Evaluation of Microfinance Institutions in Ethiopia from the Perspective of Sustainability and Outreach

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Abstract Ethiopia is a developing country, the second most populous in Africa with an estimated population of more than 94 million. The Ethiopian economy is based on agriculture, and poverty reduction has been the overriding development agenda. The coverage of formal financial services estimated to be less than 10 percent, nevertheless banks consider the poor "un-bankable". It has been assumed that Microfinance Institutions (MFIs) have reached the poor on a sustainable basis. Considering the situation, this study aims at evaluating the outreach level of Ethiopian MFIs and its sustainability. In order to achieve the planned research objectives, quantitative as well as qualitative research methods are used. The target of this research is MFIs currently operating in the country. The 14 samples of the study were selected from operating 34 MFIs by using purposive sampling technique to include all categories. Data were collected through questionnaires, whereas, secondary data from annual reports and other documents. The analysis indicated that the breadth and the depth of outreach of Ethiopian MFIs are in an increasing trend. The increase in the amount of voluntary savings was remarkable, and its ratio to the compulsory savings was 482.51 percent from 2005 to 2014. With regards to depth of outreach, 54.73 percent of women and relatively insignificant number of crop producing farmers have been covered by microfinance services. The Operational Self-sufficiency Ratio and Financial Self-sufficiency Ratio of Ethiopian Microfinance Institutions' are in increasing trends because of the enhancements in generating more revenue. Outreach trend is promising, though they have challenges to address the disadvantaged group of the society. The sustainability indicators suggested that the increase of operational sustainability and financial sustainability ratios are due to the increase in revenue and the contribution of donors and/subsidization. It is also advisable to improve its sustainability by increasing the efficiency.

Keywords outreach, sustainability, microfinance, savings, subsidization

INTRODUCTION

The emergence of Microfinance institutions (MFIs) is a late phenomenon in Ethiopia compared to other developing countries. It only counts back to the second half of the 1990s as a pilot in one region, and as a result of its success, the microfinance service was gradually replicated in other regions. The MFIs in Ethiopia focus on group-based lending and promote compulsory and voluntary savings. They use joint liability, social pressure, and compulsory savings as alternatives to conventional forms of collateral (SIDA, 2003). These institutions provide financial services, mainly credit and saving and, in some cases, loan insurance. The objectives of MFIs are quite similar across organizations. Almost all MFIs in the country have poverty alleviation as an objective. They focus on reducing poverty and vulnerability of poor households by increasing agricultural productivity and incomes, diversifying off

farm sources of income, and building household assets. They seek to achieve these objectives by expanding access to financial services through sustainable microfinance institutions.

There is a big challenge in accessing financial resources from formal financial institutions/ banks by the poor in Ethiopia due to various reasons, and particularly, collateral. The experiences of some Asian countries like, Bangladesh, were considered as a success stories in tackling the problem of access to finance, and the Ethiopian government issued proclamation no. 40/1996 in 1996 that allowed the establishment of MFIs. The government takes financial inclusion as a policy objective and assumed MFIs can fill this gap. A number of studies indicated that sustainability is the basic question and challenges of MFIs in developing countries, which hinders their ability to outreach the poor. This problem has attracted the attention of many researchers and as a result many strategies have been put to ensure that MFIs are sustainable (Yaron, 1992). Therefore, one of the objectives of this study is to clearly understand the factors affecting the outreach and sustainability.

The main objective of this study is to evaluate the current performance of Ethiopian MFIs to point out the influencing factors of the sustainability and level of outreach for the better progress in performance and as well to contribute to policy formulation.

METHODOLOGY

Outreach and sustainability: Meyer (2002) noted that the poor needed to have access to financial service on long-term basis (sustainability) rather than just a onetime financial support. This indicates that, outreach and sustainability are inseparable although there is a tradeoff between them (Izumida, 2003). Due to this fact, this study employed both outreach and sustainability to evaluate the position of Ethiopian MFIs. This study used both primary and secondary data. Primary data were taken from questionnaire followed by interviews. On the other hand, secondary data were taken from time series data (2005-2014) collected from reports, journals, and other financial statement sources. The study employs both quantitative and qualitative methods of analysis. Thus, multiple regression models have been used with IBM SPSS statistical software. The sampling was done on the basis of purposive sampling technique to incorporate from all categories (large, medium to small). Accordingly, 14 MFIs were selected as a study sample from the targeted population of about 34 MFIs operating in the country.

RESULTS AND DISCUSSION

A) Outreach level of Ethiopian MFIs: Various studies have used the number of borrowers as a measure of microfinance breadth of outreach (Nyamsogoro, 2010; Mersland and Strom, 2009; Harmes et al., 2008). It is generally assumed that the increasing trend/ the larger the number of borrowers the better the outreach. The number of borrowers of Ethiopian MFIs were about 68, 000 in 2005 while this number increased to about 2 million in 2014. In this case we are able to say that, the Ethiopian MFIs have been expanding its outreach to the poor. The average balances of outstanding loans are proxy indicators used to indicate a client's socioeconomic level or depth of outreach. The lower the loan size is the indication of the quality of depth of outreach in which the industry average low end depth of outreach is loan size less than USD 150. The Ethiopian MFIs average loan size was about USD 121, which qualifies good quality of depth of outreach. But there was also some MFIs tending to exceed the threshold of the industry, which needs further investigation whether they are lean towards mission drift or not. Provision of different kind of product by MFIs is also noted as performance indicators.

As depicted on Table 1, the types of financial services were concentrated on saving and credit services, it has limitations on addressing the various scopes of needs of the poor. The loan programmes actually performing better thought the geographically remote area, where poor farmers have very small access to the financial services of the MFIs. Crop producing farmers have limited access to these financial services. The other indicator of outreach is the percentage of women. With regards to this

indicator the Ethiopian MFIs covered only about 55%, compared to the average coverage of South Asia 86% and Africa 61%. With respect to saving characteristics, the ratio of voluntary savings to compulsory savings stretched to 482.51 percent in ten years' period of time from 2005 to 2014 which is a well-off progress.

Table 1 Types of services, loan programmes, and clients of Ethiopian MFIs

Type of financial services by MFIs	Percentage	Percentage of MFIs who have rural farmer clients	Percentage
Pension	28.6%		
Saving and Credit	100%	14.3%	< 10%
Insurance	21.4%	21.4%	< 50%
Money Transfer	21.4%	64.3%	> 50%
Type of loan programme		**MFIs serving**	**Crop producer farmers**
Loan for Geographically Remote Area	28.6%	10%	7.1%
Loan for SME	100%	40%	22.9%
Loan for Women	54.4%	50%	40%
Loan for Farmer	85.%	**Average**	**35%**

B) Sustainability: The definition of sustainability pointedly varies due to the big divides of thought (Institutionalist Vs Welfarist) in the industry. The institutionalist basically assumes MFIs as a purely business entity. They argued that, the Dollar invested as a loan in microcredit should have to work in the free market and poverty can be reduced by commercialization, democratization of capital and financializing of development (Roy, 2010). But the Walfarist argued, MFIs can achieve sustainability without achieving financial sustainability. Sustainability basically appraised by two levels of sustainability. These are Operational Self Sufficiency (OSS) and Financial Self Sufficiency (FSS). OSS requires MFIs to meet all administrative costs and loan losses from operating income of any kind; while FSS measures the extent to which an MFI's business revenue; mainly interest received covers the MFIs adjusted costs. Both OSS and FSS ratios are expected to be equal and/or more than 100% to prove sustainability of a particular MFI. Based on this assumption the analysis of the trends of OSS and FSS ratios are indicated in Figure 1 below. Ethiopian MFIs were in increasing trend both in OSS and FSS during the study period of time, except it tends to decrease of FSS ratio from 2013. The basic question here is, what are the influencing factors behind this trend.
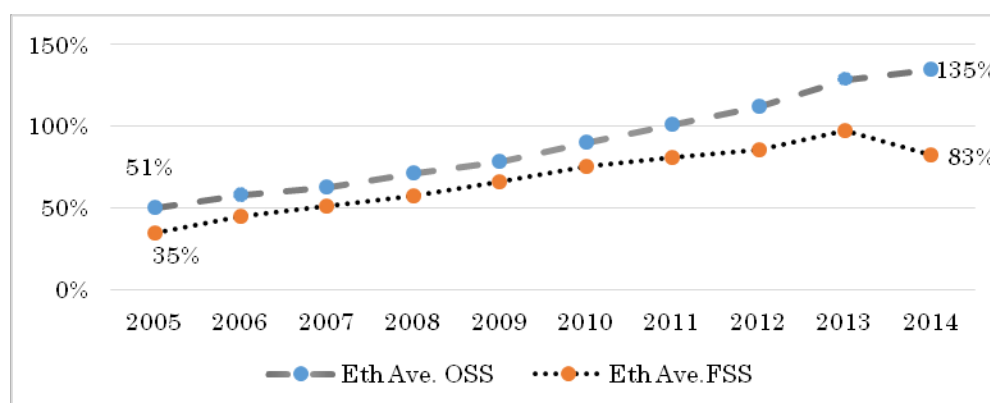
Fig. 1 Trends of OSS and FSS ratios of Ethiopian MFIs

Multiple regression models have been used to assess the significant determinants of sustainability. OSS and FSS are the dependent variables, where about eight independent variables have been identified based on the Microfinance Information Exchange platform (MIX market), and from the detailed reviews of the related literatures. These variables are YIELD, Cost Per Borrower (CPB), Operating Expense Ratio (OER), Active Loan Balance Per Borrower (ALBPB), SIZE, Debt to Equity Ratio (DER), Number of Active Borrowers (NAB) and Age of MFIs. The IBM SPSS statistical software have been used for empirical analysis. To apply this model most of the assumption of the regression model has been implemented; and the validation of the data used have been done. Accordingly, the regression diagnostic test of the null hypothesis *"normally distributed errors"* has been done and the Shapiro-Wilk's tests for normality showed, there is insufficient evidence to suggest that the data set is not normally distributed. Test of skewness and kurtosis also indicated the value of 'zero' is within the 95% confidence interval. So in both tests we fail to reject the null hypothesis. An admittedly arbitrary rule of thumb is established to constrain simple correlations between explanatory variables to be smaller than 0.8 to 0.9. The null hypothesis to check for *"No Multicollinearity"* has been tested using person correlation and reject the null hypothesis. To solve this problem, number of active borrower is removed according to its relative importance to size and the second test proves no multicollinearity problem. The Durbin-Watson (DW) test for autocorrelation has been done and failed to reject the null hypothesis, *"no autocorrelation"*. The disturbance of the error was also checked by scatterplot and proves no autocorrelation. After the consecutive test of validity and reliability of the dataset, the OSS and FSS determinants are identified along their significance level.

Determinants of Operating Self Sufficiency

Table 2 Econometric Results of OSS's Determinants

Variables	Std. error	Standardized coefficients Beta	t	Sig.
(Constant)	1.099		0.170	0.245
SIZE	0.046	0.249	0.768	0.228
YIELD	0.022	0.738	0.636	0.267
CPB	0.003	-0.951	-4.129	0.000***
OER	0.129	-0.698	-0.456	0.327
ALBPB	0.127	0.052	3.486	0.002**
DER	0.101	0.775	0.786	0.222
Age	0.114	0.221	0.184	0.428

*Dependent Variable: OSS, *** Significant at 1%; ** Significant at 5%; * Significant at 10%*
Source: Author's Computation using IBM SPSS (2016)

As it can be seen from Table 2 above, from the estimated seven variables only about two variables have a significant impact on OSS. The null hypothesis for these factors were as follows.

> *Ho: There is a negative significant relationship between cost per borrower of*
>   *microfinance institutions and operational self-sustainability.*
> *H0: There is no significant positive relationship between average loan balance*
>   *per borrower and operational self-sustainability.*

The result revealed that CPB have a negative significant impact on OSS at 1% significant level. Therefore, we failed to reject the null hypothesis. The findings by (Woller and Schreiner, 2002; Christen et al, 1995) also indicated the CPB negatively and significantly affect operational sustainability. With regards to ALBPB, the statistics result indicated that it has positive impact on OSS at a significance level of 5%. The ALBPB for Ethiopian MFIs is about USD 121. Thus, the Ethiopian

MFIs average loan size evidences high cost from this analysis. The smaller the loan size, the better in outreach, but the higher the cost; here is where the tradeoff between the two triggered. The average loan size for African countries was 307 USD during the study period of time. Other studies, for instance (Adongo and Stork, 2006) similarly found that profitability is related to selling bigger loans.

Determinants of Financial Self Sufficiency (FSS)

The result of the econometric analysis indicated that, about three factors, namely, CPB, YIEDER, and DER have significant effect on financial sustainability. The proposed hypothesis for the above mentioned influencing factors were as follows.

> *Ho: There is negative significant relationship between cost per borrower*
>   *of microfinance institutions and financial self-sustainability*
> *H0: There is a significant positive relationship on the yield on gross loan*
>   *portfolio of microfinance institutions with financial self- sustainability.*
> *H0: There is no positive significant relationship between debt to equity ratio*
>   *of microfinance institutions and financial self-sustainability.*

Table 3 Econometric Results of FSS's Determinants

Variables	Std. error	Standardized coefficients Beta	t	Sig.
(Constant)	0.706		0.652	0.262
SIZE	0.030	0.371	0.163	0.436
YIELD	0.144	0.879	3.532	0.001**
CPB	0.085	-0.951	-3.976	0.000***
OER	0.083	-0.048	-0.376	0.356
ALBPB	0.082	0.118	0.320	0.104
DER	0.065	0.792	3.141	0.003*
Age	0.073	0.235	0.780	0.224

*Dependent Variable: FSS, *** Significant at 1%; ** Significant at 5%; * Significant at 10%*
Source: Author's Computation using IBM SPSS (2016)

As one can depict from Table 3 above, CPB have a negative significant effect on FSS at 99% confidence interval, we failed to reject the null hypothesis. To the contrary, the study made by (Nyamsogoro, 2010), indicates that CPB has no significant impact on FSS of Tanzanian MFIs. The YIELD from gross loan portfolio influenced FSS positively at 95% confidence interval, fail to reject the null hypothesis. Correspondingly, the research finding by (Cull and Morduch, 2007) indicates that the coefficient for gross portfolio yield is positive and significant on financial self-sufficiency. The result also exhibited DER have positive effect on FSS, rejects the null hypothesis. In the same way, (Coleman, 2007) for example, found that highly leveraged microfinance institutions have higher ability to deal with moral hazards and adverse selection than their counterparts with lower leveraged ratio. This states that high leverage and profitability are positively correlated

CONCLUSIONS AND RECOMMENDATIONS

Access to financial resources in Ethiopia, particularly by poor is very limited, and the poor are regarded as unbearable by formal banks. MFIs are playing vital roles to fill these gaps. In this study the MFIs are evaluated on two main indicators, *outreach* and *sustainability*. Concerning the outreach, it is found that the outreach level of Ethiopian MFIs has been improving in width and depth, although there

is still a need to diversify the services and programs to address the uncovered need of the disadvantage groups of the society, such as people in the geographically remote location, gender, crop farmers. We recommend the MFIs have to work against achieving this goal to fight poverty as per their major goals. The government is also expected to set appropriate regulations, and policy framework which motivate and enable the MFIs to address these unmet needs, for instance supporting the MFIs to access cheap loans. The intervention of the government in the operations of MFIs, particularly in a loan recruitment is vital because the MFIs cannot fully operate in self-sustainable manner.

Sustainability was measured on two levels, operationally, and financially. The study revealed that Ethiopian MFIs are operationally self-sufficient while financially subsidy dependent. The increasing trend of both financial and operational self-sufficiency is mainly due to the increase in revenue, and the existence of subsidy; we recommend to keep the trend. The determinant factors on operational sustainability were the cost per borrower, and loan size. Therefore, the MFIs are expected to reduce cost per borrower by innovation, for instance, by introducing village banking systems, and mobile phone in microfinance services. In case of loan size, the current loan size of the MFIs is desirable, qualifying depth of outreach but risks sustainability. Hence, we recommend the donors and government should give priorities for those MFIs addressing the need of the very poor providing small loans. The influencing factors for financial sustainability were the cost per borrower, and yield from gross loan portfolio and debt equity ratio. The MFIs have to work against these negative factors by increasing their yield innovatively, increasing the volume of revenue, and/or the profit margin and by reducing the cost to the optimal level. The debt equity ratio basically refers to cheap fund. It may be desirable to increase this ratio by attracting the interest of donors/lenders using inclusive plan to address the need of the poor, particularly to reach the female beneficiaries. The study also recommend that the government of Ethiopia should encourage involvement of private sector and donors in building capacity of MFIs.

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