04} \]: Development stages of MFI are not significantly affected by the determinants of financial sustainability.

\[ H_{04a} \]: Start-up stage of MFI is not significantly affected by the determinants of financial sustainability.

\[ H_{04a1} \]: Earning ratio of MFI is not significantly affected by the determinants of financial sustainability.

\[ H_{04a2} \]: Liquidity of MFI is not significantly affected by the determinants of financial sustainability.

\[ H_{04b} \]: Growth stage of MFI is not significantly affected by the determinants of financial sustainability.

\[ H_{04b1} \]: Cost per borrowers of MFI is not significantly affected by the determinants of financial sustainability.

\[ H_{04b2} \]: Financial productivity of MFI is not significantly affected by the determinants of financial sustainability.

7.4 SCOPE OF THE STUDY

The universe of the study consisted of all those MFIs of India which are reporting their financial and social report to Microfinance Information Exchange (MIX) USA. These are nearly 160 MFIs of India reporting their data to the MIX USA.

7.5 DATABASE AND SOURCES

The present study is an exploratory in nature. Accordingly, there is an extensive use of secondary data. Annual reports of the MFIs have been used as secondary data. The reference period for annual data pertaining to the objectives is ranging from the year 2006-2007 to 2013-2014. The universe of the study consisted of all those MFIs of India which are reporting their financial and social report to Microfinance Information Exchange (MIX) USA. Only
forty MFIs, whose complete data is available for the time period under extensive have been selected for the purpose of the study.

7.6 TOOLS OF THE ANALYSIS

The statistical tools used to analyses the data includes mean, standard deviation, skewness, kurtosis, maximum, minimum, unit root test, correlation analysis, variance inflation test and regression respectively. Levin, Lin and Chu unit root test (2002) have been applied to check the stationary of the data. To fulfill the research objectives, panel regression Models have been applied to confirm the theory behind the conceptual framework and examine the impact of efficiency indicators and outreach indicators on financial sustainability indicators of MFI. As data is off panel nature, both fixed effect and random effect model has been used in the study. Hausman Chi² test is used to identify that which model is appropriate between fixed effect and random effect. Breusch and Pagan Lagrangian Multiplier test are used to identify that ordinary least square model is the best estimator or not in compare to random effect model.

7.7 MAJOR FINDINGS

7.7.1 Association of Outreach indicators and other related factors with Financial Sustainability indicators

7.7.1.1 Association between Outreach indicators and other related factors with OSS

The results of fixed random effect test indicate that OSS did not show any trade off with the outreach measures. These results similar to the previous findings by Cull et al. (2007), Ayayi & Sene (2010), Quayes (2012), Zerai & Lalitha (2012), Kipesha & Zhang (2013) which reported the absence of trade-off between sustainability and outreach. Capital assets ratio (CAR) is positively associated with OSS. Portfolio at risk is significantly and negatively associated with operational self-sufficiency. It means if the level of the portfolio at risk is increasing has a negative contribution to increasing the operational self-sufficiency of microfinance institutions. Other control variable especially the age is negatively and significantly associated with OSS. Size is positively associated with OSS. Here, \( H_{0a} \) is partially accepted that OSS is insignificantly affected by outreach factors but some other factors significantly affect the operational self-sufficiency.

7.7.1.2 Association between Outreach indicators and other related factors with ROA
The results indicate that outreach indicators and CAR are positively and significantly associated with ROA. It means that outreach and CAR has a significant role to play in increasing the ROA. Outreach indicators are positively associated with ROA that is confirmed by previous studies (Kipesha 2013, Kipesha & Zhang 2013). Portfolio at risk is negatively and significantly associated with ROA has a negative contribution to increasing the ROA. Age is negatively and significantly association with ROA, it is similar to a previous study (Coleman & Oesi 2008, Kipesha 2013) but contradicts to study of (Hartarska 2005, Cull et al 2007, Bogan et al 2007, Ejigu 2009). Size not significantly with ROA confirmed by Kipesaha (2013) but contradict by Coleman & Oesi (2008). H_0b is partially rejected because ROA is significantly affected by the outreach factors, CAR, PR and Age but not significantly affected by the DER and Size.

7.7.1.3 Association between Outreach indicators and other related factors with ROE

ALS is negatively and PR is positively associated with ROE. Size is positively and CAR is negatively associated with ROE that is confirmed by Kar (2012) but DER is negatively associated with ROE that is not confirmed by Kar (2012). Another explanatory variable not significantly associated with ROE. So, H_0c is partially accepted because ROE is significantly affected with ALS and PR.

7.7.2 Association of Financial sustainability indicators and other related factors with Outreach indicators

7.7.2.1 Association between Financial Sustainability indicators and other related factors with NAB

The results revealed that financial sustainability is positively associated with NAB but at a non-significant level. So, H_0d is accepted because NAB is insignificantly affected by the financial sustainability of microfinance institutions. In the previous study of Kipesha & Zhang (2013), OSS and ROA is negatively associated with NAB. Portfolios at risk and size are positively and significantly affect the NAB. It means portfolio at risk is increasing has a positive contribution in a number of active borrowers. Size is positively and significantly associated with NAB is confirmed by previous studies (Coleman & Oesi 2008, Kar 2012) but contradict to study of Coleman (2007). Age is negatively associated with NAB is similar to a previous study (Coleman 2007, Coleman & Oesi 2008) and contradict to study of Kar (2012). DER is negatively associated with NAB is contradict to previous study result (Kar 2012, Kipesha & Zhang 2013).
7.7.2.2 Association between Financial Sustainability indicators and other related factors with ALS

It is examined with the results that ROE and OSS are negatively and significantly associated with ALS is similar to the result of the previous study (Quayes 2012). ROA is significantly associated and positive contribution in ALS. OSS and ROA association with ALS is contradicting to the previous study of Kipesha & Zhang (2013). The result revealed that H₀e is rejected because ALS is significantly affected by the financial sustainability of microfinance institutions. DER is positively and significantly associated with ALS similar to the result of the previous study (Kipesha & Zhang 2013) but against the some studies (Quayes 2012, Kar 2012). CAR is negatively associated with ALS is also confirmed by the study of Kar (2012). Control variable size and age is positively and significantly associated with ALS at one percent level of significance but in the previous study (Coleman 2007, Coleman & Oesi 2008, Kar 2012) age is negatively associated with ALS.

7.7.3 Association of Efficiency indicators with Financial Sustainability indicators

7.7.3.1 Association of Efficiency indicators with OSS

It is revealed from the results that Borrowers per staff member and yield are playing a significant role in increasing the operational self-sufficiency of MFIs. Yield is positively associated with OSS that is confirmed by the previous study of Kipesha & Zhang (2013). Borrower per loan officer, personnel allocation ratio, cost per borrower and personnel expenses on loan portfolio are negatively and significantly associated with OSS indicating that increasing ratio of these variables has a negative contribution to increasing the OSS. Hence in light of above result, H₀a is rejected because OSS is significantly affected by the efficiency variables of MFIs.

7.7.3.2 Association of Efficiency indicators with ROA

Results depict that Borrowers per staff member, borrower per loan officer and personnel allocation ratio are positively associated with ROA but at a non-significant level. Yield is positively associated with ROA at 1 percent level of significance and personnel expenses on loan portfolio are negatively associated. Yield is positively associated with OSS that is confirmed by the previous study of Kipesha & Zhang (2013). Cost per borrower ratio is negatively associated with ROA at insignificant level. H₀b is partially accepted because ROA is insignificantly affected by BPSM, BPLO, CPB and PAR but other variables significantly affect the return on assets.
7.7.3.3 Association of Efficiency indicators with ROE

The results indicate that personnel allocation ratio and yield are negatively associated with ROE but at an insignificant level. Personnel expenses on loan Portfolio and borrower per loan officer are negatively and significantly associated with the return on equity. Borrower per staff member and cost per borrower is positively associated with ROE. Hence, in light of above results, H0c is partially accepted because ROE is insignificantly affected by BPSM, CPB, Yield and PAR but other variables significantly affect the return on assets.

7.7.4 Association of determinants of financial sustainability with Initial stage indicators

7.7.4.1 Association of determinants of financial sustainability with ER

The result shows that yield on gross loan portfolio; administrative expenses on assets, size and MFI age are positively and significantly associated with earning ratio of MFIs. It implies that these variables have a positive contribution in earning ratio of MFIs. Cost per borrower and portfolio at risk are negatively but significantly associated with ER. Borrower per staff member is negatively associated with earning ratio at insignificant level. Results depict that H0d is partially accepted because earning ratio is insignificantly affected by the borrower per staff member of MFIs and other variables significantly affect the earning ratio of MFIs.

7.7.4.2 Association of determinants of financial sustainability with LR

Results suggest that yield on the gross loan portfolio, cost per borrower and MFI age is negatively associated and operating expenses on loan portfolio is positively associated with liquidity ratio at non-significance level. Portfolio at risk is playing a negatively significant role in increasing the liquidity ratio. MFI size is positively associated with LR at one percent level of significance. Hence, in light of above result, H0e is partially rejected because liquidity ratio is significantly affected by portfolio at risk and size of MFIs and other variables does not affect significantly the liquidity ratio of MFIs.

7.7.5 Association of determinants of financial sustainability with Growth stage indicators

7.7.5.1 Association of determinants of financial sustainability with CPB

The result indicates that yield on the gross loan portfolio, administrative expenses on assets and MFI age are positively associated and borrower per staff member is negatively associated with a cost per borrower. Results manifest that if the cost per borrower is increasing in MFI yield, administrative expenses and size of the MFI has a positive contribution. Borrower per
loan officer is positively and MFI size is negatively associated with a cost per borrower at non-significance level. H0f is partially accepted because the cost per borrower does not significantly affected by borrower per loan officer and size of MFIs and other variables affect significantly the cost per borrower of MFIs.

7.7.5.2 Association of determinants of financial sustainability with FP

The results revealed that yield on the gross loan portfolio and size of MFI has a positive contribution to increasing the financial productivity of MFI. Portfolio at risk is showing a significant association while cost per borrower is showing a negative association but at insignificant level. Administrative expenses and MFI age showing a positive association with financial productivity at insignificant level. H0g is partially accepted because financial productivity does insignificantly affected by cost per borrower, administrative expenses on assets and age of MFIs and other variables affect significantly the financial productivity of MFIs.

7.8 RECOMMENDATIONS

The present study analyzes the different factors which affect the sustainability of Indian microfinance institutions. The results reveal that outreach and efficiency indicators affect the financial sustainability of Indian microfinance institutions. Further, financial sustainability indicators also affect the outreach of Indian MFIs. Based on the results, this section offers some recommendations to further enhance the sustainability level of Indian microfinance institutions.

- Microfinance institutions should provide the appropriate incentives and training to the staff members till they are able to serve the number of borrowers which will helpful in increase the level of operational self-sufficiency of Indian microfinance institutions.

- Microfinance institutions aim should be to find ways to have decreased the cost per borrower and personnel expenses on loan portfolio till they increase the level of operational self-sufficiency and achieve the higher returns on assets.

- Microfinance institution should focus on the initial and growth stage because which factors affect the sustainability of microfinance institution on initial and growth stage they also affect on the sustainability in the mature stage of the microfinance institution. If microfinance institution is not sustainable in the initial stage he will not survive for a long period.
• Outreach indicators of microfinance institution are helpful in attaining the social sustainability but it increases the risk of repayment of a loan which affects the financial sustainability of microfinance institution. So, a breath of outreach should be maintained otherwise it may create the problem of financial sustainability.

• A mechanism of information sharing should be adopted by MFI. This may be beneficial for the new players in microfinance industry. Some critical information may be check by information sharing, which may be beneficial for all the MFI, like information about credit allowed by different MFI to a particular borrower. It may be helpful in reducing the level of portfolio at risk and also minimize the problem of multiple borrowing.

• Microfinance institutions should utilize their assets in an effective manner because it may be helpful to increase the outreach level of Indian microfinance institution. For microfinance institutions, the aim should not be only to increase the outreach level but it may also focus on the financial sustainability. Repayment rate of the loan in a microfinance institution needs to be higher if they wish to achieve both the objectives outreach and financial sustainability.

• Microfinance institution should identify the new ways to reduce the portfolio risk. For this microfinance institutions should focus on providing the training to the borrower which may be helpful to establish some business and may give new ideas about the business till they earn income and easily pay the loan amount.

• Microfinance institution should be registered under a good regulatory framework because a good regulatory framework reduces the unnecessary conditions for providing a loan. It is helpful in reducing the transaction cost. So, microfinance institution should make appetency register in a perfect regulatory framework.

• The client appraisal is important, MFI should take a greater consideration on character of client, capacity of the customer to repay, behavior of the group members, history of repayment, assessment of the need and their work.

• Microfinance institutions should adopt tight policy for collecting the loan amount as compared to liberal policy because tight policy yields high loan performance compared to liberal policy.
• Microfinance institutions should involve the loan officer and customer when they formulating credit term because these people have good understanding about the term.

7.9 POLICY IMPLICATION

The present study provides a detailed and comprehensive analysis of the performance appraisal of Indian microfinance institutions. Different aspects of performance appraisal, including social and financial sustainability are evaluated in the study. The outcome of the study may be used by the microfinance institutions for increasing the sustainability level of the microfinance industry. This study has highlighted the factors that can significantly improve the financial sustainability of microfinance institutions. It provides an insight of the desirable ways that microfinance institutions can adopt to make it possible the simultaneous achievement of the dual objectives of financial and social sustainability. Microfinance institutions can achieve a greater breadth of outreach by a reduction in the portfolio at risk because if the level of risk will reduce the repayment rate of the loan will higher and microfinance institution achieve the level of financial sustainability and outreach. If microfinance institution repayment is higher it will earn a yield on gross loan portfolio which increases the level of operational self-sufficiency and return on assets. Return on assets increases the size of microfinance institution which may be helpful to increase the level of outreach. So, repayment rate of loan significantly affects the sustainability of microfinance institutions. Therefore, microfinance institutions may be focused on the portfolio at risk, it play a significant role in the performance of microfinance institutions and reduce the cost per borrower and personnel expenses on the loan portfolio. Overall, the society may get the benefits through the microfinance institutions because outreach level will increase and poor people’s access to credit and their standard of living will increase. So, microfinance institutions may be focused on these factors which are important for increase the social status and sustainability.

7.10 REFERENCES


