

Whether Age Determines Asset Creation? - A Case Study of the Microfinance Institutions of Assam

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Abstract

Microfinance today has become one of the most debated and documented but still hangs around much confused buzzwords in banking, inclusive growth and developmental policymaking fields. Asset creation is one of the most important and crucial component of MFIs since these institutions have the dual objective of outreach and profitability. In this study an attempt is made to find out the role of age in the asset creation process of the MFIs of Assam. In order to achieve this primary objective, a sample survey was conducted during June – October, 2010 in 14 districts of Assam finally selecting 34 MFIs based on their outreach. Linear regression analysis was used to test the null hypothesis that there is no significant relationship between the total assets created by the MFIs and the age of the MFIs. Finally the results of the study concluded that there is significant relationship between the total assets created by the MFIs and their age.

Key words: *Asset Creation, Micro finance, MFIs, Assam*

1. Background and Motivation

Microfinance refers to the means by which poor people convert small sums of money into large lump sums (Rutherford, 1999). Specifically, it refers to the broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and, their micro-enterprises (Asian Development Bank [ADB], 2000). Thus microfinance institutions (MFIs) are special type of financial institutions.

Microfinance today has become one of the most debated and documented but still hangs around much confused buzzwords in banking, inclusive growth and developmental policymaking fields. Actually in some form or the other, the concept of “microfinance” always existed in almost each and every society. But as a more formal process, the history can be traced back to portions of the Marshall Plan at the end of second world war in the middle of the 20th century and the writings of abolitionist/legal theorist Lysander Spooner who wrote about the benefits of numerous small loans to the poor as a way to alleviate poverty (Khandelwal, 2007).

Whether Age Determines Asset Creation? A Case Study of the Microfinance Institutions of Assam.

Microfinance was born as a response to the frustrated development resulting from subsidized rural credit in the 1950s and 1960s (Adams & Fitchett, 1992; Mersland, 2009). Some global examples of microfinance initiatives are - FINCA and ACCION International of Latin America, Bank Rakyat of Indonesia (BRI), and Grameen Bank of Bangladesh, now acting in more than 50 countries.

2. Literature Review

This section tries to find out any direct or indirect literatures studied by the past researchers in the field of the age and asset creation of the MFIs in India and Abroad.

The microfinance revolution, particularly the success stories of institutions like Grameen Bank in Bangladesh, Banco Sol in Bolivia, and Bank Rakyat in Indonesia, attracted several economists to study microfinance in the latter half of the 1990s. A number of studies have shown a significant impact on the lives of people benefiting from microfinance services across a wide range of economic and social indicators, including better access to education for the children, greater empowerment of women, economic upliftment, and increased participation of women in social and political activities (Fisher & Sriram, 2002; Robinson, 2001; Simanowitz & Walter, 2002; Yunus 2004; Zohir & Martin, 2004). The Malegam Committee Report of 2011 reports that the level of penetration in the South is more than four times the penetration in the second highest region, namely the West and over ten times the penetration in the least penetrated region, namely the Central. This concentration of total microfinance activity in the South is paralleled by the distribution of MFI portfolio as between the regions. The Malegam Committee report also revealed that the Southern region has an overwhelmingly large share of the MFI portfolio, it also shows that this share is only a little over twice the share of the region with the next highest share, namely the East but significantly higher than the share of other regions. This supports the complaint that MFIs have been concentrating in the Southern region where Self Help Groups are well developed while neglecting the other regions.

Gonzalez (2008) shows that MFI efficiency is strongly related to age, after screening out the effect of other variables. This effect is strongest in the first six years of institutional history, when efficiency increases 2–8 percent annually. In the following years this figure drops to 1–2 percent per year. Next to the obvious learning effects that explain this finding, it seems reasonable to assume that MFIs build up a solid customer base in their early years of existence, which significantly translates into greater efficiency. In subsequent years, this trend is still positive, but begins to level off, as most internal processes have already been tested and improved. If the time to become efficient were decreasing from one age cohort to the next, then one could assume a marketwide learning effect as new entrants into the market avoid the mistakes of previous entrants. Thus we see in this paper the researcher tries to find out the role of age as the efficiency drivers of MFIs.

In another study Swain and Varghese (2008) made an attempt to evaluate the effect of Self Help Group participation on asset creation. In other words, they tried to find out whether Self Help Group Participation Lead to Asset Creation. The results of their study reveal that longer membership in SHGs positively impacts asset creation, robust to various asset specifications. With longer participation in SHGs, members move away from pure agriculture as an income source towards other sources such as livestock income. Training by NGOs positively impacts asset creation but the type of SHG linkage per se has no effect.

Thus in this limited search, no such literature is found which studied whether age of the MFIs determines its asset creation in India and particularly in the state of Assam.

3. The Problem Area

Asset creation is one of the most important and crucial component of MFIs since these institutions have the dual objective of outreach and profitability. In other words MFIs objective is not only incurring profit but also reach those where the formal financial institutions are unable to provide microfinance services. Asset creation also determines the operating efficiency of an institution in general. In this study an attempt is made to find out the role of age in the asset creation process of the MFIs of Assam.

4. Research Methodology

The main objective of this study is to find out whether the age of the microfinance institutions determine the asset creation of the MFIs operating in the state of Assam. In order to achieve this primary objective, a sample survey is conducted during June – October, 2010 in 14 districts of Assam. Annexure 1 in the appendix documents the numbers of MFIs present in different districts of Assam. The study is based on primary data. The research strategies considered for the study is exploratory in nature. Top 34 MFIs are selected based on their number of active clients. The list of MFIs studied is shown in the Annexure 2. To select the representative number of MFIs for the study, the data base of Centre for Microfinance Livelihood (CML) is considered. The CML data base is published in February 2010 focusing the sector overview of NGOs, NGO-MFIs and MFIs of Assam. In this CML database, total number of institutions is 212 which consists of 84 NGO-MFIs, 7 MFIs and 121 NGOs. From this data base, we have selected only those MFIs that are continuing microcredit operations for the last three years as on 31st March 2010. After this first level screening, the number of available MFIs comes down to 79 from 212 which consists of 6 MFIs, 8 NGOs, and 65 NGO-MFIs. Thus, we have finally selected 34 MFIs (43% of the sample population) based on the MFI's outreach i.e., number of clients served by the MFIs.

5. Role of Age and Asset Creation of the MFIs

The primary objective of this paper is to find out the role of age in the asset creation of the MFIs of Assam. Let us consider the economic relationship between age and asset creation. Each additional years of existence enables an MFI to create more assets. As age of the MFI increases, we expect total asset to rise as well. If we were to hypothesize a relationship between age of the MFI and asset creation of the MFI, it would be positive, the more the number of years of existence, the more is the total assets. To start this experiment, the following equation shows the theoretical model of this relationship:-

$$y = \beta_0 + \beta_1 x + \varepsilon,$$

where ε is a random error term,

Here 'y' represents the respective average assets created by the sample MFIs and 'x' represents the average age of the respective sample MFIs for the three financial years 2007-2008, 2008-2009, and 2009-2010. If 'x' and 'y' genuinely have a positive relationship, β_1 is a positive number. If they have a negative relationship, β_1 is a negative number. If they have no relationship at all, β_1 is zero. Our null hypothesis is that there is no significant relationship between the total assets created by the MFIs and the age of the MFIs which is stated below:-

Null Hypothesis,

$$H_0 : \beta_1 = 0$$

Alternative Hypothesis,

$$H_0 : \beta_1 \neq 0$$

The regression results are summarized below in Table 1, Table 2, and Table 3:-

Table 1:
Regression Statistics

Multiple R	0.611893152
R Square	0.374413229
Adjusted R Square	0.354233011
Standard Error	3.269277825
Observations	33

Table 2:
ANOVA

	df	SS	MS	F	Significance F
Regression	1	198.3028613	198.3028613	18.55347756	0.000154419
Residual	31	331.3335023	10.68817749		
Total	32	529.6363636			

**Table 3:
Coefficient**

	Coefficients	Standard Error	t Stat	P-value
Intercept	6.755858463	0.604707291	11.17211346	0.000013085
1844796.333	2.10470527	5.30156E-09	4.307374788	0.000154419

From Table 1, we find that the coefficient of determination, R^2 is 0.37 which is very low. Thus we see that changes in the age of the MFI account for only 37% of the variation in asset creation of the MFIs.

In this instance, the null hypothesis being tested is that the true slope, β_1 , equals 0. Here with an F statistic in excess of 18.55 and a significance level of 0, we would reject the null hypothesis.

The final piece of output is the table of coefficients. In a regression equation, the slope and the intercept are referred to as the coefficients in the model. We find both coefficients in the column labeled Coefficients; the intercept (β_0) is constant, and the slope (β_1) is the coefficient of average age of the sample MFIs. From the table we find that our estimated line can be written as:

$$\text{Total Assets} = 6.755858463 + 2.10470527 (\text{Age of the MFIs})$$

The slope of the line (2.1047) means that if Age of the MFIs increases by one year, Total Assets of the MFIs would increase by 2.1047 years. In other words, in the aggregate, Total Assets created by MFIs is about 2.1047 times of each year of existence of the MFIs.

Considering the t statistic and P value From Table 3, we see that the value of the test statistic for the slope is 4.307, and the associated P -value is approximately 0 at 5% level of significance. Therefore the null hypothesis would be rejected and we conclude that there is significant relationship between the total assets created by the MFIs and their age.

6. Conclusion:

Over the last decade, the microfinance field has expanded substantially both in terms of number of institutions and the size of these institutions. While such scaling up is applauded for its progress in spreading the benefits of microfinance services to a greater number of poor and for achieving sustainability, there is a concern that scaling-up may lead to a drift from the microfinance institutions original poverty alleviation mission (Hishigsuren, 2004). Christen et al., (2004) reported an astonishing 500 million persons served, mostly with savings accounts, while the Microcredit

Whether Age Determines Asset Creation? A Case Study of the Microfinance Institutions of Assam.

Summit in the 2006 meeting in Halifax had celebrated the milestone of 100 million borrowers reached.

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The advent of MFIs in the Microfinance sector appears to have resulted in a significant increase in reach and the credit made available to the unorganized sector in India and globally now accepted as a poverty reduction tool. But unfortunately, the presence of MFIs and their activity is very less in the North Eastern part of India. So it is expected that the MFIs must be encouraged to serve those sections of the community which are beyond the reach of formal financial institutions and their activities should be promoted for the socio-economic development by creating social capital.

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Appendix I:
District-wise Distribution of Sample MFIs

Sl. No.	Districts	No. of MFIs
1	Baksa	2
2	Barpeta	2
3	Cachar	1
4	Darrang	3
5	Goalpara	1
6	Golaghat	1

Whether Age Determines Asset Creation? A Case Study of the Microfinance Institutions of Assam.

7	Hailakandi	1
8	Kamrup	8
9	Karimganj	1
10	Lakhimpur	1
11	Morigaon	2
12	Nalbari	5
13	Sivasagar	1
14	Sonitpur	5
	Total	34

Appendix II

List of the MFIs surveyed in Assam

Sl. No.	Acronyms of MFIs	Full Name of MFIs
1	PRDS	Pragati Rural Development Society
2	MZGPS	Morigaon Zila Gramya Puthibharal Sanstha
3	NCS	Nightingale Charitable Society
4	PROCHESTA	Prochesta
5	ASOMI	Asomi
6	GS	Grameen Sahara
7	RGVN	Rastriya Gramin Vikash Nidhi
8	RGVN NE	RGVN North East Microfinance Ltd.
9	CRD	Centre for Rural Development
10	AAMIVA	Association for Advancement of Micro Institution and Voluntary Action
11	ASC	Ajagar Social Circle
12	GSEDC	Gandhinagar Socio Economic Development
13	AGUP	Anchalik Gram Unnayan Parishad
14	Pancharatna	Pancharatna Gramya Bikash Kendra
15	GM	Gwudan Muga
16	WDS	Weavers Development Society
17	BJS	Bishnujyoti Janakalyan Samiti
18	GVM	Gramya Vikash Mancha
19	LSS	Lok Seva Samiti
20	AD	Asha Darshan
21	SATRA	Social Action for Appropriate Transformation and Advancement in Rural Areas
22	SDC	Sipajhar Diamond Club Community Centre
23	AGUS	Associated Gramya Unnayan Society

24	Reneissance	Reneissance
25	MASK	Mahila Sakti Kendra
26	DASK	Doulung Ajon Samajik Kendra
27	JPYS	Jyoti Puthibharal & Yubak Sangha
28	DPYS	Donyi Polo Youth Society
29	ROAD	ROAD
30	RMI	Rainbow Microfinance Institution
31	MACC	Monacherra Athletic & Cultural Club
32	DC	Deshbandhu Club
33	Sonali	Sonali SHG Unnayan Samiti
34	Mandal	Maandal

Appendix III

Age and Average Age of the Sample MFIs

Sl. No.	MFIs	Age (in Years as on 31.03.2010)	Average Total Assets (2008-2010)
1	PRDS	5	1844796
2	MZGPS	10	10889696
3	NCS	6	28581822
4	PROCHESTA	9	14361282
5	ASOMI	8	154988583
	GRAMEEN		
6	SAHARA	4	33311899
7	RGVN	20	437324392
	RGVN NE		
8	MICROFIN	15	458609973
9	CRD	6	20447967
10	AAMIVA	4	456693
11	ASC	9	13071559
12	GSEDC	7	4630924
13	AGUP	14	3807508
14	PANCHARATNA	5	6676559
15	GM	3	296265
16	WDS	7	5010445
17	BJS	5	315756
18	GVM	8	2000141
19	LSS	6	2152731
20	AD	5	170457

Whether Age Determines Asset Creation? A Case Study of the Microfinance Institutions of Assam

21	SATRA	5	11732468
22	SDC	13	11206110
23	AGUS	13	2883389
24	RENEISSANCE	7	1840546
25	MASK	4	4671137
26	DASK	3	441033
27	JPYS	9	1054522
28	DPYS	12	58410
29	ROAD	6	1252707
30	RMI	5	1180999
31	MACC	3	11643057
32	DC	12	11643057
33	SSUS	6	14463300
34	MANDAL	3	1240980