

## **Microfinance Institutions in Ethiopia: Poverty Outreach and Financial Sustainability**

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### **Abstract**

*This study examined the relationship between poverty outreach and financial sustainability of the Microfinance Institutions (MFIs) taking MFIs operating in Ethiopia as a case in point. In addition to understanding the relationship, it also examined the trend of the institutions' performance along the outreach and sustainability dimensions. The study was based on the data obtained from Association of Ethiopian Microfinance Institutions (AEMFI). The analysis of findings revealed that while industry has made major improvements along outreach and sustainability performance variables (number of women borrowers, total number of clients served, outstanding loan portfolio, and saving mobilizations), the savings element has not grown large enough in relation to loan portfolio to make the industry meet its demand for loan from this source. Though, there is improvement in terms of financial sustainability, the industry's average operational self-sufficiency and financial self-sustainability ratios are not far from the breakeven point. The findings of this study revealed the possibility of tradeoff between the social and financial goals of the MFIs. Viewed from stand point of microfinance's social mission sympathizers, this is not good news as an increasing focus on financial bottom line could make the MFIs to move their eyes away from serving the poor.*

Key words: Microfinance institutions, Poverty outreach, financial sustainability

### **1. Introduction**

Microfinance is the provision of small loans and other financial services to the poor (Hartarska, 2005). As a practice, it has a long history. It has existed since the rise of formal financial systems, and probably predates them. Though microfinance has been practiced long ago in mankind history, it is only since the recent decades that serious global efforts have been made to formalize such financial services (Brau and Woller, 2004) .

The resurgence of it with such global popularity, receiving huge attention both from policy makers as well as in academic circles, is traced back to the work of Muhammad Yunus, who started making small loans to local villagers in Bangladesh in 1970's and the emergence of Grameen Bank as a consequence. The experience of the Grameen bank had disproved the established belief that the poor is not bankable by demonstrating that high loan recovery rate can be achieved under non-collateral lending(Gebrehiwot, 1998).

Following the success story of the Grameen Bank Model, microfinance program has gained a considerable acceptance in many developing countries. This is mainly due to lack of access to credit is generally seen as one of the main reasons why many people in developing economies remain poor(Hermes and Lensink, 2007). Efforts powered by this success story and existence of

deep-rooted poverty across these countries resulted in replication of Grameen-Bank-type institutions across the world, leading to the proliferation of microfinance institutions (MFIs).

Currently, there are thousands of microfinance institutions, operating across the world, providing microfinance services to millions of people formerly denied access due to the belief that the poor don't make good clients for such services. The very idea behind the rise and such expansion of microfinance institutions was poverty alleviation (Braun and Woller, 2004) as microfinance has been considered as effective instruments for reduction of poverty (Morduch and Haley, 2002). Recognizing this, poverty reduction, role of microfinance, the UN declared 2005 to be the International Year of Microcredit (Hermes and Lensink, 2007). This event together with the 2006 Nobel Peace Prize award to Mohammed Yunus and Grameen Bank has given further considerable public recognition to microfinance as a development tool (Mersland and Strøm, 2009).

Ethiopia, one of the developing countries, significant proportion of whose population lives under poverty line, has too recognized this role of microfinance and adopted supply of microfinance services to the poor as one of the national strategy to combat poverty. In the country, the provision of microfinance services to income generating activities and micro enterprises started in the late 1980s by non-governmental organizations (NGOs). However, formal microfinance, operating according to national financial institutions regulation, started in 1996. In particular, the Licensing and Supervision of Microfinance Institution Proclamation of the government, proclamation No. 40/1996, encouraged the spread of Microfinance Institutions (MFIs) in both rural and urban areas. The proclamation authorized them among other things, to legally accept deposits from the general public, to draw and accept drafts, and to manage funds for the micro financing business (Getaneh, 2005). This marked a shift from government and NGO subsidized credit programs to financial services run by specialized financial institutions. With this shift, some NGO and government microcredit programs were transformed to formal microfinance institutions.

With the expansion of MFIs across the globe come a number of questions that have attracted the attentions of academicians and practitioners. Some of the questions attracting attention in this regard include: are microfinance institutions serving their social objectives (expanding the outreach to the poor); can they operate sustainably without external subsidies and grants; are the social and financial objectives of microfinance institutions compatible; what environmental settings affect the microfinance institutions' ability to attain these goals. Studies conducted on these issues around the world yield mixed outcomes implying the difficulty of generalization and a need for more context based studies regarding the microfinance's performance (Odell, 2010). So, this study is the one intended to address one of these questions in the Ethiopian microfinance institutions/industry/ context.

## **2. Statement of problem**

Poverty is the major problem of the most developing economies. In these economies, it is argued that, among other things, absence of access to credit is presumed to be the cause for the failure of the poor to come out of poverty (Chirwa, 2002). Decades back, microfinance has emerged as a remedy for this problem. It is believed to bring a change in the life of the poor by providing access to finance without a need to present collateral that traditional financial institutions require. This role has made microfinance an increasingly popular tool for poverty alleviation (Paxton,

2003). Following the promise of what microfinance has been widely claimed to deliver to the poor and the role it is said to play in poverty reduction, many developing nation's governments and the non- governmental organizations have introduced it and used it for long as one of the development tools. However, the performance of microfinance as promised is subject to debate.

Among the areas of debates one is linked to the relationship between the financial and social bottom-lines of the MFIs. That is the one that says: can the MFIs operate sustainably without drifting the focus from serving the poor? Studies conducted on these issues around the world yield mixed outcomes implying the difficulty of generalization and a need for context based studies regarding the microfinance's performance (Odell, 2010). Most of the empirical studies (Bassem, 2009, Mersland and Strøm, 2009, Hartarska, 2005, Berhanu and Adane, 2021) focuses on looking into the linkage between MFIs' governance and their financial and outreach performances. Mostly, there are geared towards examining individual governance mechanisms effect on outreach. Few extant studies that have covered the nexus between outreach and financial sustainability are generally context based and have shown mixed results leaving the question to remain open for further enquiry. For instance, whereas Ylinen (2010) in his Ugandan MFIs based study observes the existence of tradeoffs between these two goals of microfinance, the study of Zerai and Rani (2012) in Indian microfinance context fails to evidence such tradeoffs. Pointing the need for more studies on this issue, Hartarska,(2005) remarks that there is no conclusive evidence that the two dimensions of performance in every MFI are substitutes or complements. So, considering this unsettled debate and the need for generating additional context based evidences, the current study endeavors to produce additional context based evidences on the issue by addressing the following specific research objectives.

### **3. Research objectives:**

On the backdrop of the above discussions, the current study aims to:

- Examine the trend of the Microfinance institutions' performance along the outreach and sustainability dimensions
- Examine the relationship between financial sustainability and poverty outreach of the Ethiopian MFIs

### **4. Literature review**

#### **4.1. Concept and measures of outreach in microfinance**

Outreach is defined as the ability of an MFI to provide high quality financial services to large number of clients. According to Schreiner, (2002) and Navajas *et al* (1999) , outreach is a social benefit of microfinance aiming at improving the well-being of the poor and has six aspects: worth, cost, depth, breadth, length, and scope. In the context of this source, Worth of outreach to clients represents their willingness to pay; Cost of outreach represents the sum of price costs and transaction costs to clients such as direct cash payments for interest and fees as well as non-cash opportunity costs such as the time to apply for a loan; Length of outreach, on the other hand, is the time frame of the supply of microfinance; the Scope of outreach is the number of types of financial contracts supplied..

Of the six aspects of outreach identified by (Schreiner, 2002), depth and breadth of outreach are the two commonly used and popular aspects of outreach as a means of evaluating and examining the performance of microfinance institutions. Breadth of outreach represents the total active number of clients served by microfinance institutions. As discussed in (Schreiner,

2002), conceptually, the depth of outreach stands for clients' poverty level. It is associated with the value that society attaches to the net gain of a given client and a society likely prefers that a street child or a widow get a given net gain than that a richer person get the same net gain. Direct measurement of depth through income or wealth is difficult. Simple, indirect proxies for depth are sex (women are preferred), location (rural is preferred), education (less is preferred), ethnicity (minorities are preferred), housing (small, flimsy houses are preferred), and access to public services (lack of access is preferred) (Schreiner, 2002). Writers such as (Mersland and Strom, 2010) also use the average loan size of MFIs as the proxy measure of the depth of outreach with smaller size indicating more depth as better-off clients tend to be uninterested in smaller loans.

#### **4.2. Concepts and measures of financial sustainability**

Financial sustainability can be understood as the ability of an MFI to cover its costs by its operating revenue (Hartarska, 2005). It is a concept related to profitability and is an adjusted measure of profitability in an accounting sense, generally defined as the difference between total revenue generated by an organization from its operations and the total associated costs. However, the term sustainability rather than profitability is preferred to use for performance of organizations that depend on external subsidies like microfinance institutions (Okumu, 2007). The idea of using the term sustainability rather than profitability under this case comes due to the doubt that the conventional way of representing organizational profitability may not reflect the real efficiency of subsidy supported institutions as the following quotation makes clear.

It is common to assess the performance of any commercial organization, including the development finance institutions, in terms of the profits it makes; and without profits, of course no commercial organization can sustain itself. However, if profits depend on external subsidy, they imply nothing about the efficiency of the organization, or even about its sustainability, since the abolition of a subsidy can make the institution incapable of standing on its own. For these reasons, it is right to evaluate the financial performance in terms of indicators which measure more accurately the organization's financial efficiency (Hulme and Mosley 1996:42 in Okumu, 2007)

Hence, it is in this context that sustainability of institutions like MFIs are understood. That is, the sustainability of a microfinance institution means the ability to cover costs and to continue operations without resorting to gifts, subsidies and debt relief or without keeping depositors savings illiquid. It stands for the degree that an institution is capable of generating sufficient revenue from offered services to meet full operating as well as financing costs.

Literature suggest various approaches for measuring financial sustainability of MFIs including operational self-sufficiency (OSS), financial self-sustainability (FSS), Subsidy dependency index (SDI), and return on assets (ROA) (Rosenberg Richard, 2009 and Okumu, 2007).

Return on Assets (ROA) reflects that organization's ability to use its assets productively. Financial Self-Sufficiency (FSS) is a subsidy-adjusted indicator often used by donor-funded microfinance NGOs. It measures the extent to which an MFI's business revenue—mainly interest received—covers the MFI's adjusted costs. If the FSS is below 100%, then the MFI has not yet achieved financial break-even. The operational self-sufficiency (OSS) measure is similar

with FSS in all other respects except that the later considers wider cost elements including inflation for adjustment. The Subsidy Dependence Index (SDI) measures how much an MFI would have to increase its lending interest rate in order to cover all of its costs including adjustments. An SDI above zero means that the MFI still needs subsidy to operate—i.e., it has not achieved financial sustainability (Rosenberg Rechar, 2009).

#### **4.3. Debates on depth of outreach and financial sustainability relationship in microfinance**

MFIs originate with a dual mission that combines social (outreach to the poor) and commercial (financial sustainability) objectives. According to Rock *et al.*(1998), the social mission seeks to provide financial services to as many of the lowest income population as possible. On the other hand, financial objective drives the organization to achieve financial self-sufficiency, which allows sustainable service delivery without dependence on subsidies. Based on the conviction to the relative importance of these bottom lines of microfinance, there comes two different views: poverty lending approaches and financial systems approach (Zerai and Rani, 2012, Hermes and Lensink, 2007) regarding to which of these objectives microfinance institutions should live for first. Rhyne (1998) consider the proponents of two approaches as “poverty camp” and “sustainability camp” and says in microfinance the split continues between these camps.

The proponents of the financial systems approach argues that microfinance institutions should reduce their dependency from donors and governments by becoming financially self-sufficient commercial institutions that can attract funds from capital markets. With this, the MFIs can simultaneously go for their both bottom lines hence the outcome will be a ‘win-win’ situation (Morduch, 2000). The claim of the ‘win-win’ proposal under this view is that increased institutional sustainability leads to increased alleviation of poverty. This is due to the fact that, as argued, as MFIs are able to expand on sound banking principles and produce profits, they will be able to tap into standard financial markets as well as attract local savings. With access to such resources, the industry will be able to lend to millions more who need microfinance services (Mersland, 2005). In line of this argument, Rhyne (1998) and Christen and Drake (2002) as cited in Mersland and Strom (2010) posits that the more commercialized microfinance industry, the higher their ability to serve the poorest clientele as the efficiency and willingness to look for new market for their loan products increases. Likewise, citing some MFIs, such as BancoSol of Bolivia and ACCION Comunitaria del Peru of Peru as case examples, Rock et al (1998) argues that there is no trade-off between social goals of providing services to very poor and un-bankable clients and generating a profit.

Those in the poverty camp, however, fear that an increased emphasis to commercialization of microfinance will shift a focus away from the hard core poor that microfinance were originally meant to serve, so as to cause a mission drift (Ylinen, 2010). According to Robinson (2001) cited in Hermes and Lensink (2007), the poverty lending approach argues for making subsidized credit available to the poor. Such argument drives from the concern that the poor cannot afford higher interest rates that commercially motivated MFIs charge and hence that high emphasis for financial sustainability ultimately goes against the aim of serving large groups of poorest borrowers. For this group, also called “welfarist”, the focus of MFIs should be on depth of outreach rather than scale or sustainability. They argue that a narrow insistence on cost recovery and the elimination of subsidies would only force MFIs to drop the poorest from their portfolios of borrowers because they are precisely the most difficult and costly to serve(Conning, 1999). In

line of this point, in his article of microfinance schism, Morduch,(2000) argues that the ‘win-win’ vision of the sustainability camp is fully supported neither by logic nor by the available empirical evidence. The source of such concern is the presumption that poverty outreach and financial sustainability are incompatible objectives. The argument is that higher profits lead to lower outreach in terms of reaching the poor.

#### **4.4. Research hypotheses**

The mission of all microfinance institutions is to provide banking services to the poor, that is, to lend very small sums to very poor borrowers. Under mission drift literature, there is a claim that an inclination towards commercialization of microfinance would lead the industry to abandon its mission of serving the poor(Ylinen, 2010). However, this claim has been continuously refuted by proponents of sustainability who expects the outcome to be a ‘win-win’ situation (Morduch, 2000). The ‘win-win’ claim under this view is that increased institutional sustainability leads to increased alleviation of poverty. This is due to the fact that, as argued, as MFIs are able to expand on sound banking principles and produce profits, they will be able to tap into standard financial markets as well as attract local savings. With access to such resources, the industry will be able to lend to millions more who need microfinance services (Mersland, 2005). In line of this argument, Rhyne (1998) and Christen and Drake (2002) as cited in Mersland and Strom (2010) posits that the more commercialized microfinance industry, the higher their ability to serve the poorest clientele as the efficiency and willingness to look for new market for their loan products increases. Likewise, citing some MFIs, such as BancoSol of Bolivia and ACCION Comunitaria del Peru of Peru as case examples, Rock et al (1998) argues that there is no trade-off between social goals of providing services to very poor and un-bankable clients and generating a profit.

However, in his article of microfinance schism, Morduch,(2000) argues that the ‘win-win’ vision is fully supported neither by logic nor by the available empirical evidence. Limited available empirical literatures on financial sustainability and poverty outreach relationship also show mixed outcomes. For example, Mersland and Strom (2010), in the study focused on investigating the mission drift in MFIs, found positive relationship between the sustainability and poverty outreach indicators, with implication that emphasis on financial sustainability could lead to reduction in the depth of outreach. In his mission drift studies in Uganda, Ylinen (2010) also observes negative relationship between these two goals of microfinance and concludes that mission drift is a possible concern. On the other hand, the study of Zerai and Rani (2012) and (Cull et al., 2007) have identified no evidence of tradeoff between being profitable and reaching the poor. Though the empirical evidences on the relationship between financial sustainability and poverty outreach are inconclusive, inclining towards the claims under mission drift theory and Morduch (2000)’s argument about ‘win-win’ in his “microfinance schism,” this study anticipates negative relationship between poverty outreach and financial sustainability of MFIs.

***Hypothesis1: poverty outreach (depth of outreach) and financial sustainability are negatively related***

There is a tendency to associate migration of MFIs away from their mission with their age. It is said that older and more mature MFIs that are past their start-up phase might be more prone to disburse larger loans and crowd out poorer borrowers than younger institutions. For instance, Dichter & Harper, (2007) mention that the microfinance industry is coming of age and with its

maturation come claims that the industry is abandoning its mission to serve the poor. Based on this claim, this study hypothesizes inverse relationship between age wise maturity and depth of outreach of microfinance institutions.

***Hypothesis 2: poverty outreach (depth of outreach) and age of MFIs are negatively related***

With the argument that depth of outreach of microfinance suffers with the MFIs maturity and maturity is tied with their size, previous researchers such as Ylinen (2010) and Mersland and Strom (2010) use the size of MFIs in their models as explanatory variables. So, this study too considers this variables effect with the hypothesized relationship below.

***Hypothesis 3: poverty outreach (depth of outreach) and size of MFIs are negatively related***

## **5. Materials and methods**

### **5.1. Sources of data**

The data for this study was accessed from the Association of Ethiopian Microfinance Institutions (AEMFI). AEMFI collects data of interest to microfinance operations, from each member institutions and for the sector as a whole annually and publishes on its yearly bulletin with the title “Ethiopian Microfinance Institutions Performance Analysis Report.” It makes adjustment to financial performance indicators, mainly necessitated by the subsidy effect, so as to make them reflect the true performance of MFI using the methodology suggested by Consultative Group to Assist the Poorest (CGAP) and commonly used by the institutions that maintain global microfinance institutions’ performance database such as Mix-market, Micro-banking Bulletin (MBB), Planet Rating, and the like. The AEMFI’s database is equivalent in terms of credibility with such global databases and of course better than them in terms of avoiding the *Self Selection Bias*. This is because the global rating agencies do rate only those MFIs who apply for rating and the Mix-Market uses the self-reported data. The MFIs who self-report data and who apply for rating are mostly the larger and with relatively better performance, which may lead them to be susceptible to self-selection bias. On the other hand, the AEMFI’s database is free from this problem as all: large, medium, and small sized MFIs’ data are included. In the current study, data from the 2020’s publication of the AEMFI were used to examine the relationship between depth of poverty outreach and financial sustainability.

### **5.2. Target Population**

There are 30 microfinance institutions operating in Ethiopia. As the number of the MFIs is that small, the study was made a census based and all 30 MFIs whose performances were published in the 2020 were incorporated in this study.

### **5.3. Variables, their measures, and hypothesized relationships**

In the study, the poverty outreach was measured using proportion of the women clients and an average loan size. When it comes to financial sustainability three variables- Operational self-sufficiency (OSS), financial self-sufficiency (FSS), return on assets (ROA)- were used as proxy indicators of the MFIs financial performance. The year 2003 and 2019 MFIs’ performance data were examined using these indicators to see their performances’ change overtime. However, of these indicators, the average loan size (ALS) and return on asset (ROA) were used in the regression analysis aimed at examining the relationship between the two variables. The justification for using the ALS as poverty outreach indicator is the belief that the more

meaningful way of looking into whether the MFIs are moving away from the poor or not is the amount of loan that they provide on average terms. Here, the rich is not believed to be attracted by small loan and hence the possibility of the crowding –out- effect would be minimal with small loan size. ROA was picked for financial sustainability variable as it is commonly used measure of firm’s financial performance as compared to other proxy indicators (candidates) of the same listed above. Moreover, given the dual missions of the MFIs, it is believed that the ROA is the list vulnerable indicator for any possible window-dressed reporting. As the goal of this study is seeing if the financial sustainability focused operation of the MFIs is making them to not to keep their eyes on their social goal of serving the poor, the researcher believe that using the less susceptible to manipulation indicator is commendable. Regarding the relationship between the variables, the employed proxy measure, and hypothesized relationship are summarized the following table.

Variables	Measurement (proxy indicator)	Hypothesized relationship with dependent variable	The hypothesis is supported when OLS regression yields:
<b>Dependent variable:</b> Depth of outreach	Average loan size (ALS)= (Outstanding loan portfolio ÷ Number of active borrowers)		
<b>Independent variables:</b>			
Financial sustainability	Return on Asset (ROA)= (Net operating income ÷ Average total assets)	Negative	Positive coefficient
Age	No. of years in operation	Negative	positive coefficient
Size	Log of total assets	Negative	Positive coefficient

#### 5.4.Data analysis and analytical Model

The analysis of data was done using descriptive statistics, paired samples test, and multiple regression analysis. The year 2003 and 2019 performance data was utilized to examine the overtime change (trend) in the MFIs financial and outreach performance. The paired samples test was used to statically check the observed change in the MFIs financial performance indicators overtime. To this end the 2011 and 2019 performance data were used (justification for using 2011 data was given in 5.1 below). On the other hand, a one year latest (the most recent) cross-sectional data was used for analyzing the relationship between the depth of outreach and financial sustainability. The following analytical model was employed for analysis of the relationship between depth of poverty outreach and financial performance of the MFIs. The model analyses, the effect of financial sustainability (performance) of the MFIs on their poverty outreach controlling for the MFIs age and Size.



$$DOUTR_i = \partial_0 + \partial_1 FSi + \partial_2 AGE_i + \partial_3 Size_i + \epsilon_i$$

Where:

$DOUTR_i$  = depth of poverty outreach variable for MFI  $i$

$FSi$  = financial sustainability variable for MFI  $i$

$AGE_i$  = age of MFI  $i$

$Size_i$  = size of MFI  $i$

$\epsilon_i$  = error term

## 6. Data analysis and discussion

### 6.1. Outreach and financial sustainability performance trends

The study looked in to the year 2003 and 2019 performance of the MFIs to see their overall outreach and financial sustainability performances trend. In terms of the outreach the trend shows continuous increase in number of active clients, total outstanding loan size, and total savings (Table 1).

Table 1: MFIs Outreach

	Year 2003	Year 2019
Total number of active clients	755,073	5,100,000
Total outstanding loan	593,978,863 Birr	58,387,790,000 Birr
Total savings	325,028,670 Birr	40,618,437,000 Birr
Proportion of women	30%	45%
Average loan size	787 Birr	22,546.67 Birr

In terms of number of active loan clients getting loan services each year, the MFIs have shown noticeable improvements over the seventeen years period. The industry's overall active loan clients served per year grew from 755,073 in year 2003 to 5,100,000 in 2019. Though the change is so remarkable, the number is still slim compared to the country's population size. As the low income citizens with no capacity to pledge collateral for conventional bank's loan are supposed to be served with MFIs, it is important to note that more effort is needed to expand financial access to the poor. The industry has also recorded magnificent improvement and a continuous increase in terms of the size of outstanding loan portfolio and savings mobilization over the same observation period.

The aggregate yearly outstanding loan of the MFIs has grown from about 593,978,863 Birr in year 2003 to 58,387,790,000 Birr in year 2019. For the same period, the overall industry wise saving mobilization also increased from about 325,028,670 Birr to 40,618,437,000 Birr. Mobilization of savings is believed to have reinforcement effect on the MFIs ability to serve the poor without losing their sight on financial viability. An MFI which is able to mobilize more savings can effectively reduce the cost of raising capital that can be directed to net borrowers. With this gain, it can provide a loan to the poor at a reasonable cost. If we see the industry's seventeen years' data, the ratio of total savings to total outstanding loan is about 54.7 % and 69.6% for the year 2003 and 2019 respectively. This shows that though there is significant

improvement over savings mobilization in absolute terms over the period of seventeen years, the Ethiopian MFIs are still in short of collecting savings enough to cover significant portion of demand for loan. The implication is that if they are not capable of generating enough profit that can be accumulated in the form of retained earnings; they would depend on external loan or subsidy to meet their demand for loan.

The proportion of women and rural clients, the number of group borrowers and the average loan size are among the proxy indicators suggested for measuring the depth of poverty outreach of the microfinance institutions. It was learned that unlike other outreach variables (indicators), proportion of women borrowers to total credit clients showed fluctuations from year to year: 30% in year 2003 and 45% in 2019. However, the overall picture is that on average, almost half of the loan clients have been women borrowers for this period with exact proportion of 49%. It requires some standards against which this value would be compared to judge on the sufficiency of depth in this regard and such objective standard is in short of supply. However, as their share as loan clients is almost half of the total loan takers, it can be said that the loan service is not gender biased against women and this is desirable. Another indicator of the depth of outreach, the average loan size per borrower, has grown from 787 Birr in 2003 to 22546.67 Birr in 2019 in nominal terms. As the none-poor are believed to go for the larger size loan, MFIs with the smaller loan size is said to be good in terms of poverty outreach. In this regard, observed Ethiopian MFIs' average loan is not worrisome in the eyes of neglecting the poor.

Microfinance literature suggests numerous variables as indicators of financial sustainability performance of the MFIs. The most commonly cited ones are Return on Asset (ROA), Operational Self-Sufficiency (OSS), and Financial Self-Sufficiency (FSS). While the first indicator measures the MFIs profitability in terms of return generated by the money tied in the form of institution's asset the later two measures the degree of subsidy independence achieved by the MFI. Table 2 presents the summary descriptive statistics of these three indicators of the financial sustainability.

**Table 2: Descriptive Statistics Financial sustainability indicators**

<b>Year 2019</b>	N	Minimum	Maximum	Mean	Std. Deviation
Operational self-sufficiency	30	.36	1.85	1.1620	.40500
Financial self sufficiency	30	.28	1.32	.9367	.30369
Return on Asset	30	-.31	.14	.0100	.09563
Valid N (listwise)	30				
<b>Year 2003</b>					
operational self sufficiency	14	.47	1.61	1.0200	.33496
Financial self sufficiency	14	.43	1.36	.9443	.30333
Return on Asset	14	-.03	.34	.0407	.09203
Valid N (listwise)	14				

Figures in the table revealed that the Ethiopian MFIs financial sustainability performances are almost the same on average terms in terms of subsidy independence though small improvement observed on Operational Self-sufficiency (OSS) which grew from 1.02 in 2003 to 1.162. However, the industry’s average profitability in terms of Return on Asset appeared even somewhat declining from around 4 % in 2003 to 1% in 2019. As the single average figures could sometimes mask the true trend, I decided to run a paired sample test taking the year 2011 and year 2019 MFIs performance data. The reason for taking 2011’s data as baseline for comparison was due the smallness of the number of MFIs in 2003 that makes the number of data points (observations) inadequate for the intended statistical analysis. Hence, the observed change within nine years’ time period was examined using twenty Microfinance institutions’ data. Viewed in terms of sample size, this number is not that small given the total number of the MFIs in the industry and the included MFIs are also of different size mix- Small, medium, and Large according to the classification of AEMFI. Table 3 and Table 4 for below present the result of the paired comparison test.

**Table 3: Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Return On Asset, 2019	.0055	20	.10880	.02433
	Return On Asset, 2011	.0425	20	.08213	.01837
Pair 2	Financial Self-Sufficiency,2019	.9665	20	.29944	.06696
	Financial Self-Sufficiency ,2011	1.0375	20	.34891	.07802
Pair 3	Operational Self-Sufficiency,2019	1.2040	20	.43481	.09723
	Operational Self-Sufficiency , 2011	1.1620	20	.45132	.10092

**Table 4: Paired Samples Test**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Return On Asset 2019 - Return On Asset 2011	-.03700	.17959	.04016	-.12105	.04705	-.921	19	.368
Pair 2	Financial Self-Sufficiency 2019 - Financial Self-Sufficiency 2011	-.07100	.39854	.08912	-.25752	.11552	-.797	19	.435
Pair 3	Operational Self-Sufficiency 2019- Operational Self - Sufficiency 2011	.04200	.51066	.11419	-.19700	.28100	.368	19	.717

As reported in Table 4, the analysis showed that there is no significant change in the average financial sustainability performance of the both in terms subsidy dependency ( or independency)

as well as profitability as measured by Return-on- Asset. In terms of Financial Self-sufficiency the industry is on the margin as the average is a bit less than the required 100% (or 1) but it has a little crossed the cut-off points when it comes to Operational-Self-sufficiency. However, it should be noted that as the analysis indicate only the average performance, this does not mean that all MFIs have not fully achieved financially sustainability level that enable them cover all their operations related costs.

## **6.2. Relationship between depth of outreach and financial sustainability.**

As indicated in the previous sections, the nature of relationship between the depth of outreach and financial sustainability is the area of an ongoing debate in microfinance. This section of the paper gives an insight on this point with empirical data. Based on the theoretical underpinnings and debates on the relationship of poverty outreach and financial sustainability goals of the MFIs, one of the proxy indicators of the depth of poverty outreach, average loan size, was regressed on the operational self-sufficiency (an indicator of financial sustainability), size, and age of the MFIs. The finding of the analysis is presented in the appendix section.

The regression result supported the first hypothesis that the financial sustainability and poverty outreach are inversely related. Positive coefficient of the ROA shows that average loan size increases with the return on asset (the measure of financial sustainability). On the other hand, the depth of poverty outreach is believed to decrease as the loan size increases. Consequently, the regression result on the financial sustainability and depth of poverty outreach relationship supported the walfarsits' position. The claim of the walefarists is that the commercial and social goals of the MFIs do not go hand in hand and a move for commercial objectives will have a crowding out effect on the poor. This finding generally falls in the category of Mersland and Strom (2010) who observe positive significant relationship between sustainability and depth of poverty outreach indicators, with implication that emphasis on financial sustainability could lead to reduction in the depth of outreach and Ylinen (2010) that indicate that the mission drift is the possible concern in his study's context rather than that of Zerai and Rani (2012) and (Cull et al., 2007) whose study fail to identify an evidence of tradeoff between being profitable and reaching the poor (depth of poverty outreach). On the other hand, findings on the age and size of the MFIs failed to support our hypothesis defying the claim in the mission drift literature that with growth in size and age maturity there is a tendency for MFIs to move away from serving the poor. Regarding the age factor, the finding of my study conforms to that of the Mersland and Strom (2010) on MFIs' age based maturity effect on their depth of poverty outreach .

The data in the descriptive statistics table show that the average loan size of the MFIs is 22,546 Birr, which is about \$450 in the current exchange rate. Customarily, the average loan size is compared with the CGAP's (consultative group to assist the poorest) cutoff point of \$150 to judge whether the loan size is operationally pro-poor or not. A loan size below this figure is taken as unattractive to the non-poor and within the reach of the poor. Hence, MFIs maintaining their average loan size at minimum are considered as maintaining their social mission as well. As the price level (inflation) in Ethiopia has been climbing up since a while, considering the \$450 merrily as a bigger sum could lead to erroneous conclusion. Hence, considering the proportion of the women client reported in the above section, the regression result and the continuing inflation dwarfing the reported average loan size, it can be said that the Ethiopian MFIs are not migrating away from their very mission.

## 7. Conclusion

The study examined the depth of poverty outreach and financial sustainability performance of the microfinance institutions. Examination of the performance trends has shown promising pictures. The industry has made major improvements along all performance variables that has been covered here, such as total number of clients served, outstanding loan portfolio, saving mobilizations, over seventeen years' period. However, the savings element has not grown large enough in relation to loan portfolio to make the industry meet significant proportion of its demand for loan from this source.

The proportion of women borrowers is at par with the men on average showing that the Ethiopian microfinance institutions are not gender biased against women, which is desirable in general. Though, there is improvement in terms of financial sustainability over this period, more work is needed in this aspect as even industry's average operational self-sufficiency and financial self-sustainability ratios are not far from the breakeven point. The findings of this study revealed the possibility of tradeoff between the social and financial goals of the MFIs. Viewed from stand point of microfinance's social mission sympathizers, this is not good news as an increasing focus on financial bottom line could make the MFIs to move their eyes away from serving the poor.

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**Appendix: Regression result**

**Descriptive Statistics**

	Mean	Std. Deviation	N
Average loan size	22546.6667	27505.22851	30
Return on asset	.0100	.09563	30
Age of MFI	16.3333	6.78911	30
Log of total Asset	8.5399	.94336	30

**Correlations**

		Average loan size	Return on asset	Age of MFI	Log of total Asset
Pearson Correlation	Average loan size	1.000	.171	-.542	-.151
	Return on asset	.171	1.000	.254	.535
	Age of MFI	-.542	.254	1.000	.523
	Log of total Asset	-.151	.535	.523	1.000
Sig. (1-tailed)	Average loan size	.	.183	.001	.213
	Return on asset	.183	.	.087	.001
	Age of MFI	.001	.087	.	.002
	Log of total Asset	.213	.001	.002	.
N	Average loan size	30	30	30	30
	Return on asset	30	30	30	30
	Age of MFI	30	30	30	30
	Log of total Asset	30	30	30	30

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629 <sup>a</sup>	.395	.326	22586.84827

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8675281693.453	3	2891760564.484	5.668	.004 <sup>b</sup>
	Residual	13264308579.214	26	510165714.585		
	Total	21939590272.667	29			

a. Dependent Variable: Average loan size

b. Predictors: (Constant), Log of total Asset, Age of MFI, Return on asset

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	63429.412	46516.840		1.364	.184		
	Return on asset	95278.061	51959.797	.331	1.834	.078	.713	1.403
	Age of MFI	-2531.418	725.102	-.625	-3.491	.002	.726	1.378
	Log of total Asset	-57.265	5974.890	-.002	-.010	.992	.554	1.806

a. Dependent Variable: Average loan size