



A STUDY ON PERFORMANCE OF SELECT MICROFINANCE INSTITUTIONS IN INDIA

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Abstract

Microfinance is the provision of financial services such as credit, savings and insurance to low-income individuals with the goal of creating social value. India is one of the fastest growing economies; despite fast-paced growth, two thirds of the population lives on less than US \$2 a day. This study analyses the performance of select Micro Finance Institutions (MFIs) in India. The period of study is from 2005 to 2013. Performance of select MFIs with respect to five major indicators is taken up. These are Outreach Indicators, Financing Structure, Overall Financial Performance, Efficiency and Productivity Indicators and Portfolio Quality Indicators. The mean values for all the MFIs for the said period is taken across several parameters for the above mentioned indicators. It was found that most of the MFIs performed well prior to microfinance crisis. Though all MFIs were operationally self sufficient, improvement with respect to ROE, ROA and reduction in cost per borrower is solicited.

Keywords: Microfinance Institutions (MFIs), Performance, Outreach Indicators, Financing Structure, Portfolio Quality, Operationally Self Sufficiency.

INTRODUCTION

Microfinance is defined as provision of financial services to low-income clients including the self employed. The financial services include savings and credit, but some Microfinance Institutions (MFIs) are providing insurance and money transfers as part of financial intermediation. Unlike banks, these MFIs are not granted subsidies by the Government, nor do they depend entirely on donations. How are funds being managed by them and how do they perform? This article focuses on performance of select MFIs in India.

RATIONALITY OF THE STUDY

In India, people, predominantly in the rural areas are below poverty line. Rural credit has not been expanding, it has recorded a negative growth in the past, following the unwillingness on the part of the bankers to provide finance to the rural sector. The Initial Public Offering (IPO) of the MFI-SKS sparked off public debate about commercialization of microfinance. Following this, the suicides in rural Andhra Pradesh due to coercive practices to recover loans has put the sector at cross roads. This has affected the growth in this sector. Hence it is imperative to study the performance of MFIs and identify the problems inherent.

OBJECTIVE

- To study the performance of select Micro Finance Institutions in India during the period, 2005 to 2013.

Period and scope of the Study

The study is conducted for a period of 9 years starting from 2005 to 2013. The scope of the study is restricted to four NBFC-MFI from India, with limited indicators used to study the performance.

RESEARCH METHODOLOGY

The study aims at analyzing the performance of MFIs in India with respect to Outreach Indicators, Financing Structure, Overall Financial Performance, Efficiency and Productivity Indicators and Portfolio Quality Indicators.

1. Outreach Indicators: This indicates how many clients are being served, and if women were covered.
2. Financing Structure: Indicates the financing structure with respect to Capital asset ratio, debt equity ratio and deposit to loan ratio of the MFI.
3. Overall Financial Performance: Indicates if the MFI is able to maintain and expand its services.
4. Efficiency and Productivity Indicators: Indicates how well the MFI controls its operative costs.
5. Portfolio Quality: These ratios provide information on the percentage of non-earning assets, which cause decrease in revenue and liquidity position of MFIs.

Source of Data

The data used for analysis is secondary and has been gathered from sites “www.mixmarket.org” and “www.themix.org”. Only NBFC-MFIs were selected for the study to facilitate comparison. The following MFIs were selected

1. Asmitha Microfinance Ltd. (AML)
2. Bandhan Microfinance

3. SKS Microfinance
4. Spandana Sphoorthy Finance Ltd.

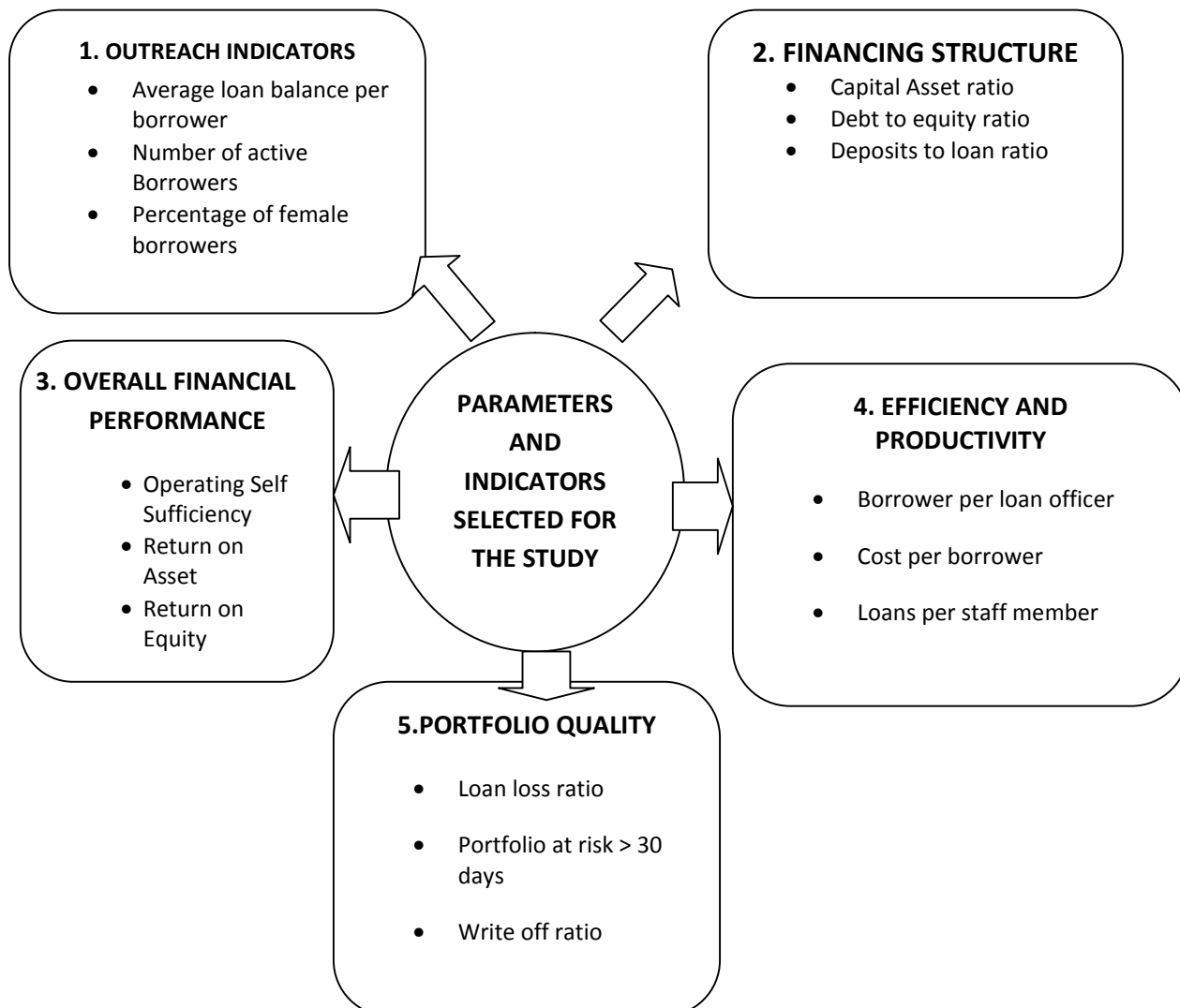
DATA ANALYSIS

I Outreach Indicators

1. Average Loan Balance per Borrower (ALB): It is the average of loan balance borrowed by the individuals or small organization from MFI. It is also defined as Deposits/Number of Deposit accounts. A higher rate is preferred. The minimum value was Rs. 55 for Bandhan in 2005 and the maximum was Rs. 235 for AML in the year 2009 (Table 1). The value of Coefficient of Variation (C.V) is less indicating less variation in average loan balance per borrower among MFIs. The mean value was least for SKS and highest for AML. High value of C.V for Bandhan indicates more variation during the nine years.

2. Number of Active Borrowers (NAB): It is defined as number of borrowers with loan outstanding, adjusted for standardized write-offs. The maximum number of borrowers during nine years was 62,42,266 which was for SKS during 2010, the minimum was 1,49,886 for Bandhan in 2005 which increased to 54,09,866 in 2013 (Table 1). The mean value of active borrowers over the years is highest for SKS and least for AML. The C.V value is highest for Bandhan showing more variation over years than other MFIs.

Figure 1.1 Parameters and Indicators selected for the study



The above indicators are explained and calculated for all the NBFC-MFI under consideration for a period of nine years from 2005-2013.

3. Percentage of Female Borrowers (FB): It is the number of active women borrowers or adjusted number of active women borrowers. There was a constant increase in percentage of female borrowers from 2005-13. Bandhan and SKS catered to only female borrowers. The C.V shows that the variation among MFIs is very less (Table 1)

Table -1. Outreach Indicators
Average loan balance per borrower, Number of Active Borrowers and Percentage of Female borrowers

Year	AML			BANDHAN			SKS			SPANDANA		
	ALB	NAB	FB %	ALB	NAB	FB %	ALB	NAB	FB%	ALB	NAB	FB%
2005	101	3,93,538	100	55	1,49,886	99.98	119	1,72,970	100	88	7,21,621	100
2006	109	4,16,829	100	67	4,49,304	100	123	5,13,108	100	98	9,16,261	96.55
2007	148	5,65,806	100	92	8,96,714	100	161	16,29,474	100	153	11,88,861	96.55
2008	156	8,90,832	100	86	14,54,834	100	137	35,20,826	100	151	24,32,000	99.70
2009	235	13,40,288	100	144	23,01,433	100	166	5,95,028	100	215	36,62,846	91.95
2010	222	13,41,524	100	173	32,54,913	100	148	62,42,266	100	186	41,88,655	88.49
2011	215	10,99,177	100	203	36,17,641	100	77	42,56,719	100	155	34,44,483	91.77
2012	206	9,58,936	100	184	44,33,885	100	101	43,08,301	100	172	23,83,594	90.81
2013	183	8,61,913	100	188	54,09,866	100	104	49,63,046	100	157	22,41,189	91.80
Mean	175	8,74,316	100	132.4	24,40,942	100	126.2	34,89,082	100	152.7	23,53,279	94.18
S.D	49.1	358675.2	0	57.63	1851539	6.67E-05	29.57	2226054	0	39.63	1243844	0.041
C. V	28.1	41.023	0	43.51	75.853	0.006	23.43	63.800	0	25.94	52.855	4.373

Source: www.mixmarket.org; ALB: Average Loan Balance per Borrower; NAB: Number of Active Borrowers; FB – percentage of female borrowers

II Financing Structure

1. Capital- asset ratio
2. Debt- equity ratio
3. Deposits to loan ratio

Table- 2 Financing Structure
Capital-Asset, Debt- equity and Deposit to Loan Ratios

Year	AML			BANDHAN			SKS			SPANDANA		
	C/A	D/E	D/L	C/A	D/E	D/L	C/A	D/E	D/L	C/A	D/E	D/L
2005	4.31	22.18	0.00	4.31	23.73	22.02	13.59	6.36	0.19	3.56	27.07	7.12
2006	6.02	15.61	0.00	6.02	11.96	16.46	20.87	3.79	0.00	3.26	29.72	1.56
2007	8.96	10.16	0.00	8.96	11.16	13.83	15.72	5.36	0.00	10.46	8.56	0.00
2008	10.0	9	0.00	10.0	15.39	18.11	21.86	3.57	0.00	15.21	5.58	0.00
2009	11.09	8.02	0.00	11.09	8.57	16.21	23.73	3.21	0.00	16.67	5	0.00
2010	15.05	5.64	0.00	15.05	6.24	17.66	42.09	1.38	0.00	15.29	5.54	0.00
2011	33.79	1.96	0.00	33.79	5.06	1.41	26.02	2.84	0.00	43.94	1.28	0.00
2012	-33.85	-3.95	0.00	-33.85	4.93	0.00	17.36	4.76	0.00	-0.82	-122.6	0.00
2013	-63.71	-2.57	0.00	-3.71	4.71	0.00	20.06	3.99	0.00	-1.12	-90.49	0.00
Mean	-0.93	7.338	0.00	-0.93	10.19	11.74	22.37	3.91	0.02	11.83	-14.48	0.96
S.D	0.294	8.346	0	0.294	6.291	0.087	0.083	1.45	0.000	0.139	53.75	0.023
C. V	-3163	113.72	0	-3163.2	61.717	74.397	37.344	37.207	316.666	117.63	-371.064	246.3

Source: www.mixmarket.org; C/A: Capital to asset ratio; D/E: Debt to equity ratio; D/L: Deposit to loan ratio.

1. Capital /Asset ratio (C/A): It is a key financial ratio measuring a MFI's capital adequacy or financial stability. As a general rule, higher the ratio, more sound the MFI. It is defined as adjusted total equity/adjusted total assets. The highest mean value was 42.09 for SKS during 2010 and the lowest value was -63.71 for AML during 2013 (Table 2). C.V is very less

indicating low variability for AML and C.V is high for Spandana. The mean value over the years is high for SKS and low for AML.

2. Debt to equity ratio (D/E): This reveals the proportion of debt and equity a company is using to finance its business. It measures MFIs borrowing capacity given by adjusted total liabilities to adjusted total equity. The debt to equity ratio has declined for all institutions during the year 2005-13. The maximum value is 29.72 for Spandana in 2006 (Table 2). A relatively high value of C.V indicates variability in the ratio among MFIs. MFIs that offer savings are usually highly leveraged. Local banking regulations in most countries will place a limit or a restriction to a MFI's Debt/Equity ratio (e.g. 7:1 or 13:1) in order to protect savers' deposits.

3. Deposits to Loan Ratio (D/L): It is a commonly used statistics for assessing a MFI's liquidity by dividing the MFI's total deposit by its total loans. It is voluntary deposits to adjusted gross loan portfolio. The deposits to loan ratio for Bandhan and Spandana has declined and other MFIs remains stable with no variation. The maximum value is 11.74% for Bandhan (Table 2). A relative high value of C.V for Spandana indicates more variation.

III Overall Financial Performance

1. Operating Self Sufficiency (OSS): It measures how well a MFI can cover its costs through operating revenues. It is also defined as financial revenue/ (financial expense + Impairment losses on loans + operating expense). Operating self-sufficiency is expressed as percentage, which indicates whether or not enough revenue has been earned to cover the Microfinance Institution's (MFI's) total costs. An OSS of 90%-100% shows good self sufficiency. From the Table (3) it is clear that Bhandhan maintained an OSS of above 100% for all the years, however for the others it decreased during 2011 - 2012 and picked up in 2013 (Table 3). C.V is less for Bandhan indicating less variation and it is high for Spandana which indicates that it has more variation than others MFIs. The mean value over the years was above 100% for all MFIs, which indicates that all MFIs under study are operationally self-sufficient. Bhandhan recorded the highest mean value and SKS the least.

Table- 3, Overall Financial Performance
Operating Self Sufficiency, Return on Asset and Return on Equity

Year	AML			BANDHAN			SKS			SPANDANA		
	OSS (%)	ROA (%)	ROE (%)	OSS (%)	ROA (%)	ROE (%)	OSS (%)	ROA (%)	ROE (%)	OSS (%)	ROA (%)	ROE (%)
2005	120.8	2.95	51.44	104.8	1.02	31.72	120.7	2.83	27.3	149.0	4.72	79.84
2006	116.5	1.67	32.13	151.6	8.76	126.6	110.2	0.76	3.98	109.7	0.72	21.24
2007	111.5	1.43	17.85	133.1	8.71	126.1	119.7	1.99	11.9	159.0	4.34	53.56
2008	131.0	5.33	55.52	174.2	8.66	125.6	128.5	3.68	18.7	166.2	6.89	51.16
2009	146.6	4.31	40.07	158.3	3.52	38.21	138.8	4.96	21.5	180.0	8.99	55.67
2010	107.9	1.30	10.06	156.5	5.32	41.12	115.8	2.40	7.93	100.0	-0.3	-1.89
2011	42.07	-11.9	-46.37	162.6	6.44	37.62	25.36	-46.7	-117	56.36	-9.8	-43
2012	18.88	-51.0	-489.7	151.0	4.73	26.08	53.06	-15.7	-73.4	17.84	-47	-996
2013	69.26	-5.63	23.04	151.4	5.01	28.24	115.2	2.88	16.5	130.2	3.27	-36.5
Mean	122.7	-5.74	-34.00	126.1	5.80	64.60	110.9	-4.78	-9.17	118.7	-3.1	-90.6
S.D	0.429	0.17	1.735	0.199	0.026	0.464	0.377	0.16	0.50	0.538	0.17	3.421
C. V	35.04	-311	-510.4	15.80	45.56	71.83	34.07	-354.1	-550	45.35	-552	-377

Source: www.mixmarket.org; OSS- Operating Self Sufficiency, ROA- Return on Asset; ROE- Return on Equity.

2. Return on Assets (ROA): It is defined as the measure of how well the MFI uses its assets to generate returns. This ratio is (adjusted net operating Income – Taxes)/ Adjusted Average total assets. It is clearly depicted that in case of 'Return on assets' there was an increase for Bandhan till 2007 (Table 3) A ratio between 2%-5% is preferred. Factors that affect ROA are varying loan terms, interest rates and fees. The mean value was high for Bhandhan and least for AML.

3. Return On Equity (ROE): It measures a firm's profitability by revealing how much profit a company generates with the money shareholders have invested. It is the amount of net income returned as percentage of shareholders equity. It is also defined as (Adjusted net operating income – Taxes)/adjusted average total equity. Maximum value of 126.68 for Bhandhan in 2006 and minimum value of -996.06 for Spandana in 2012 was recorded. A mean positive value was recorded for Bandhan where as other MFIs recorded a negative value (Table 3). Many MFIs target a ROE of 15%-25%.

IV Efficiency and Productivity Indicators

- Borrowers/Loan Officer (B/L):** It measures the average number of borrowers managed by each loan officer. It is defined as adjusted number of active borrowers/ number of loan officers. Minimum value was 227 for Bandhan during 2005, the maximum value was 944 for SKS in 2013 (Table 4). The highest mean value of 599 was recorded for Spandana. The C.V indicates variability among MFIs, where SKS shows high variation and Spandana shows less variation.
- Cost per borrower (C/B):** It is defined as expense such as interest payment incurred from taking a loan. It is defined as Adjusted Operating Expense/ Adjusted Average Number of Active Borrowers. Spandana and Bandhan recorded a least cost of Rs. 6 per borrower during 2005-2006 (Table 4). A moderate value of variance indicates less variability across MFIs. The average cost per borrower was least for Bandhan and highest for SKS at Rs.19.
- Loans Per Staff Member (L/S)**
It is defined as Adjusted Number of Loans Outstanding/ Number of personnel. The mean was maximum for AML and minimum for SKS during 2005-13 (Table 4). The C.V was less for all MFIs.

Table- 4, Efficiency and Productivity Indicators
Borrowers per loan officer, cost per borrower and Loan per staff member

Year	AML			BANDHAN			SKS			SPANDANA		
	B/L	C/B	L/S	B/L	C/B	L/S	B/L	C/B	L/S	B/L	C/B	L/S
2005	371	14	497	227	6	221	235	12	265	659	6	574
2006	399	10	486	360	6	262	386	16	326	645	6	515
2007	420	14	324	431	9	323	436	19	314	535	7	424
2008	517	15	569	530	8	342	443	19	263	534	9	469
2009	518	13	612	522	7	348	488	16	274	503	10	484
2010	553	15	586	521	10	371	407	18	275	514	12	459
2011	657	13	566	504	11	379	411	16	264	631	11	521
2012	733	11	611	509	8	387	639	12	264	775	7	621
2013	764	13	669	543	8	416	944	11	264	759	13	630
Mean	521	13.1	546.6	450.5	8.11	338.7	430.6	15.44	278	599	9	521
S.D	143.4	1.69	100.9	105.3	1.69	62.30	200.7	3.086	23.9	10	2.6	72.4
C. V	212.4	12.9	18.46	245.7	20.8	18.39	257.0	19.98	8.60	184	29	13.8

Source: www.mixmarket.org; B/L- Borrower per loan officer; C/B-Cost per borrower; L/S – Loan per Staff.

V. Portfolio quality

- Loan loss ratio (LLR):** It is defined as (Adjusted Write –offs - Value of Loans Recovered)/ Adjusted Average Gross Loan Portfolio. It is preferable if loan loss ratio is less than 4%. It is seen that the mean Loan Loss Ratio for SKS is above 4% (Table 5). The loan loss ratio reflects only the amounts written off in a period.

Table- 5, Portfolio Quality Loan loss ratio, Portfolio at risk and write off ratio

Year	AML			BANDHAN			SKS			SPANDANA		
	LLR (%)	PAR (%)	WOR (%)	LLR (%)	PAR (%)	WOR (%)	LLR (%)	PAR (%)	WOR (%)	LLR (%)	PAR (%)	WOR (%)
2005	4.38	0.15	4.38	0.00	0.00	0.00	1.00	1.52	1.00	6.93	0.00	6.93
2006	-0.04	2.39	0.42	0.00	0.09	0.00	0.61	0.12	0.61	1.97	8.17	2.56
2007	0.55	0.63	0.79	0.05	0.13	0.00	0.29	0.15	0.29	-0.65	4.43	0.09
2008	-0.35	0.34	0.04	-0.66	0.09	0.00	0.60	0.19	0.60	0.39	0.07	0.59
2009	0.46	0.33	0.56	0.00	0.13	0.00	0.86	0.22	0.86	0.63	0.13	0.66
2010	9.45	48.2	9.46	0.00	0.57	0.00	1.55	0.22	1.67	3.65	47.7	3.66
2011	-0.07	55.7	9.46	0.60	0.16	0.60	42.62	0.22	42.62	0.35	52.4	0.49
2012	3.11	58.3	9.46	0.25	0.20	3.14	0.84	0.22	0.25	5.89	61.4	1.74
2013	1.44	63.6	1.50	0.21	0.09	0.21	2.00	0.22	2.68	3.39	57.4	3.48
Mean	2.10	25.5	4.01	0.05	0.16	0.44	5.60	0.34	5.62	2.51	25.7	2.24
S.D	0.031	0.29	0.042	0.003	0.00	0.010	0.138	0.004	0.138	0.02	0.27	0.022
C. V	151.5	116	106.7	664.1	101	234.6	248	130.3	247.2	105	108	98.32

Source: Mix market LLR: Loan loss ratio; PAR: Portfolio at risk; WOR: written off ratio.

2. Portfolio at risk > 30 days (PAR): Portfolio at Risk (PAR) is a standard international measure of portfolio quality that measures the portion of a portfolio which is deemed at risk as payment are overdue. A value of PAR>30 means a portion of the portfolio payments are more than 30 days past due. If the value of PAR>30 is above 5% or 10%, it is a sign of trouble in microfinance, it makes financial sustainability impossible. PAR is defined as Outstanding balance, portfolio overdue > 30 days + renegotiated portfolio / Adjusted Gross Loan Portfolio. 'Portfolio at risk > 30 days' is above 5% for AML and Spandana, which will result in high delinquency. The mean value is highest for Spandana at 25.77%. The mean PAR is within limits for all years from 2005 to 2009, but a sharp increase is observed from 2010-2013 (Table 5). This rise is a sign of trouble for MFIs. The mean PAR for AML and Spandana are above 10% which indicates riskiness and is a threat to MFIs financial sustainability.

3. Write off ratio (WOR): This indicator simply represents the loans that the institution has recovered from its books because of substantial doubt that they will be recovered. It represents the percentage of the MFI's loan that has been removed from the balance of the gross loan portfolio because they are unlikely to be repaid. MFI's write off policies vary. It is also defined as Adjusted value of loans written off / Adjusted Average Gross Loan Portfolio. With regard to 'Write-off ratio' there was an increase in SKS during 2005-2011 and in case of Spandana there was a decline during 2005-10 (Table 5). The ratio was high during 2005 and decreased thereafter, showing good loan recovery. However it was high for Spandana during 2005. During 2008 the variation among MFIs was high though some MFI has a zero write off ratio. MFIs with less C.V indicate less variation which is least for Bandhan and highest for SKS among all MFIs.

FINDINGS

- Average loan balance per borrower ranged from Rs. 55 to Rs. 235. Active number of
- borrowers increased for all MFIs till 2010 and declined later due to microfinance crisis.
- Most of the borrowers were females.
- As per the outreach indicator, Average Loan Balance was good for AML and SKS had good Number of Active Borrowers as compared to other MFIs. AML and SKS performed well with respect to outreach indicators.
- With respect to the financing structure SKS performed well with respect to capital asset ratio and D/E ratio.
- Operating self sufficiency was above 100% for all MFIs under study. Only Bhandhan performed well with respect to ROA and ROE. Other MFIs have to improve their ROA and ROE ratios.
- Under efficiency and productivity indicators, Borrowers per loan officer as high for Spandana, however monitoring borrowers will be a major challenge. Cost per borrower was least for Bhandhan.
- Loan loss ratio should be less than 4%. The mean value is very high for SKS at 5.06%.
- PAR>30 should range between 5%-10%; this value is high for AML and Spandana which will result in high delinquency.
- All MFIs under this study are Operationally Self Sufficient.
- Financial Sustainability is least for AML and Spandana.
- Write off ratio is high for SKS and least for Bhandhan.

RECOMMENDATIONS

- MFIs in India should try to acquire funds from banks in order to provide loans to the poor people when there is insufficient amount with them.
- To convert inactive borrower to active borrowers these MFIs should appoint skillful staff members.
- To reduce the number of loans outstanding for any MFI, MFI agents and field officers should monitor these loans closely.
- Every institution should try to reduce the institutional cost of delivering the loan service in order to perform well, since lower the operating expense, higher the efficiency.
- MFIs should appoint more staff in order to provide more loans to the people who are in need of it.
- Use of Information Technology can bring down the cost of borrowing for MFIs, through use of e-cards, e-billing etc.
- Different funding avenues can be explored, for example securitization was used by SKS MFI.
- There is a need to regulate this sector.
- Multiple borrowings should be discouraged.

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