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Is Age a Criterion for Sustenance of Microfinance Institutions? A Comparative Study of India and Bangladesh

R. Rupa*

ABSTRACT

Microfinance is defined as provision of financial services to low income clients. The institutions offering financial services and banking opportunities to the unbankable population are called as Microfinance Institutions (MFIs). The study aims to compare the MFIs of India and Bangladesh, two fast growing economies of the South Asian region of the world, based on the classification of their age as new, young and mature. Kruskal Wallis test is used to find which category has done better than other two categories on different financial performance indicators. The findings show that on the basis of age groups, mature MFIs have shown better performance in terms of breadth of outreach, return on assets, operational self-sufficiency, profit margin, total expense to assets, financial expense to assets, operating expense to loan portfolio, cost per borrower, loan per staff member, and risk coverage.

Keywords: *Microfinance institutions; Performance; New MFIs; Young MFIs; Mature MFIs; Kruskal Wallis H Test; India; Bangladesh.*

1.0 Introduction

South Asia consists of eight countries, namely, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka with a large combined population (1.5 billion), second to East Asia (2 billion). Over 460 million among these are poor and the three countries India, Bangladesh and Pakistan together account for 95 per cent of the population as well as poor. Nearly 80 per cent of the region's GDP originates in India, South Asia's fastest-growing and biggest economy, with Pakistan and Bangladesh accounting for another 10 per cent and 7 per cent, respectively, and with the remainder divided among the others.

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*Associate Professor, SCMS School of Technology and Management, Cochin, Kerala, India.
(Email id: rupa@scmsgroup.org; ruparaj_29@yahoo.com)

India and Bangladesh are two developing economies with poverty as a common problem in these two countries. Bangladesh has been the birth place of microfinance and also the pioneer in the world for applying microfinance. The microfinance industry in India started with informal Self Help Group (SHG) to access the much needed savings and credit services in the early 1980's and today it has evolved into a vibrant industry exhibiting variety of business model. Microfinance is defined as provision of financial services to low income clients. The institutions offering the financial services and banking opportunities to the unbankable population are called as Microfinance Institutions (MFIs). In this study, the MFIs operating in two biggest economies of India and Bangladesh of South Asian nations are grouped into three categories based on the age of MFIs. The present study is an attempt to compare the MFIs based on the classification of their age. The study aims to answer the following questions: (i) What is the present status of MFIs?; (ii) How are the MFIs assessed in their performance?; (iii) Is age an important factor for performance of MFIs?

2.0 Review of Literature

There is plethora of literature on performance of MFIs across globe, though only few studies have been carried out on the importance of 'age' of microfinance institution. Zacharias (2008) seeks to address two questions in his study: 'what cost efficiencies are evident in microfinance with regard to firm size when comparing like firms?' and 'what observable patterns are seen when viewing individual firm growth longitudinally, and do these patterns suggest existence of economies of scale?' The study has offered an answer to the question that there are scale efficiencies, bigger portfolios and bigger loans that are associated with better efficiency. It has been suggested that any firm that places profit first will ultimately find itself moving out of business of microfinance for social gain and into the broader realm of credit loan.

Ejigu (2009) conducted a study on the performance analysis of a sample of microfinance institutions of Ethiopia. The study compares the performance of the Ethiopian MFIs with Micro Banking Bulletin benchmark. The MFIs have been stratified based on their size because the Ethiopian MFIs have shown high variability in terms of size rather than age, legal status, financial intermediation and lending method. The study has revealed that the profitability and sustainability of MFIs depend on their size. It has been found from simple correlation analysis that there has been a trade-off between serving poor and being operationally self-sufficient.

Kamath and Srinivasan (2009) aim to build a model of the microfinance sector that explains why multiple borrowing results optimally in small loan size and high

portfolio quality. The study focused on the MFIs which have three features of interest: first the average loan size is small, second the bulk of MFIs follow rigid lending policies, third with the exception of portfolio problems created in Andhra Pradesh. It has been found that Grameen replicators in India, using for-profit non-banking finance company legal form; have grown rapidly in terms of client numbers. Loan sizes are relatively small compared to per capita income, while portfolio quality was until recently very high.

Tiwari (2012) conducts a comparative study on working of microfinance working for Bangladesh and India. The author has examined whether MFIs are servicing their purpose of existence or are these MFIs becoming commercial centers. It has been found that MFIs in India have been shifting from the status of social institutions to more profitable venture when compared to Bangladesh but at the same time it has been revealed that Indian MFIs are earning good returns to maintain a sustainable business model.

Kumar et al. (2012), in their comparative study on microfinance for Bangladesh and India examine whether the institutions are serving their purpose of existence or are these rather becoming profit making centres. This paper has conducted a comparative study between India and Bangladesh, in terms of loan lent by institutes to the customers, clientele, and financial sustainability of MFIs. They have discovered that Indian MFIs are more profitable and operating more efficient than those in Bangladesh.

3.0 Objectives of the study

The study focuses on the objective to analyse and compare the MFIs in India and Bangladesh based on their age. The age wise comparison of the performance of MFIs in India and Bangladesh has been done by applying Kruskal Wallis test. In order to make an age wise analysis, the MFIs have been divided into three categories, namely, 'New', 'Young' and 'Mature' based on the maturity of their microfinance operations. The MFIs are classified on the basis of their age as follows:

- (i) Age less than 10 years – New MFI;
- (ii) Age between 10 to 15 years – Young MFI; and
- (iii) Age more than 15 years – Mature MFIs.

The Kruskal Wallis is used to find which category has done better than other two categories on different financial performance indicators. The null hypothesis has been framed and tested for the purpose of the study to ascertain the difference, if any, in the mean rank of selected parameters.

Null hypothesis: Age is not an important criterion for sustenance of MFIs.

4.0 Research Methodology

4.1 Scope of the study

The study is pertaining to microfinance institutions in India and Bangladesh. The comprehensive financial performance indicators model used by Microfinance Information Exchange (MIX) has been chosen for the study. The variables, such as institutional characteristics, financing structure, outreach indicators, overall financial performance indicators, revenue and expenses, efficiency and risk and liquidity have been considered to analyse the financial performance.

4.2 Source of data

The study is primarily based on secondary data. The data have been collected from Microfinance Information Exchange (MIX) i.e., www.mixmarket.org. The MFIs which have fulfilled the disclosure guidelines laid down by Consultative Group to Assist the Poor (CGAP), the global body of dominant donors of MFI space, providing details on all indicators of financial reporting are considered in this study. There are 122 MFIs in India and 37 MFIs in Bangladesh which have reported their financial information to CGAP through MIX in the fiscal year 2011. The MFIs for which the financial details have been reported at least for 5 years continuously have been identified. It is noted that only 71 MFIs of which 46 MFIs in India and 25 MFIs from Bangladesh have fulfilled the requirement and all these MFIs are taken for the study.

4.3 Tools for analysis

The Kruskal-Wallis H-test has been used to compare k independent groups, where k is equal to or greater than 3, and measurement is at least ordinal. The Kruskal-Wallis H-test is used to compare more than groups on a variable of interest.

5.0 Analysis and results

5.1 Institutional characteristics

H_0 : The mean rank of assets does not differ significantly among the three age groups.

Table 1 shows that the assets for mature MFIs (US \$ 112,401,974) are greater than the other two groups. The lowest asset value has been for MFIs in New group. The same is reflected in mean rank. The higher the mean ranks, the more is the value of the asset and lower the mean rank the less is the asset value. The chi-square value 42.92 shows that there is a significant difference in the mean ranks of the three groups. The

assets differ among the three groups significantly. Hence, the hypothesis is rejected. It is inferred that the mature MFIs with their long life span have shown a wider asset base.

Table 1: Institutional Characteristics of MFIs in India and Bangladesh

Assets						
Age	Mean	S.D	N	Mean Rank	Kruskalwallis test	
New	5988717.28	6062625.66	25	64.36	Chi-square	42.92
Young	30524127.8	46054464.5	53	145.89	df	2
Mature	112401974	249611706	277	194.4	Sig.	**
Total			355			

Source: Author's calculations

Note: ** significant at 1 percent level

5.2 Financing structure

H₀: The mean rank for financing structure, namely, capital/asset ratio, debt to equity ratio and gross loan portfolio to total assets does not differ significantly among the three age groups.

Table 2 shows that, the capital/asset ratio for young MFIs (20.89) is greater than the other two groups. The lowest value is for new MFIs (16.88). Similar trend is reflected in mean rank. The chi-square value (1.224) shows that there is no significant difference in the mean ranks of the three age groups. Hence, the hypothesis is accepted for this variable. The mean table has shown that the debt to equity ratio of new MFIs is greater than the other two groups. The young MFIs exhibit the lowest debt to equity ratio (7.18). The same is reflected in the mean rank. The chi-square value 1.855 shows that there is no significant difference in the mean ranks of three groups. Hence, the hypothesis is accepted for this variable.

It is clear from Table 2 that the gross loan portfolio to total assets of new MFIs is higher than the other groups. The lower value is for mature MFIs. The similar result is reflected in the mean rank. The chi-square value 11.584 reveals that there is a significant difference in the mean ranks of three groups at 1 per cent level. Hence, the hypothesis is rejected for this variable. To conclude, the capital/asset ratio and debt/equity ratio do not have a mentionable difference between the age groups, whereas, gross loan portfolio to total assets differ significantly among the age groups. The MFIs under all age groups has maintained optimum capital/asset ratio. It is clear that the new MFIs are growth oriented and their allocation of assets to its lending activity is greater than the other age groups.

Table 2: Financing Structure of MFIs in India and Bangladesh

Capital/Asset Ratio						
Age	Mean	S.D	N	Mean Rank	Kruskalwallis test	
New	16.88	15.52	25	161.76	Chi - square	1.224
Young	20.89	16.67	53	188.81	Df	2
Mature	18.22	13.95	277	177.4	Sig.	Ns
Total			355			
Debt to Equity ratio						
New	26.82	62.33	25	201.34	Chi - square	1.855
Young	7.18	7.96	53	167.43	Df	2
Mature	8.11	17.38	277	177.92	Sig.	Ns
Total			355			
Gross Loan Portfolio to total assets						
New	87.97	9.72	25	231.76	Chi - square	11.584
Young	83.95	13.92	53	200.41	Df	2
Mature	81.01	14.52	277	168.86	Sig.	**
Total			355			

Source: Author's calculations

Note: ** significant at 1 percent level; Ns- Not significant

5.3 Outreach

H_0 : The mean rank for outreach indicators, namely, number of active borrowers, average loan balance per borrower, average loan balance per borrower/GNI per capita and average outstanding balance does not differ significantly among age groups.

It can be seen from Table 3 that the number of active borrowers for mature MFIs is greater than the other two groups. The new MFIs has the lowest number of active borrowers because of its recent origin. Similar trend is witnessed in the mean rank. The chi-square value 32.295 has shown that there is a significant difference among the age groups at 1 per cent level. Hence, the hypothesis is rejected. The mean table shows the average loan balance per borrower for mature MFIs is greater than the other two groups. The new MFIs have the lowest average loan balance per borrower. Same trend is reflected in the mean rank. The chi-square value 10.586 has shown that there is a significant difference in the mean ranks among the three age groups at 1 per cent level, thereby, rejecting the hypothesis for this variable.

Table 3: Outreach of MFIs in India and Bangladesh

Number of Active Borrowers						
Age	Mean	S.D	N	Mean Rank	Kruskal Wallis test	
New	52371	56721.76	25	78.8	Chi – square	32.295
Young	199598	292961.87	53	150.94	Df	2
Mature	687761	1473867.5	277	192.13	Sig.	**
Total			355			
Average Loan Balance per Borrower						
New	106.40	27.89	25	115.64	Chi – square	10.586
Young	124.73	30.85	53	172.27	Df	2
Mature	139.25	64.25	277	184.72	Sig.	**
Total			355			
Average Loan Balance per Borrower/GNI per Capita						
New	10.47	3.12	25	103.76	Chi – square	56.503
Young	10.18	2.86	53	99.5	Df	2
Mature	15.89	6.96	277	199.72	Sig.	**
Total			355			
Average Outstanding Balance						
New	105.68	27.84	25	124.82	Chi –square	7.355
Young	123.85	29.18	53	186.73	Df	2
Mature	174.08	712.2	277	181.13	Sig.	*
Total			355			

Source: Author's calculations

Note: *significant at 5 percent level; Ns- Not significant

It is understood from the mean table that the average loan balance per borrower/GNI per capita for mature MFIs is greater than the other two groups. The young MFIs has the lowest average loan balance per borrower/GNI per capita. The same is reflected in the mean rank. This chi-square 56.503 value has shown that there is a significant difference in the mean ranks between the three age groups at 1 per cent level. Hence, the hypothesis is rejected for this variable.

The mean table shows that the average outstanding balance for mature MFIs is greater than the other groups. The lower average outstanding balance is observed for New MFIs, but it is found different in the mean rank. The chi-square value 7.355 has shown that there is a significant difference in the mean ranks the between the three age groups at 5 per cent level. Hence, the hypothesis is rejected for this variable.

It is thus concluded from the result that the outreach indicators have attributed significant difference among the age groups of MFIs and it is clear that mature MFIs have been able to reach more clients and maintain a high average loan balance per borrower, whereas new MFIs have maintained their average balance per borrower/GNI per capita and average outstanding balance at low level as they are of recent origin.

5.4 Overall financial performance

H_0 : Mean rank for overall financial performance, i.e., return on assets, return on equity and operational self-sufficiency does not differ significantly among age groups.

Table 4 shows that the return on assets for mature MFIs is greater than the other groups. The lowest value is for the new MFIs, but the mean rank have reflected a reverse trend. The chi square value 0.641 has depicted that there is no significant difference in the mean ranks of the three groups. Hence, the hypothesis is accepted for this variable. It is clear from the mean table that the return on equity for young MFIs is greater than the other two groups. The lowest return on equity has been for the new MFIs, but the mean rank have shown a reverse trend. The chi-square value 1.907 has revealed that there is no significant difference in the mean ranks of the three groups. Hence, the hypothesis is accepted for this variable.

Table 4: Overall Financial Performance of MFIs in India and Bangladesh

Return on Assets						
Age	Mean	S.D	N	Mean Rank	Kruskalwallis test	
New	-1.93	20.49	25	193.7	Chi - square	0.641
Young	-0.37	9.46	53	178.21	df	2
Mature	1.13	7.31	277	176.54	Sig.	Ns
Total			355			
Return on Equity						
New	-14.94	265.43	25	204.1	Chi - square	1.907
Young	17.39	43.46	53	181.3	df	2
Mature	1.08	99.79	277	175.01	Sig.	Ns
Total			355			
Operational Self Sufficiency						
New	113.32	32.87	25	189.38	Chi-square	0.347
Young	109.92	29.96	53	178.76	df	2
Mature	114.94	46.69	277	176.83	Sig.	Ns
Total			355			

Source: Author's calculations

Note: Ns- Not significant

It is understood from the mean table that the OSS for mature MFIs is greater than the other two groups. The young MFIs have witnessed the lowest OSS, but a different trend is resulted in mean rank. The chi-square value 0.347 has shown that there is no significant difference in the mean ranks of the three groups. Hence, the hypothesis is accepted for this variable. Thus the overall financial performance indicators of MFIs do not differ significantly among the age groups of MFIs. It is observed that the mature MFIs is able to derive high return on assets than the other age groups, whereas, young MFIs have proved their ability to reward the shareholders' investment at a high rate. All the three age groups MFIs are operationally self-sufficient but comparatively mature MFIs have higher operationally self-sufficient.

5.5 Revenue and expenses

H₀: The mean rank for Revenue and Expenses, namely, financial revenue/assets, profit margin yield on gross portfolio (nominal), total expense/assets, financial expense/assets, provision for loan impairment/assets, operating expense/assets does not differ significantly among age groups.

Table 5 demonstrates that the financial revenue/assets for new MFIs is greater than the other two groups. The financial revenue/assets has been the lowest for mature MFIs. The same is reflected in the mean rank. The chi-square value 28.496 has shown that there is a significant difference in the mean ranks of the age groups at 1 per cent level there by rejecting the hypotheses for this variable. The mean table has revealed that the profit margin for mature MFIs is greater than the other two groups. The lowest profit margin is recorded for new MFIs, but a different trend has been revealed in mean rank. The chi-square value 0.273 has shown that there is no significant difference in the mean ranks of the three groups. Hence, the hypothesis is accepted for this variable. It is observed from the mean table that the yield on gross portfolio (nominal) for new MFIs is greater than the other two groups. The mature MFIs has the lowest yield on gross portfolio. The similar trend is expressed in the mean rank. The chi-square value 15.17 has shown that there is a significant difference in the mean ranks of the three age groups at 1 per cent level. Hence, the hypothesis is rejected for this variable.

The mean table shows that the total expense/asset for new MFIs is greater than the other two groups. The lowest total expense/assets has been recorded for mature MFIs. Similar trend is reflected in the mean rank. The chi-square value 22.881 has shown that there is a significant difference in the mean ranks of the age groups at 1 per cent level. Hence, the hypothesis is rejected for this variable.

Table 5: Revenue and Expenses of MFIs in India and Bangladesh

Revenue and Expenses						
Age	Mean	S.D	N	Mean Rank	Kruskalwallis test	
New	25.79	5.89	25	256.38	Chi - square	28.496
Young	22.48	5.54	53	218.28	Df	2
Mature	20.26	6.94	277	163.22	Sig.	**
Total			355			
Profit Margin						
New	-9.13	97	25	188.3	Chi - square	0.273
Young	-6.19	65.53	53	176.65	df	2
Mature	2.56	112.83	277	177.33	Sig.	Ns
Total			355			
Yield on gross Portfolio (nominal)						
New	27.84	6.79	25	243.72	Chi - square	15.17
Young	24.4	7.06	53	199.3	df	2
Mature	23.48	8.16	277	167.99	Sig.	**
Total			355			
Total Expense/Assets						
New	26.89	20.36	25	243.44	Chi - square	22.881
Young	22.05	9.32	53	217.68	Df	2
Mature	18.76	7.7	277	164.5	Sig.	**
Total			355			
Financial Expense/Assets						
New	8.92	3.05	25	230.02	Chi - square	23.416
Young	8.58	2.3	53	226.53	df	2
Mature	6.79	3.34	277	164.02	Sig.	**
Total			355			
Provision for Loan Impairment/Asset						
New	0.93	0.94	25	162.9	Chi-square	3.379
Young	0.84	0.84	53	157.55	Df	2
Mature	1.27	1.63	277	183.28	Sig.	Ns
Total			355			
Operating Expense/Assets						
New	17.08	20.15	25	227.86	Chi -square	8.304
Young	13.07	9.95	53	192.28	Df	2
Mature	10.67	5.74	277	170.77	Sig.	*
Total			355			

Source: Author's calculations

Note: * and ** indicate significance at 5 percent and 1 percent respectively; Ns- Not significant

It is understood, therefore, from the mean table that the financial expense/assets for new MFIs have been greater than the other two groups. The lowest financial expense/assets has been recorded for mature MFIs. Same trend is reflected in the mean rank. The chi-square value 23.416 has revealed that there is a significant difference in the mean ranks of the age group at 1 per cent level. Hence, hypothesis rejected for this variable. It is evident from the mean table that the provision for loan impairment/asset is greater for mature MFIs than the other two groups. The young MFIs have recorded the lowest provision for loan impairment/assets. The similar trend is exhibited in the mean ranks. The chi-square value 3.379 has revealed that there is no significant difference in the mean ranks of three age groups. Hence, the hypothesis is accepted for this variable.

The mean table has shown that operating expense/assets have been greater for young MFIs. The lowest operating expense/assets has been seen in mature MFIs. A same trend is evident in the mean ranks. The chi-square value 8.304 has shown that there is a significant difference in the mean ranks of three age groups at 5 per cent level. Hence, the hypothesis is rejected for this variable. It is concluded that there is no significant difference in the mean rank of profit margin and provision for loan impairment/assets of the MFIs of the three age groups, whereas, financial revenue/assets, yield on gross portfolio (nominal), total expense/assets, financial expense/assets and operating expense/assets exhibit a significant difference among the age groups. Only new MFIs have higher financial revenue/assets and yield on gross portfolio (nominal), which indicates that they are charging higher interest rates. In spite of this higher revenue their expense also seems to be on higher side for new MFIs than that of other age groups, only mature MFIs have recorded lower expenses.

5.6. Efficiency

H₀: The mean rank for efficiency indicators, namely, operating expense/loan portfolio, average salary/GNI per capita, cost per borrower, loan per staff member and personnel allocation ratio does not differ significantly among the age groups.

It is observed from the Table 6 that the operating expense/loan portfolio has been greater for New MFIs. The lowest operating expense/loan portfolio has been reflected in Mature MFIs. A similar trend is found in the mean rank. The chi-square value 2.786 has shown that there is no significant difference in the mean ranks among the age group. Hence, the hypothesis is accepted for this variable. It is clear from the mean table that the average salary/GNI per capita for mature MFIs is greater than other two groups. The lowest average salary/GNI per capita has been for young MFIs. Uniform trend is revealed in the mean rank. The chi-square value 26.173 has shown that

there is a significant difference in the mean ranks of the three age groups at 1 per cent level. Hence, the hypothesis is rejected for this variable.

Table 6: Efficiency of MFIs in India and Bangladesh

Operating Expense/Loan Portfolio						
Age	Mean	S.D	N	Mean Rank	Kruskalwallis test	
New	22.01	35.1	25	210.96	Chi-square	2.786
Young	17.8	19.26	53	176.92	Df	2
Mature	14.58	14.47	277	175.23	Sig.	Ns
Total			355			
Average Salary/GNI per capita						
New	1.78	0.76	25	139.88	Chi – square	26.173
Young	1.58	0.79	53	119.68	Df	2
Mature	2.28	1.1	277	192.6	Sig.	**
Total			355			
Cost per borrower						
New	22.16	37.24	25	160.24	Chi-square	0.815
Young	21.97	24.27	53	180.49	Df	2
Mature	17.87	12.5	277	179.13	Sig.	Ns
Total			355			
Loan per Staff Member						
New	236	100.55	25	200.84	Chi -square	1.635
Young	215	102.61	53	183.38	df	2
Mature	239	186.24	277	174.91	Sig.	Ns
Total			355			
Personnel Allocation Ratio						
New	63.25	18.13	25	217.74	Chi-square	4.16
Young	54.93	20.49	53	170.4	df	2
Mature	55.72	22.01	277	175.87	Sig.	Ns
Total			355			

Source: Author's calculations

Note: ** indicate significance at 1 percent level; Ns- Not significant

It is evident from the mean table (Table 6) that the cost per borrower of new MFIs is greater than the other two groups. The cost per borrower has been lowest for mature MFIs, but the mean rank has reflected a different trend. The chi-square value 0.815 has shown that there is no significant difference in the mean ranks of the three age groups. Hence, the hypothesis is accepted. It is also understood from the mean table that the loan per staff

member for mature MFIs is greater than the other two groups. The loans per staff member have been lower for young MFIs, but a different trend is reflected in the mean rank. The chi-square value has revealed that there is no significant difference in the mean ranks of the three groups. Hence, the hypothesis is accepted for this variable.

The mean table has shown that the personnel allocation ratio for new MFIs is greater than the other two groups. The personnel allocation ratio has been the lowest for young MFIs. Similar trend is reflected in the mean rank. The chi-square value 4.16 has revealed that personnel allocation ratio has no significant difference among the three groups. Hence, the hypothesis is accepted for this variable. It is further observed that there is no significant difference in the mean rank of operating expenses/loan portfolio, cost per borrower, loan per staff member and personnel allocation ratio of MFIs among the three age groups, whereas, average salary/GNI per capita have shown a noteworthy difference among the three age groups. It is concluded that mature MFIs have shown efficiency, in terms of operating expenses/loan portfolio cost per borrower and loan per staff member, whereas, new MFIs have shown higher personnel allocation ratio and young MFIs have been able to reduce the average salary/GNI per capita.

5.7 Risk and liquidity

H₀: The mean rank for risk and liquidity indicators, namely PAR > 90 days, risk coverage and non-earning liquid asset as a per cent of total asset does not differ significantly among the age groups.

The mean table (Table 7) has revealed that the PAR > 90 days for mature MFIs are greater than the other two groups. The PAR > 90 days has been the lowest for new MFIs. Similar trend has been witnessed for mean rank. The chi square value 40.498 has revealed that there is a significant difference in the mean ranks of the three age groups at 1 per cent level. Hence, the hypothesis is rejected for this variable. The mean table also shows that the risk coverage for mature MFIs is greater than the other two groups. The young MFIs have lesser risk coverage, but the mean rank have shown a different trend. The chi-square value 5.68 has revealed that there is no significant difference in the mean ranks of the three age groups. Hence, the hypothesis is accepted for this variable.

It can further be observed from Table 7 that the mean value of non-earning liquid asset as per cent of total assets of mature MFIs is greater than the other two groups. The NELA as per cent of total assets has been lowest for new MFIs. The mean rank also reveal similar trend. The chi-square value 9.572 has revealed that there is a significant difference in the mean ranks of the three age groups at 1 per cent level. Hence, the hypothesis is rejected for this variable.

Table 7: Risk and Liquidity of MFIs in India and Bangladesh

PAR > 90 days						
Age	Mean	S.D	N	Mean Rank	Kruskalwallis test	
New	0.21	0.34	25	81.1	Chi - square	40.498
Young	0.88	1.57	53	133.23	Df	2
Mature	9.92	40.37	277	195.31	Sig.	**
Total			355			
Risk Coverage						
New	399.21	1045.61	25	170.86	Chi - square	5.68
Young	355.18	1134.05	53	208.91	Df	2
Mature	1536.81	15051.7	277	172.73	Sig.	Ns
Total			355			
Non-earning Liquid Assets as a per cent of Total Assets						
New	9.36	6.95	25	117.82	Chi - square	9.572
Young	15.64	12.08	53	175.22	Df	2
Mature	16.56	11.98	277	183.96	Sig.	**
Total			355			

Source: Author's calculations

Note: ** indicate significance at 1 percent level; Ns- Not significant

It is found that the mean rank of risk coverage does not differ significantly among the three age groups, whereas, PAR > 90 days and NELA as a per cent of total assets differ significantly among the three age groups of MFIs. It is concluded that new MFIs have better liquidity in terms of PAR > 90 and NELA as a per cent of total assets, whereas, mature MFIs have higher risk coverage.

6.0 Findings and Conclusion

Among the MFIs belonging to new, young and mature groups, the mature MFIs have exhibited a better performance in variables, namely, assets, number of active borrowers, average loan balance per borrower, return on assets, operational self-sufficiency, profit margin, financial expense to assets, operating expense/assets, operating expense to loan portfolio, cost per borrower, loan per staff member and risk coverage. The new MFIs have exhibited a better performance in variables, namely, capital to asset ratio, debt to equity ratio, gross loan portfolio to total assets, average outstanding balance, financial revenue to assets, yield on gross portfolio (nominal), personnel allocation ratio, portfolio at risk greater than 90 days and non-earning liquid assets as a per cent of total

assets. The young MFIs have revealed a better performance in variables, namely, average loan balance to GNI per capita, return on equity, provision for loan impairment to assets and average salary to GNI per capita.

Mature MFIs with their long life span have shown a wider asset base and recorded lower expenses. New MFIs are growth oriented and their allocation of assets to its lending activity is greater than the other age groups. Outreach indicators have attributed significant difference among the age groups of MFIs overall financial performance indicators of MFIs do not differ significantly among the age groups of MFIs. From the study, it is vivid that age is an important factor in the performance of MFIs. Among the age groups, mature MFIs have shown better performance in terms of breadth of outreach; profitability in terms of return on assets and operational self-sufficiency; revenue in terms of profit margin; expenses in terms of total expense to assets and financial expense to assets; efficiency in terms of operating expense to loan portfolio and cost per borrower and loan per staff member; and risk in terms of risk coverage. Thus, the general hypothesis that 'Age is not an important criterion for sustenance' is not approved.

One of the limitation of the study is the non-availability of continuous data from MIX for more than five years that has restricted the period and number of MFIs in this study. Future research can focus on the age-wise comparison that can be undertaken in the areas like Middle East Nations (MENA) and African Nations where there are more MFIs.

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