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PERFORMANCE INDICATORS OF SELECT MICROFINANCE INSTITUTIONS IN INDIA– A COMPARATIVE STUDY

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Abstract

Microfinance has been considered as a developmental tool to alleviate poverty and lead to growth of nation through financial inclusion. Out of nearly 6 lakh villages in India only 10% of the villages have access to finance, thereby making India a country with highest number of households being excluded from banking arena. The very poor are the ones who are very vulnerable to the vagaries of nature and are hence considered to be 'unbankable' by mainstream commercial financial institutions. The goal of microfinance is to make financial services accessible to the poor. A sample of 14 Microfinance Institutions (MFIs) out of 23 Microfinance Institutions, which are registered with AKMI (Association of Karnataka Microfinance Institutions) have been selected for the study. Six financial performance indicators based on efficiency, financial viability, profitability, leverage and capital adequacy have been considered for the study. A comparison is made between the life of the Microfinance Institutions and its financial performance using statistical tool; ANOVA- one way classification. There is no significant difference in the means of the performance indicators, of three categories of MFIs. The performance indicators considered for the study are Operating Cost, Operational Self Sufficiency, Return on Assets Ratio and Return on Equity Ratio, Debt/Equity Ratio, Capital Adequacy Ratio (CAR). Donors, Practitioners of Microfinance and other stakeholders will benefit by having knowledge of the key financial performance indicators.

Key Words: Microfinance, Portfolio Quality, Productivity, Profitability, Capital Adequacy.

INTRODUCTION

According to a World Bank survey in 2012, only 35% of adults in India had access to a formal bank account and only 8% borrowed from institutional and formal sources. There has been a vaccum that has been created by the banks and the Government. The very poor are the ones who are very vulnerable to the vagaries of nature and are hence considered to be 'unbankable' by mainstream commercial financial institutions. Microfinance has emerged as a powerful economic development tool intended to favour low-income women and men. Microfinance is considered as a significant approach for fulfilling Financial Inclusion mission of India. Effective financial management requires periodic analysis of financial performance (Joana Ledgerwood, 2000). Basic set of performance indicators have been considered for the study. Donors, Practitioners of Microfinance and other stakeholders will benefit by having a knowledge of the key financial performance indicators. The key indicators undertaken for review in this article are as follows:-

- Efficiency Ratios – Operating Cost Ratio
- Financial Viability - Operational Self Sufficiency
- Profitability Ratios - Return on Assets Ratio and Return on Equity Ratio
- Leverage - Debt/Equity Ratio
- Capital Adequacy – Capital Adequacy Ratio (CAR)

Each of these performance indicators were selected as they are useful in managing MFIs.

OBJECTIVES

1. To compare the financial performance of Indian Microfinance Institutions segregated into three categories on the basis of their tenure of existence.
2. To analyse the financial structure of MFIs in India
3. To study the Profitability and Efficiency of MFIs in India

LITERATURE REVIEW

There is ample literature available on the performance of micro finance institution across the globe, though only few studies have been carried out on the topic related with performance of Indian MFIs.

Rajarshi Ghosh (2005) in his research paper **Microfinance in India: A critique**, the evolution of microfinance in empowerment of women and poverty alleviation is studied. Microfinance is viewed as an important tool for providing self employment for the low income rural population. This paper studies the various delivery models of microfinance institutions which contribute to women empowerment in India.

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"Microfinance in India: Discussion" by **R.Srinivasan and M.S.Sriram (2006)** shows the various views of people from various microfinance institutions. Microfinance has been viewed as an effective tool in bringing about financial inclusion and as a measure to alleviate poverty. This discussion also is a study on the various models of microfinance prevailing in India and aims to discuss if these models contribute to the growth and sustainability. It also aims to discuss about the various government policies and regulatory framework prevailing in microfinance sector.

"**Performance and Transparency: A survey of Microfinance in South Asia"** by **Blaine Stephens and Hind Tazi (2006)** highlights the performance of the microfinance sector in the South Asian region as well as globally. The study has highlighted South Asia for the study due to the region‟s impressive outreach with microfinance giants in South Asia such as Grameen Bank, ASA and BRAC. The microfinance sector has evolved by providing micro-loans as well as the self-help group programs in order to reach to a vast majority of the poor population.

Alain de Crombrugghe, Michael Tenikue and Julie Sureda (2007) has studied three important aspects of sustainability such as repayment of loans, financial self-sustainability or operational self-sustainability and cost-control or efficient use of resources.

Jayasheela, Dinesha.P.T and V.Basil Hans (2008) in their paper on "Financial inclusion and microfinance in India: An overview" studied the role of microfinance in the empowerment of people and provision of a sustainable credit availability to the rural low income population. The study relates to the opportunities available for the microfinance institutions with an increasing demand for credit in the rural areas due to inadequate formal sources of credit.

Pankaj K Agarwal and S.K.Sinha (2010) found in their study that the sustainability of microfinance institutions is important in order to pursue their objectives through good financial performance. This paper studies the various players in the microfinance sector which range from not-for-profit organizations which work towards a developmental objective to commercial banks which view microfinance as a good source of deposits with sound banking and as a measure to reach their priority lending targets.

"Performance and Sustainability of Self-Help Groups in India: A Gender Perspective" by **Purna Chandra Parida and Anushree Sinha (2010)** studies performance and sustainability of Self-help group in India. It is been reported that the self-help group (SHG) programmes is an effective tool which has been used in various countries in order to address a range of socio-economic issues. The performance and sustainability of self-help groups vary based on income generating activities, gender composition of members in the group etc.

M Sravani (2015) has made an attempt to study the performance of microfinance institutions in the backdrop of the Andhra Pradesh Crisis.

RESEARCH METHODOLOGY

Sources of Data: The data considered for the study is secondary data collected from the Annual Reports of the Microfinance Institutions.

Method of Analysis: The secondary data is further analysed by using statistical tool of one-way ANOVA, to draw conclusion based on the results obtained. The technique is used to identify if there exists a significant difference in the life of the MFI and its financial performance. 5 years Average of the ratios for the past five years (from 2011 to 2015) have been calculated for 14 different MFIs.

Table 1: Table showing classification of MFI's

Sl No.	Name of the MFI	Year of Commencement	Life of the MFI	Category
1	IDF Financial Services Pvt. Ltd.	2009	6 years	0 to 9 years
2	Janalakshmi Financial Services Pvt. Ltd.	2008	7 years	
3	BSS Microfinance Pvt. Ltd.	2008	7 years	
4	Chaitanya India Fin Credit Pvt. Ltd.	2009	6 years	
5	Samastha Microfinance Ltd.	2008	7 years	
6	Navachetana Microfinance Pvt. Ltd.	1999	16 years	10 to 17 years
7	Grameen Koota Financial Services Pvt. Ltd.	1999	16 years	
8	SKS Microfinance	1998	17 years	
9	Ujjivan Financial Services	2005	10 years	
10	Spandana Sphoorthy Financial Ltd.	1998	17 years	

11	Nirantara FinAccess Pvt. Ltd	1997	18 years	>18 years
12	SKDRDP	1982	33 years	
13	Equitas Microfinance Pvt. Ltd.	1994	21 years	
14	Future Financial Services Ltd.	1996	19 years	

Source: Annual Reports of companies

EXPECTED OUTCOMES

The various parameters are calculated for a period of 5 years, which help us to analyze the growth of microfinance institutions in India and also understand its contribution to financial inclusion.

The performance of MFIs in India are analyzed based on certain parameters to check if there exists a significant difference between them. The results obtained would help us identify if there exists a significant difference between the performance of the MFIs and its experience.

RESULTS

Hypothesis:

H0: There is no significant difference between the means of MFIs under the three categories.
H1: There is significant difference between the means of MFIs under the three categories.

LIMITATIONS OF THE STUDY

- The data has been collected only for 14 MFIs out of a total of 23 MFIs listed with AKMI. Hence the analysis cannot be generalized for a vast number of MFIs in India.
- Only the important financial indicators have been selected. Hence it is not an exhaustive list of financial indicators.

ANALYSIS & INTERPRETATION

Efficiency Ratios: Operating Cost Ratio

It measures the cost of providing services to generate revenue. These are referred to as operating costs and should include neither financing costs nor loan loss provisions. Operating Cost ratio provides an indication of the efficiency of the lending operations.

$$\text{Operating Cost Ratio} = \frac{\text{Operating Costs}}{\text{Average portfolio outstanding}}$$

Table 2: Table showing the Operational Cost Ratio

	0-10 years	**10-18 years**	**>18 years**
Operating Cost Ratio	10	13	10
	7	10	19
	13	13	6
	16	11	8
	11	6	

Source: Annual Reports of MFIs

SUMMARY						
Groups	***Count***	***Sum***	***Average***	***Variance***		
0-10 years	5	57	11.4	11.3		
10-18 years	5	53	10.6	8.3		
>18 years	4	43	10.75	32.91666667		
ANOVA						
Source of Variation	***SS***	***df***	***MS***	***F***	***P-value***	***F crit***
Between Groups	1.778571429	2	0.889285714	0.055219548	0.946537973	3.982297957
Within Groups	177.15	11	16.10454545			
Total	178.9285714	13				

Source: Output of Statistical Analysis using MS Excel

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There is no significant difference in the operating expenses to total assets ratio of different category of MFIs at 5% level of significance, thereby rejecting alternate hypothesis. The reason for slight difference in the Operating Cost Ratio is because the new MFIs have incurred training expenses for their staff members, education of borrowers etc. The MFIs with considerable experience have been able to reduce their operating expenses through learning curve effect.

Financial Viability- Operational Self Sufficiency
Operational Self Sufficiency indicates whether or not enough revenue has been earned to cover the MFI's direct costs, excluding the cost of capital but including any actual financing costs incurred.

$$\text{Operational Self Sufficiency} = \frac{\text{Operating Income}}{\text{Operating Expenses + Financing Cost+ Provision for loan losses}}$$

Table 3: Table showing the Operational Self Sufficiency

	0-10 years	10-18 years	>18 years
Operational Self Sufficiency Ratio	110	104	123
	145	106	78
	112	86	108
	116	117	88
	102	97	

Source: Annual Reports of MFIs

SUMMARY				
Groups	*Count*	*Sum*	*Average*	*Variance*
0-10 years	5	585	117	271
10-18 years	5	510	102	131.5
>18 years	4	397	99.25	406.25

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	862.6785714	2	431.3392857	1.677324664	0.231313264	3.982298
Within Groups	2828.75	11	257.1590909			
Total	3691.428571	13				

Source: Output of Statistical Analysis using MS Excel.

There is no significant difference in the operational self-sufficiency ratio of different category of MFIs at 5% level of significance, thereby rejecting alternate hypothesis. The operational self-sufficiency ratio is slightly lower for the microfinance institutions that have started newly when compared to the MFIs that have started before the year 1999.
The new MFIs can consider increasing their OSS by either increasing its yield (Return on Assets) or by decreasing its expenses (financing costs, provision for loan losses or operating costs)

Profitability Ratios- it measures the MFIs net income in relation to the structure of its balance sheet. This ratio helps the investors and managers to calculate whether they are earning adequate return on their investments.

1. **Return on Assets**

$$\mathbf{ROA} = \frac{\textbf{Net Income}}{\textbf{Average Assets}}$$

Table 4: Table showing the Return on Asset

	0-10 years	10-18 years	>18 years
Return on Asset	1.34	0.43	1.07
	1.17	1.94	1.57
	0.01	-0.11	1.39
	0.36	2.19	-0.07
	2.49	-0.09	

Source: Annual Reports of MFIs

SUMMARY

Groups	Count	Sum	Average	Variance		
0-10 years	5	5.37	1.074	0.93173		
10-18 years	5	4.36	0.872	1.24072		
>18 years	4	3.96	0.99	0.54213333		
ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.102835714	2	0.051417857	0.05482604	0.94690682	3.982298
Within Groups	10.3162	11	0.937836364			
Total	10.41903571	13				

Source: Output of Statistical Analysis using MS Excel

ANOVA Output of Return on Asset Ratio

Source of Variation	Sum of Squares	Degree of Freedom	Mean Sum of Squares	Test Statistics
Between Samples	0.102835714	2	0.051417857	0.054826043 F tab= 3.99
Within Samples	10.3162	11	0.937836364	
TOTAL	10.41903571			

2. Return on Equity

$$\mathbf{ROE} = \frac{\textbf{Net Adjusted Income}}{\textbf{Average Equity}}$$

Table 5: Table showing the Return on Equity

	0-10 years	10-18 years	>18 years
Return on Equity	4.3	2.2	12.9
	5.8	10.4	1.4
	9.4	-0.3	21.9
	4.8	10.6	5.6
	3.2	-2.2	

Source: Annual Reports of MFIs

SUMMARY

Groups	Count	Sum	Average	Variance
0-10 years	5	27.5	5.5	5.63
10-18 years	5	20.7	4.14	36.148
>18 years	4	41.8	10.45	80.8433333

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	95.18657143	2	47.59328571	1.27800895	0.31690788	3.982298
Within Groups	409.642	11	37.24018182			
Total	504.8285714	13				

Source: Output of Statistical Analysis using MS Excel

There is no significant difference in the Profitability ratios of different category of MFIs at 5% level of significance, thereby rejecting alternate hypothesis. Some of the MFIs in the category of 10 to 18 years of life have negative profitability ratio which indicates that the MFIs have not earned profit.

High ROA and ROE is required to attract private capital to achieve its mission of poverty alleviation. Microfinance institutions have a small asset base as they are not allowed to accept deposits from their clients. The optimum range of ROA as per ACCION audit is greater than 3% (> 3%) for ROA and greater than 15% (> 15%) for ROE. This implies that the Indian microfinance institutions are still lagging behind on the profitability front.

Leverage - Debt/Equity Ratio
Leverage refers to the extent to which an MFI borrows money relative to its amount of equity.

$$\textbf{Debt to equity ratio} = \frac{\textbf{Debt}}{\textbf{Equity}}$$

Table 6: Table showing the Debt/Equity Ratio

	0-10 years	10-18 years	>18 years
Debt / Equity Ratio	2.8	3.8	3.6
	2.2	4	0.3
	4.7	3.5	5
	4.8	3.7	27
	2	-40.3	

Source: Annual Reports of MFIs

SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		
0-10 years	5	16.5	3.3	1.84		
10-18 years	5	-25.3	-5.06	388.113		
>18 years	4	35.9	8.975	148.2825		
ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	452.2126429	2	226.1063214	1.24069426	0.32667758	3.982298
Within Groups	2004.6595	11	182.2417727			
Total	2456.872143	13				

Source: Output of Statistical Analysis using MS Excel

There is no significant difference in the Debt/Equity ratio of different category of MFIs at 5% level of significance, thereby rejecting alternate hypothesis. Some of the MFIs in the category of 10 to 18 years of life have negative Debt/Equity ratio which indicates that the MFIs have borrowed more debt to focus on growth. It is suggested to all the MFIs to maintain a proper balance between debt and equity to ensure that the equity or viability of the organization is not at risk.

Capital Adequacy Ratio- It refers to the amount of capital an MFI has relative to its assets

$$\textbf{Capital Adequacy Ratio} = \frac{\textbf{Interest Capital + Reserves + Retained Earnings}}{\textbf{Risk- weighted assets}}$$

Table 6: Table showing the Capital Adequacy Ratio

	0-10 years	10-18 years	>18 years
Capital Adequacy Ratio	26	28	100
	28	24	7
	19	30	26
	53	25	27
	20	15	

Source: Annual Reports of MFIs

ANOVA Output of Capital Adequacy Ratio

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
0-10 years	5	146	29.2	191.7
10-18 years	5	122	24.4	33.3
>18 years	4	160	40	1684.66667

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	555.4285714	2	277.7142857	0.51307644	0.61229795	3.982298
Within Groups	5954	11	541.2727273			
Total	6509.428571	13				

Source: Output of Statistical Analysis using MS Excel

Source of Variation	**Sum of Squares**	**Degree of Freedom**	**Mean Sum of Squares**	**Test Statistics**
Between Samples	555.4285714	2	277.7142857	
Within Samples	5954	11	541.2727273	0.513076443
TOTAL	6509.428571			F tab= 3.99

There is no significant difference in the Capital Adequacy Ratio of different category of MFIs at 5% level of significance, thereby accepting null hypothesis. The Non-Banking Financial Companies (NBFCs) in India are required to maintain a capital adequacy ratio (CAR) of 15% as mentioned by RBI. It has been reported that nearly 45% of the MFIs have CAR in excess of 20% and 25% of MFIs have CAR above 15%. A higher CAR is essential for the microfinance institutions because a thin layer of capital would not allow for loss absorption in case of default.

SUGGESTIONS

1. There is a multitude of performance indicators that an MFI might use to analyse its financial performance.
2. Many of MFIs incur huge operational costs due to their business model which is door step service delivery model. The frequency of loan repayment is usually fortnightly. All this has led to increase in operational expenses. However, this cost can be reduced by the adoption of technology.
3. Mobile banking would also be a valuable tool for reducing cost.
4. The MFI should avoid multiple lending i.e., not to lend to members who have already taken loan from 2 other MFIs. The credit bureau should be active to give information about the same.
5. The MFI should customize their loan products depending on the requirements of their clients.
6. Proper impact assessment has to be done by the MFIs in order to ensure that the loan has been used for the same purpose for which it was taken.
7. Frequent audits by ACCION audit could be conducted by the regulatory authority to monitor the performance of MFIs. Subsidies could be provided for these audits as most of the MFIs do not undergo this audit as it is expensive.
8. The microfinance institutions also face problem of lack of funds from commercial banks. 40% of the loans given by commercial banks should account for priority sector lending.
9. Microfinance institutions should be allowed to accept deposits from the public. This would improve the profit margins for the microfinance institutions as well as reduce the interest rates.
10. There is a huge demand for funds that is not yet catered to by the MFIs. MFIs can consider increasing the scale of operations thereby meeting the dual objective of improving their overall performance and improving the lives of the poor.

CONCLUSION

Microfinance cannot be considered as a magical wand to evade poverty. The Government, Commercial Banks and Microfinance Institutions together can bring in a difference to the society. There has been a significant improvement in the financial performance of microfinance institutions in the recent years. The more experience the institutions gain in the field of microfinance they have been able to bring down the cost and improve their earnings. However with development of effective

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strategies and with a combined effort by all the players in the society, the long term goal of the Government of Jan Dhan Yojana to achieve financial inclusion can be attained.

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