

Factors Affecting the Financial Performance: A Case of Microfinance Institutions in Ethiopia

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Abstract: Micro finance institutions in Ethiopia have shown a remarkable qualitative and quantitative growth since the early 1990s. It is increasingly understood that adequate financial services such as loans, saving products, insurance and payment services for the broad population, poor farmers and MSEs, promote quality and productivity. Thus, this study examined and presented the most prominent factors of financial performance of microfinance institutions in Ethiopia by using panel data. From a total population of 38 MFIs operating in Ethiopia; the study selected 17 microfinance institutions which are operating in the period 2011 to 2018. The fixed effect model was used after running a Hausman test. ROA was used as a proxy for the financial performance measurement and the study used the internal and external factors. Based on the regression analysis, the internal variable like age of microfinance institutions was showed to be significant variables with positive relationship to ROA and other internal variables such as capital to asset ratio and debt to equity ratio were found to be statistically negatively significant. But operational efficiency, portfolio quality and size of microfinance institutions were found to have insignificant effect on ROA. On the other hand, the only external variable market concentration was insignificant factors of microfinance institution in the study period. Based on the regression outcome, the study concluded that the management of the microfinance institutions may develop sound mobilizing savings campaign strategy in order to collect adequate savings from depositors and mostly operate on membership contribution to enhance MFI's capital for ensuring unexpected losses and also MFI managers should develop the efficiency of operations from year to year.

Keywords: Microfinance Institutions, Financial Performance, ROA

1. Introduction

Most of the poor population and enterprises in Sub-Saharan African countries have very limited chance to access deposit and credit facilities and other financial services provided by formal financial institutions [1]. Lack of access to credit is a major obstacle to growth in the continent, where a large majority of households do not have enough collateral to secure a loan. These households depend on both informal-sector and money lenders where they borrow at skyrocketed interest rates, or are simply denied access to credit and therefore investment [2]. For instance, poverty is a multi-faced problem caused by low literacy levels, limited resources, low health and education services, high unemployment and lack adequate incomes to provide basic needs to the poor [3].

In Ethiopia, poverty is a consequence of numerous factors such as high population growth, high unemployment, drought, low or limited access to education and resources and lack of adequate health service. Lack of finance is the major problem which impedes growth of production and income of rural and urban population. Since access to service of financial institutions is limited, the largest proportion of the population obtained financial service from the informal sector. Informal money lenders and friends and relatives and other informal sources are the main sources. In order to reduce ameliorate problems associated with informality in the sector, the government of Ethiopia introduced the provision of microfinance with the aim of creating income generating activities, promoting entrepreneurship, encouraging savings and private investment and launching of microfinance and small-scale industries [3].

These Micro finance institutions in Ethiopia have shown a remarkable qualitative and quantitative growth since the early 1990s. This is central to meeting the Ethiopian government's developmental goal of poverty alleviation and private sector growth. It is increasingly understood that adequate financial services such as loans, saving products, insurance and payment services for the

broad population, poor farmers and MSEs, promote quality and productivity [4].

As of June 2018 in Ethiopia, 38 MFIs served 5.1 million active borrowers with an aggregate portfolio of Birr 43 billion and the sector had total assets holding of Birr 62 billion.

Table 1. Ethiopian MFIs progress performance (2014 to 2018).

	2014	2015	2016	2017	2018
Total Asset	23661351310	27661351310	33661351310	48363903753	62192443499
% change		16.9%	21.6%	43.6%	28.6%
Outstanding loan	16976417223	20460321121	22663745058	31907827476	43735256218
% change		20.5%	10.8%	40.8%	37.1%
Saving Balance	10768797655	14864879915	16984850214	25839497379	32988251389
% change		38.1%	14.2%	52.1%	27.7%

Source: - AEMFI performance analysis report Bulletin-13, 2018.

The sustainability of MFI define as the ability of MFI to cover its operating and other costs from generated revenue and provide for profit. It is an indicator which shows how the MFI can run independent of subsidies. This change in emphasis has created a different perspective on the analysis of performance of the MFIs [4]. Sustainability in simple terms refers to the long-term continuation of the microfinance program after the project activities have been discontinued.

The MFIs need to be both operationally and financially sustainable in order to continue serving the society. Among the available measures, financial self-sufficiency and operational self-sufficiency are the predominant profitability and sustainability measurement variables. This has been needed because mostly microfinance institutions rely on the funds which are obtained from donors [5].

Performance is the result of the fulfillment of the tasks assigned. Company performance describes how individuals in the company try to achieve a goal. Company performance illustrates the magnitude of the results in a process that has been achieved compared with the company's goal. Company's performance is evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the level of which company's earnings are bigger than its costs. The third dimension is market premium, or the level of which company's market value is exceeding its book value. Financial performance plays an important role in the company performance that is expressed in monetary term. Before investing their funds, investors should first know about the performance of the company. The simplest way to determine the performance of the company is to look at the company's financial statement [6].

1.1. The Problem Statement

To achieve the main objective which is reducing poverty, MFIs should be able to provide financial services on an achievable and sustainable way. To be sustainable means, MFIs should generate an income sufficient to cover their

financial costs, costs of administration, and loan loss provisions. A MFIs working towards sustainability on market principle is not different from a formal bank except clientele that it serves. Hence, it will face a challenge that a formal bank faces in achieving its objectives [7].

The establishment of profitable and sustainable MFI that reach a large number of rural and urban poor who are not served by the conventional financial institutions, such as the commercial banks, has been a prime component of the New Development Strategy of Ethiopia.

Regardless of the increasing trust on microfinance to reduce poverty in Ethiopia there has been amazingly some work undertaken to evaluate their performance. The performance result shows that most of the MFIs are strong to effect immediate obligations and large MFIs are more efficient and productive than small and medium MFIs. But the sustainability of large and medium MFIs in Ethiopia was encouraging at that time. There is also a fear among interested parties in the industry that MFIs could not stay in the market to serve the poor without the immense support of government, donors, and others [8].

In other words, Melkamu, T. [5] and Yonas, N. [9] tried to determine the factors of performance of MFIs by using the proxy of financial and operational sustainability in Ethiopia. They focused only on internal factors and they have not considered external factors like industry specific factors like market concentration and also they have not addressed specifically the idea of financial performance of MFIs. Moreover, Abebaw, Y. [7] and Sima, G. [10] have tried to sort out the driving factors of financial performance of MFIs in Ethiopia using microfinance specific and macroeconomic external factors but the microfinance industry, along with all the players in it, is quickly changing and expanding in their service provision, increasing in their active borrowers, and rapid increasing in their branches.

Therefore, this study was attempted to look at the factors affecting financial performance of MFI in Ethiopia based on the measuring financial performance parameter of internal factors (Capital to Asset Ratio; Portfolio Quality; Debt to Equity Ratio; Operational efficiency; age of MFIs; Size of

MFIs) and external factors with (market Concentration).

1.2. Objective of the Study

The general objective of this study is to identify the factors affecting financial performance of Microfinance Institutions in Ethiopia.

1.2.1. The Specific Objectives

- 1) To analyze the effect of internal factor Debt to Equity Ratio on the financial performance of MFIs in Ethiopia.
- 2) To examine the effect of Capital to Asset Ratio on the financial performance of MFIs in Ethiopia.
- 3) To examine the effect of Portfolio Quality on the financial performance of MFIs in Ethiopia.
- 4) To examine the effect of the Size of an institution on the financial performance of Ethiopian MFIs.
- 5) To assess the effect of Age of an institution on the financial performance of Ethiopian MFIs.
- 6) To analyze the effect of Operational Efficiency on the financial performance of MFIs in Ethiopia.
- 7) To examine Market Concentration factors that influence on financial performance of MFIs in Ethiopia.

1.2.2. Research Hypothesis

The main objective of this study is to identify the Ethiopian microfinance institutions' factors of financial performance. To achieve the objectives of the study, the following research hypothesis were developed.

- 1) *Hypothesis 1*- There is a significant relationship between capital to asset ratio and financial performance of MFIs.
- 2) *Hypothesis 2*- There is significant relationship between operational efficiency and MFIs financial performance.
- 3) *Hypothesis 3*- There is significant relationship between size (total asset) and financial performance of MFIs.
- 4) *Hypothesis 4*- There is a significant relationship between age and MFI's financial performance.
- 5) *Hypotheses 5*:- There is a significant relationship between debt to equity ratio and MFI's financial performance in Ethiopia.
- 6) *Hypotheses 6*:- There is significant relationship between Portfolio quality and financial performance of MFIs in Ethiopia.
- 7) *Hypothesis 7*:- There is a significant relationship between Market concentration and financial performance of MFIs in Ethiopia.

2. Literature Review

This particular chapter comprises the theoretical and empirical evidences focusing on the factors of micro finance institution financial performance are discussed. Accordingly, the first section describes overall theoretical overview of micro finance concepts and the second section was presented as review of empirical studies on the internal and external factors of MFIs financial performance.

The field of microfinance institutions (MFIs) is still a

recent topic in economic research. The most important finding in the last two decades in the world of finance did not come from the world of the rich or the relatively well-off. More important than the hedge fund or the liquid-yield option note was the finding that the poor can save, can borrow and will certainly repay loans [11]. The microfinance industry has experienced a tremendous growth during the last few decades. These sectors (MFIs) are quasi banks which provide specialized financial services to urban and rural poor people in developing countries.

In Ethiopia, microfinance has been providing a broad range of services like micro savings, micro insurance, remittance, and micro pension. Though the decades, the sector has progressed from provision of microcredit to microfinance and now is working on financial inclusion.

The Ethiopian Proclamation No. 626/2009 defines micro financing business as "the provision of financial services like accepting savings and extend credit, drawing and accepting drafts payable with in Ethiopia, providing money transfer services and others specified in the Article 3(2) of the proclamation.

2.1. Microfinance Institution and Their Development in Ethiopia

The development of microfinance institutions in Ethiopia is a recent phenomenon. Micro financing in Ethiopia formally started in the years 1994-95 [12]. The number of micro finance institutions as well as the number of clients is increasing from time to time. The existing political and economical condition of the country contributes a lot for the development of the microfinance industry in Ethiopia.

In 1996, NBE took the lead in developing a prudential regulatory framework for microfinance to supply financial services to the poor in a sustainable and growth-oriented way. The Microfinance Proclamation 40/1996 allowed for the establishment of deposit-taking MFIs, and has supported the development of the microfinance sector over the past decade. The reasons for issuing the MFI law were to facilitate expansion and improve growth possibilities of microfinance institution. Consequently, various MFIs have legally been registered and started delivering microfinance services.

Under this prudential framework, which has been continuously adapted, the microfinance sector has transformed from humanitarian-oriented organizations to MFIs targeting financial sustainability and outreach. The Ethiopian MFI sector is unique. It is relatively young compared to the sector in the rest of the world. The average age of Ethiopian MFIs is 17 years. However, it has witnessed rapid growth, has an aggressive drive to achieve scale, broad geographic coverage, and dominance of government backed MFIs, focus on rural household, provision of both credit and saving service emphasis on sustainability [3].

Today, Ethiopia has some of the largest self-sufficient MFIs in Africa with significant outreach, and as of June 2018, there were 38 microfinance institutions operating in the country with an aggregate asset of holding 62 billion birr and more than 5 million active borrowers [3].

The above definitions of financial sustainability imply that a loss making MFI (MFI with poor financial performance) will not be classified as financially sustainable. Again a profit making MFI, whose profitability is determined after covering some of the operating costs by subsidized resources or funds, will also not be considered as financially sustainable. Financial sustainability is not an end in itself but is the only

way to reach significant scale. To analyze the sustainability of MFI the two known a set of ratios have been developed. These are widely accepted and they enable a comparison among MFIs all over the world. These two most important ratios are Operational Self Sufficiency (OSS) and Financial Self-Sufficiency (FSS).

$$\text{Operational Self-Sufficiency (OSS)\%} = \frac{\text{Operating Income}}{\text{Operating expense}}$$

Operational self-sufficiency provides information with respect to the ability of MFIs to cover costs with revenues, that is, it shows to what extent MFI is able to break even on its operations. If the calculated figure is greater than 100%, the organization under evaluation is considered to be operationally self-sufficient. In microfinance, operationally sustainable institutions are able to cover their costs through operating revenues.

Operational self-sufficiency is when the operating income is sufficient enough to cover operational costs like salaries, supplies, loan losses, and other administrative costs. And financial self-sufficiency (which referred to as high standard measure) is when MFIs can also cover the costs of funds and other forms of subsidies received when they are valued at market prices [13].

$$\text{On the other hand financial self-sufficiency (FSS)\%} = \frac{\text{Adjusted Operating Income}}{\text{Adjusted Operating expense}}$$

The financial self-sufficiency measure indicates the extent to which MFIs are able to operate without ongoing subsidies, including soft loans and grants. The adjustments try to show how the financial picture of the MFI would look on an unsubsidized basis or free from donation. Financial self-sufficiency requires adjustments for different reasons. Financial statements must be adjusted to conform to standard accounting practices, to take into account inflation and to remove the effect of subsidies and in-kind donations.

controlling for other relevant factors; institutions that make smaller loans are not necessarily less profitable. But the result showed that larger loan sizes are associated with lower average costs for both individual-based lenders and solidarity group lenders. Since larger loan size is often taken to imply less outreach to the poor, the result could have negative implications.

MFIs financial performance could be affected by a number of affecting factors. In most literatures MFIs profitability usually expressed as a function of internal and external determinant factors. Muriu, P. [2] also point out that the determinant factors of MFIs profitability can be divided into two main categories namely the internal affecting factors which are management controllable and the external affecting factors, which are beyond the control of management. Empirical literatures in relations to determinant factors of MFIs financial performance are very limited.

According to Dechasa, S. [17], the size of MFIs measured in terms of natural logarithm of their total asset in the period 2009-2013 was not a key factor of SNNPRs MFIs.

Operational efficiency in managing the operating expenses is another dimension for management quality. As the study by Abebaw, Y. [7] referring previous researchers results the performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others.

The age refers to the period that the MFI has been in operation since its initial inception. Studies indicate that the MFIs age relates to the financial performance. AEMFI [14] States that MFI's age was grouped as new (1 to 4 years), young (5-8 years) or mature (more than 8 years). The number of years is calculated as the difference between the year they started their microfinance operations and the year of data submitted by the institutions.

The Debt to Equity Ratio is the simplest and best-known measure of capital adequacy as it measures the overall leverage of the institution because it measures the overall leverage of the MFIs [14]. The debt to equity ratio is a common measure used to assess a firm's leverage, or in other words the extent to which it relies on debt as a source of financing [15].

Different research has been done so far conducted by different scholars on the subject of microfinance institutions. Accordingly, the following reviews were discussed from the very recent studies conducted in Ethiopia.

Cull, R. [16] point out that the size of MFIs and financial performance are significantly related but loan size is negatively related to financial performance. This means that

Abummar, A. [18] carried out a study regarding factors affecting financial performance of Oromia credit and saving Share Company: the case of eastern Hararghe branch using five years data from the period 2013-2017. The researcher used explanatory approach by quantitative secondary data sources. The outcome of the study indicates that operational efficiency, GDP, and size of MFIs affect OCSSCO financial performance significantly. Whereas portfolio quality, gearing ratio, capital to asset ratio, market concentration affects negatively and insignificant.

Dechasa, S. [17] conducted their study on factors affecting profitability of microfinance institution: a study in Southern Nation Nationalities and Peoples regional state. They used quantitative research approach method mainly focused on

secondary document analysis and financial statement for the period covering from 2009 to 2013. The study used multiple linear regression model, descriptive statistics and excel sheet for data analysis to measure profitability (ROA).

Ashebir, A. [19] conducted the research thesis on determinants of profitability on selected microfinance institutions in Ethiopia. The study was used explanatory research design based on the collected secondary data. Return on asset was used as a proxy for profitability measurement. The study used the internal and external factors that affect the profitability of Ethiopian MFIs.

From the regression analysis, the specific variables age of MFIs was found to be significant variable with a positive coefficient against ROA. Debt to equity ratio, capital adequacy, and operational efficiency were determined to be significant variables and size and quality of portfolio became the insignificant variables with a negative coefficient. The effect of external variable such as GDP was statistically insignificant and the industrial factors i.e. market concentration was found to be insignificant effect on ROA.

Sileshi, M. [11] entitled on determinants of financial and operational sustainability of microfinance institutions in Ethiopia. The researcher used quantitative research approach by longitudinal research design with panel data fixed regression analysis technique. The study was based on ten years secondary data from AEMFI and Mix- Market database for 13 selected MFIs in Ethiopia.

Ramanaiah, M. & Mangala, C. [12] conducted the research thesis entitled on Determinants of Financial Performance: A study on selected microfinance institutions in Ethiopia. The study was used the ordinary least square (OLS) method particularly multiple regression models to assess the significant determinants of financial performance. The study was based on nine years secondary data obtained from AEMFI performance analysis report and MoFED for selected thirteen MFIs from the period 2003 to 2011. The study used internal factors such as (capital asset ratio, age, and operational efficiency, portfolio quality, size and gearing

ratio) and external factors such as real GDP and market concentration.

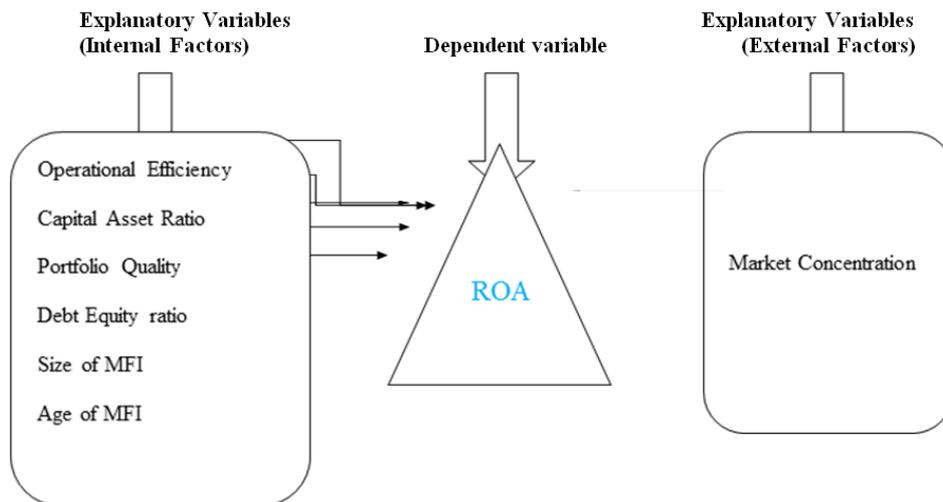
The outcome of the study shows that the age of microfinance institutions has a positive and statistically insignificant effect on financial performance. The other variables which were portfolio at risk, capital to asset ratio and market concentration affect negatively not significant.

Sima, G. [10] conducted the study in the Determinants of profitability: an empirical study on Ethiopian MFIs examined internal and external factors that affecting profitability of Ethiopian MFIs for a total of 13 MFIs for the period from 2003 to 2010. The regression result using fixed effect model showed up, operational efficiency, and portfolio quality to have a negative statistically significant effect, Whereas capital adequacy, size, and the only macroeconomic variable used in the study i.e. GDP are found to be statistically insignificant variables.

2.2. Conceptual Framework

To measure the financial performance of MFIs in Ethiopia, ROA were applied as the dependent variables because the Microfinance Financial Reporting Standard recommends the use of ROA or ROE as measures of profitability rather than financial self-sufficiency and operational self-sufficiency. It is a financial metric that is well established and understood across the finance spectrum [2]. However, Return on Asset has been used as a proxy for profitability in this study.

Different empirical evidences suggested that financial performance of financial institutions specifically MFIs is affected by internal and external factors. This study has been used as both internal and external factors of MFIs financial performance included as operational Efficiency, capital Asset ratio, portfolio quality, gearing ratio (debt to equity ratio), MFIs size, age, and Market concentration. The study was able to identify how these variables are affecting the financial performance of MFIs in Ethiopia.



Source: - developed by the researcher and some part from Moses and Zangue.

Figure 1. Conceptual frame works.

3. Research Design

The main objective of this study is to assess factors affecting the financial performance of microfinance institutions in Ethiopia through using longitudinal research design to realize stated objectives. Hence, with the aim of assessing factors affecting financial performance, this study used a quantitative research approach. The longitudinal research design with panel data was employed to analyze the resulting estimates and to properly address the hypothesized research questions. In line of this, the study was employed quantitative research approach as the literature on research methodology and shows quantitative research approach tends to assume that there is a cause-and-effect relationship between known variables of interest.

The target population considered by the researcher was all the 38 microfinance institutions which were providing the microfinance service to the target group from 2011 up to the end of year 2018. This is because of the availability of audited data obtained from AEMFI. Accordingly, this study was used a sample of 17 (44.7%) microfinance institutions based on the availability of data from the total population which were registered in National Bank of Ethiopia. The sample included in this study were Omo, Adesi, Meklit, Sidama, Eshet, Dire, Benshangul, Metemamen, Agar, Harbu, Harar, Gasha, Sfpi, Peace, Decsi, Ocsco and Wasasa. The criteria for selecting sample within the MFIs were based on the availability and quality of data for the given period of time. Thus, a total of 136 observations were considered.

3.1. Source of Data and Methods of Data Collections

To examine the factors affecting the financial performance of microfinance institutions in Ethiopia, the study used secondary data from possible sources. To enhance the quality of econometric estimates and to preserve consistency, only the most available MFIs' audited data was collected from the fiscal years 2011 to 2018 which was available in the annual reports of AEMFI and effectively used 8 years data.

3.1.1. Dependent Variable

For the purpose of this study, Return on Asset (ROA) has been used as a measure of financial performance of Ethiopian MFIs. Return on Asset (ROA) reflects the ability of MFI's management to generate profits from the MFI's assets. It shows the profits earned per birr of assets and indicates how effectively the MFIs assets are managed to generate revenues. Therefore, based on the above rationality this study was used ROA as the proxy for financial performance.

$$ROA = \frac{\text{Net Operating Income After Tax}}{\text{Average Total Assets}}$$

3.1.2. Independent Variable

To measure the financial performance of MFIs in Ethiopia, Seven variables were used as independent (explanatory) variables which are extracted from different studies. The variables were namely capital to asset ratio, operational efficiency, debt to equity ratio, size of MFIs, age of MFIs, market concentration, and portfolio quality.

Table 2. Independent variables and measurements.

R/N	Variable Name	Measurements	Variables in regression model
	MFI-specific factors		
1	Capital to Asset Ratio	$\frac{\text{Adjusted Total Equity}}{\text{Adjusted Total Asset}}$	CAR
2	Portfolio Quality	Outstanding balance, loan overdue > 30 days / Adjusted gross loan portfolio	PQ
3	Operational Efficiency	$\frac{\text{Adjusted Operating Expense}}{\text{Adjusted Average gross Loan portfolio}}$	OE
4	SIZE	Natural logarithm of the total asset	SIZE
5	AGE	Age of MFIs since their establishment	AGE
6	Debt Equity Ratio	$\frac{\text{Adjusted Total Liabilities}}{\text{Adjusted Total Equity}}$	DER
	Industry specific		
7	Market Concentration	H-H Index	MC

3.2. Model of the Research

To investigate the factors affecting the MFI-specific and industry specific factors on MFIs profitability in terms of ROA, the following general multiple linear regression equation was used as a base equation similar to Muriu, P. [2].

$$ROA_{it} = \beta_i + \beta_1 * CAR_{it} + \beta_2 * PQ_{it} + \beta_3 * DER_{it} + \beta_4 * OE_{it} + \beta_5 * AGE_{it} + \beta_6 * SIZE_{it} + \beta_7 * MC_{it} + \epsilon_{it}$$

Where: -

β_i = the constant term

β_1 - β_7 = the coefficient of Explanatory Variables

ROA_{it} = Return on Asset for MFI i at time t

CAR_{it} = Capital to Asset Ratio for MFI i at time t

PQ_{it} = Portfolio Quality of MFI i at time t

OE_{it} = Operational Efficiency for MFI i at time t

$SIZE_{it}$ = the natural logarithm of total asset for MFI i at time t

AGE_{it} = Age of MFI i at time t

DER_{it} = Debt Equity Ratio of MFIs i at time t

MC_{it} = Market Concentration of MFI i at time t

ϵ_{it} = the error term

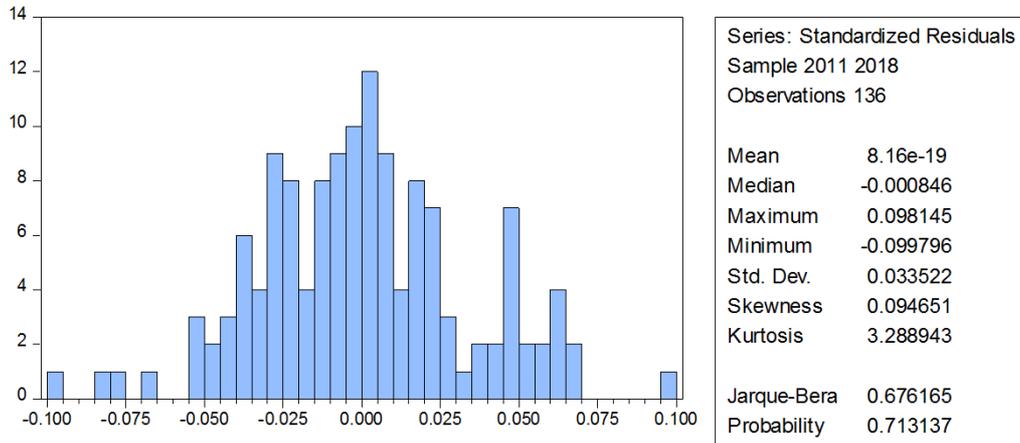
4. Results and Discussion

To avoid misspecification of regression model, diagnostic tests of the model were carried out by using Bera-Jarque test statistics for normality test; and in addition to this, it has been checked

whether the empirical model is free from multicollinearity using correlation matrix, heteroscedasticity via ARCH test, autocorrelation through (Durbin-Watson test), panel unit root test and panel co integration test by Kao (Eangle-Granger based) test.

4.1. Test for Normality

The normality tests for this study as shown in the



Source: - E-views version 10 output (2020).

Figure 2. Normality Test.

4.2. Test for Heteroscedasticity

In this study as shown in table below, both the F-statistic and Chi-Square versions of the test statistic gave the same conclusion that there is no evidence for the presence of heteroscedasticity, since the p-values were in excess of 0.05.

Table 3. Heteroscedasticity Test.

Heteroskedasticity Test: ARCH			
F-statistic	1.648628	Prob. F(2,131)	0.1963
Obs*R-squared	3.289958	Prob. Chi-Square (2)	0.1930

Source: - E-views version 10 output (2020).

Therefore, based on this statistics the researcher fail to

figure below indicated that the Bera-Jarque statistic has a value of 0.67 and a p-value of 0.71. This shows that the p-value for the Bera-Jarque test statistics for the model is greater than 0.05; which implies that the errors are normally distributed. Hence, the study was failed to reject the null hypothesis of normality at 5% significant level.

reject the null hypothesis that is indicated as there is no Heteroscedasticity or the errors are homoscedastic for the models.

4.3. Panel Unit Root Test

A panel series is said to be stationary when the statistical properties of the distribution are constant over time. When there is no trend in the data it is known as stationary. A stationary test is necessary before carrying out the regression analysis because if the data is non-stationary, the regression results will become spurious (not genuine).

Therefore, based on this statistics the researcher was rejected the null hypothesis saying there is unit root and that indicated as there is a stationary for the models.

Table 4. Panel unit root test: Summary.

Panel unit root test: Summary

Series: ROA

Date: 10/20/20 Time: 16:40

Sample: 2011 2018

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 1

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-7.13693	0.0000	17	112
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.72606	0.0422	17	112
ADF - Fisher Chi-square	62.1372	0.0023	17	112
PP - Fisher Chi-square	65.8184	0.0009	17	119

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.4. Panel Co Integration Test

The analysis of data co-integrating relationships has received considerable attention in modern time series analysis.

Table 5. Kao Residual Co integration Test.

Kao Residual Co integration Test
 Series: ROA AGE CAR DER MC OE PQ SIZE
 Date: 10/20/20 Time: 16:44
 Sample: 2011 2018
 Included observations: 136
 Null Hypothesis: No co integration
 Trend assumption: No deterministic trend
 Automatic lag length selection based on SIC with a max lag of 1
 Newey-West automatic bandwidth selection and Bartlett kernel

	Coefficient	Std. Error	t-Statistic	Prob.
ADF			-2.816984	0.0024
Residual variance			0.001570	
HAC variance			0.001198	
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D (RESID)				
Method: Least Squares				
Date: 10/20/20 Time: 16:44				
Sample (adjusted): 2013 2018				
Included observations: 102 after adjustments				
Variable				
RESID (-1)	-1.006586	0.135963	-7.403405	0.0000
D (RESID (-1))	0.262906	0.105067	2.502260	0.0140

Here the ADF test statistics is statistically significant at 5% significant level. So, reject the Ho and concluded that there is co-integration between these variables.

4.5. Model Selection-Random Effect Versus Fixed Effect Models

The key factor to consider when determining between a random effect model and a fixed effect model is whether it is reasonable to assume that the unobserved effect α_i is uncorrelated with all of the explanatory variables. The fixed effect model allows correlation between α_i and the explanatory variable for any t which eliminates the possibility to include any time constant variable [20]. Consequently, the legal status dummy indicating institution type will be omitted in the fixed effect model as it does not vary over the observed period. Whereas this opportunity is still possible under a random effect model we do not find it reasonable to assume there is no correlation between the time-constant unobserved effect and the entire explanatory variable. Therefore, we assume the fixed effects model to be better suited for this study.

To determine whether the fixed effects are necessary or not this study run about correlated random effects Hausman test and a redundant fixed effects test as recommended by Brooks, C. [21].

As a result, test though Hausman test, the p-value for the test is less than 1%, indicating that the random effects model is not appropriate and that the fixed effects specification is to be preferred. Therefore, fixed-effect model is the appropriate model for this study then the researcher must be used fixed effect than random effect model. The detail of the test result

was provided in the appendix at the end of this paper.

Table 6. Test of Hausman and Redndant Fixed effects Tests.

Correlated Random Effects - Hausman Test
 Equation: Untitled
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.648388	7	0.0064

Redundant Fixed Effects Tests
 Equation: Untitled
 Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.433187	(16,112)	0.0000
Cross-section Chi-square	66.722977	16	0.0000

Source: - E-views version 10 output (2020).

4.6. Descriptive Statistics of Variables

The descriptive statistics explores and presents an overview of all variables used in the analysis. This part presents the result of the descriptive statistics for both dependent variables (return on asset) and independent variables involved in the regression model. Table 7 shows a summary of the descriptive statistics of the dependent and independent variables which explain the mean, maximum, minimum, and standard deviation for all variables.

Table 7. Descriptive statistics of Variables.

	ROA	AGE	CAR	DER	MC	OE	PQ	SIZE
Mean	0.06	14.5	0.33	2.308	0.230	0.11	0.058	8.32
Median	0.06	15.00	0.324	2.02	0.226	0.1	0.035	8.12
Max.	0.19	21	0.8	8.4	0.266	0.39	0.798	10.08
Min	-0.06	6	0.08	0.54	0.208	0.017	0.00	6.23
Std.Dev	0.05	3.5	0.12	1.37	0.017	0.062	0.090	0.74
Observation	136	136	136	136	136	136	136	136

Source: - E-views version 10 output (2020).

As discussed in the methodology and empirical literature part, in banks and other commercial institutions, the most common measure of profitability is return on asset (ROA), which measures how well the microfinance institution uses their entire asset. It is also an overall measure of profitability which reflects both the profit margin and the efficiency of the institutions. ROA is calculated by dividing net income (after taxes and excluding any grants or donations) by average assets. ROA indicates profit earned on total asset (equity and all other liabilities).

As shown in the table 7 above, the financial performance of Ethiopian microfinance institutions for 136 observations, is measured in terms of return on asset which indicates averagely positive value of 0.06 during the study period of (2011-2018); with the maximum value of 0.19 and the minimum value of -0.06. This shows that the Ethiopian microfinance institution gained on average 0.06 cents in every one Birr investment on total assets. And profitable microfinance institution earned 0.19 cents of profit after tax for one birr investment they made on total asset. On the other hand, not profitable microfinance institution lost 0.06 cents for one birr investment they made on total asset.

The standard deviation of descriptive statistics for ROA was 0.05 indicating that the profit variation between the sampled MFIs was slightly lower those compared to other variables next to MC. The overall statistical result for ROA implies that the Ethiopian microfinance institution needs to efficiently utilize their asset to increase their profitability.

Regarding the capital to asset ratio, it is the simplest and best-known measure of the solvency of MFIs or to measure how much of the MFIs assets are funded with owner's fund. Computing this ratio helps the MFI to assess its ability to meet its obligations and absorb unexpected losses. In the table above, the mean value is 33% and the maximum value shows 80%. This statistical result shows above the minimum requirement, which was proposed by CGAP, microfinance institutions should be subject to even higher adequacy capital asset ratio than banks as a means to safeguard their portfolio and advises these institutions to maintain ratios approaching 20% with the potential to lowering it to 12% -15% based on their performance overtime [3]. The mean value of capital to asset ratio is 33% and this result indicated that 33% of the total asset of MFIs was financed by shareholders funds while the remaining 67% of the total asset was financed by other source which is above the standard set by CGAP, 20%.

In relation to debt to equity ratio, it is the simplest and best-known measure of capital sufficiency because it measures the overall financial leverage of the MFI. In the table above, the

ratio indicates that the average value of 2.31 with the maximum and minimum value of 8.4 and 0.54 respectively. The mean value of debt to equity ratio of 2.31 shows, MFIs in Ethiopia are financially leveraged higher on average than financed by equity capital because the AEMFIs in 2016 performance analysis report suggested that the standard of debt to equity ratio is 1.5. On the other hand, the maximum value for this variable is 8.4 which indicate that debt financing is more considered instead of having proportional financing structure. However, the minimum debt to equity ratio is 0.54 which indicate few Ethiopian microfinance institutions are financed more through equity capital than debt financing. The standard deviation of debt-to-equity ratio is 1.4 this clearly indicates the disparity of debt-to-equity ratio of EMFIs.

Regarding the portfolio quality, which reflects the risk of loan delinquency and determines future revenues and an institution's ability to increase outreach and serve potential and existing clients. This study used the indicator of portfolio quality in the microfinance industry is portfolio at risk greater than 30 days. The variable, portfolio at risk greater than 30 days become higher its value, the riskier the loan portfolio, which have an adverse influence on the financial performance of the MFIs.

The quality of portfolio in terms of portfolio at risk greater than 30 days for selected MFIs was on average of 6% and the maximum value of 79% with the minimum value of 0. According to AEMFI 2018, any portfolio at risk (par> 30 days) exceeding 10 percent should be a serious cause for concern, because unlike loans of commercial banks, most loan of MFIs are not backed by bankable collateral. Therefore, the result shows that the Ethiopian microfinance institution portion of the portfolio unpaid is 6% averagely. This is good but the maximum value of 79% indicates that the credit portfolio of some MFIs in the sample is highly risky.

On the other hand, the average operational efficiency of selected microfinance institution in Ethiopia was 11% which indicate that on average the institutions are incurring 0.11 cents in operating expense for each Birr in gross loan portfolio. On the other hand, inefficient institutions incur an operating expense of 0.40 cents for each birr on their gross loan portfolio. The standard deviation indicated 6.2% implying the large variation in terms of operational efficiency (operating expense management).

Another variable that affects the financial performance of MFI is its size. MFIs size plays an important role to keep the position of MFIs in the market. The size of the MFIs measured in terms of natural logarithm of their total assets which means

natural logarithm of total asset is used as a proxy of size.

In the descriptive statistics table, the mean value of this variable is 8.32 in its natural logarithm whereas the maximum and minimum values are 10.08 and 6.23 respectively. But the standard deviation of this variable is 0.74 which indicate higher disparity of size (total asset) in selected MFIs in Ethiopia.

The mean value of age of the institution is 14.5 with the maximum and minimum value 21 and 6 respectively. The standard deviation of this variable is the first largest deviation to total asset which is 355%. This indicates high disparity among MFIs in Ethiopia.

Finally, descriptive statistics of market concentration which is measured in terms of Herfindahl-Hirschman index was the mean value of 0.23 with the maximum value of 0.26 and the minimum value of 0.21. According to the antitrust regulation by the US department of justice, a market is considered to be competitive when $H-H \text{ Index} \leq 0.1$, moderately concentrated when $0.1 \leq H-H \text{ Index} \leq 0.18$ and high market concentration

when $H-H \text{ index} > 0.18$. Therefore, the result indicates that there is the existence of high market concentration in the market which is practically visible in Ethiopia, and this reveals that highly concentrated market lacks proper competition as to setting the price of banking services and it makes the existing banks more profitable. In other words, banks in more concentrated markets are most likely to make abnormal profits by their ability to lower deposits rates and to charge higher loan rates as a result of monopolistic reasons, than firms operating in less concentrated markets.

4.7. Finding of the Regression

This part presents the regression result that examined the factors affecting the financial performance of Ethiopian MFIs. So that, the regression result and coefficients of the variables were estimated by E-views version 10 software package. The model used to examine the factors affecting the financial performance of MFIs in Ethiopia was;

$$ROA_{it} = \beta_0 + \beta_1 * CAR_{it} + \beta_2 * PQ_{it} + \beta_3 * DER_{it} + \beta_4 * OE_{it} + \beta_5 * AGE_{it} + \beta_6 * SIZE_{it} + \beta_7 * MC_{it} + \epsilon_{it}$$

4.8. Discussion on the Regression Results

Based on the regression result shown in table below, the R^2 value is 58% and adjusted R^2 value is 49%. This is explained as 58% of the total variation in the financial performance i.e. ROA is jointly explained due to the variation of independent (explanatory) variables (Age, size, capital to asset ratio, debt to equity ratio, market concentration, operational efficiency and portfolio quality). The remaining 42% of variation of independent variables was explained by other factors which

are not included in this model. The F-statistic value is 0.0000 which shows that the model is fit. Each explanatory variable is discussed in detail as the following section.

4.8.1. Capital to Asset Ratio

The capital to asset ratio measures the amount of the capital required to cover additional unexpected losses and ensures that the MFI is well capitalized for potential shocks. Some lenders and investors may require a certain minimum threshold of capital to asset ratio for which they invest in MFIs.

Table 8. Regression Results of MFIs.

Dependent Variable: ROA
Method: Panel Least Squares
Date: 10/20/20 Time: 16:36
Sample: 2011 2018
Periods included: 8
Cross-sections included: 17
Total panel (balanced) observations: 136

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.255276	0.186611	-1.367963	0.1741
AGE	0.008185	0.003021	2.709485	0.0078
CAR	-0.121023	0.058881	-2.055404	0.0422
DER	-0.021326	0.005322	-4.007276	0.0001
MC	0.171787	0.207719	0.827020	0.4100
OE	0.058505	0.115846	0.505025	0.6145
PQ	-0.007482	0.061124	-0.122399	0.9028
SIZE	0.029919	0.023715	1.261606	0.2097
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.575392	Mean dependent var		0.067858
Adjusted R-squared	0.488196	S.D. dependent var		0.051445
S.E. of regression	0.036804	Akaike info criterion		-3.607643
Sum squared resid	0.151707	Schwarz criterion		-3.093645
Log likelihood	269.3197	Hannan-Quinn criter.		-3.398767
F-statistic	6.598815	Durbin-Watson stat		1.514173
Prob (F-statistic)	0.000000			

Source: - E-views version 10 output (2020).

In the table 8 above, the coefficient of the capital to asset ratio (CAP) is negative (-0.12) and statistically significant (p-value 0.042) even at 5% significance level. This confirms that in the study period 2011 up to 2018 capital strength of Ethiopian MFIs has a negatively relationship with their financial performance. This means that holding all other variables constant, increasing capital to asset ratio (CAR) by one unit results to decrease ROA nearly by 0.12 birr. Thus, the hypothesis number 1 states that there is a significant relationship between capital to asset ratio and financial performance is failed to reject because the data did support the stated hypothesis. In general, capital strength of Ethiopian Microfinance Institutions has strong and negatively relationship with financial performance in the study period 2011 to 2018. The result of this study is similar to Yonas, N. [19], Jorgensen, A. [22] and Dechasa, S. [17] but inconsistent with Sima, G. [10] and Zergaw, F. [23].

4.8.2. Portfolio Quality

The loan overdue with arrears over 30 days to gross loan portfolio has been used to measure the portfolio quality in Ethiopian MFIs. The ratio measures how well the institution can protect total portfolio available for the MFI against all kinds of risks.

The result obtained from the regression shows that the coefficient of the portfolio at risk greater than 30 days is negative (-0.007) and statistically insignificant (p-value 0.9) even at 10% significance level; which to reject the hypothesis that, there is a significant relationship between the loan portfolio quality of Ethiopian microfinance institutions and its financial performance in terms of ROA. But negative coefficient of portfolio at risk greater than 30 days indicated that holding all other variables constant, increasing PAR>30 days by one day causes to decrease the financial performance in terms of ROA by 0.007 Birr. In general speaking, high portfolio at risk reflects to limit the revenue derived from microcredit operations and determines future revenues of an institution's ability to decrease the amount of lendable funds. This result would lead to the problem of credit outreach and finally the inability of institution's sustainably to supply quality services to their customers and have negative impact on the financial performance. Therefore, this negative coefficient of the portfolio at risk indicates this problem.

Portfolio at risk greater than 30 days measure indicates how efficient MFI is in making loan collections. The higher the portfolio at risk greater than 30 days indicates low loan repayment rates and an implication of inefficient MFI. The higher the Portfolio at risk greater than 30 days, the more inefficient the MFI will be and, therefore, to decrease financial performance. In general, this shows that the portfolio-at-risk greater than 30 days is the most determining indicator of the financial performance of Ethiopian MFIs.

The result is agreement with Abummar, A [18], Ashebir, A. [19], Sima, G. [10] and Muriu, P. [2] who found that the loan portfolio quality was negative impact on the financial performance. In other words, the result was disagreement

with Moses, A. [15], and Dissanayake, D. [24] that they found out the loan portfolio quality was positively correlated with MFIs financial performance.

4.8.3. Operational Efficiency

Operational efficiency indicator is performance measures showing how well MFIs is making more effective its operations. The operational efficiency indicator is used to know how MFI uses its resources and personnel to deliver its services. The operational efficiency ratio is measured in terms of adjusted operating expense to adjusted average gross loan portfolio. By using the above formula to calculate, the operational efficiency ratio to cover the period from 2011 to 2018 shows that the coefficient of 0.06 and it is statistically insignificant variable even at 10% significant level because the p-value is 0.6. Moreover, the result shows that holding all other variables constant, increasing one unit of operational expense on gross loan portfolio could causes to increase ROA nearly by 0.06 cents. The result of the regression shows that there is a positive relationship with efficiency and financial performance in terms of ROA. The outcome is not in line with x-efficiency theory which says efficient firms (lower cost) tend to earn higher profit. Therefore, the hypothesis saying that there is a significant relationship between operational efficiency and financial performance of MFIs was rejected. Generally, Operational efficiency was not a key determinant factor of financial performance of MFIs in Ethiopia in the study period 2011 to 2018.

The result was equally consistent with Moses, A. [15] and inconsistent with Muriu, P. [2], Dechasa, S. [17], Ashebir, A. [19] and Jorgensen, A. [22].

4.8.4. Age of MFIs

Age of MFIs shows the time period (duration) in which the microfinance institutions have been providing services. The research result shows that the age of MFIs has a positive coefficient of 0.008 and it is statistically significant at 1% significant level because p-value is 0.007. The hypothesis it indicated that the age of MFIs has a significant relationship with the financial performance and the result confirms positively related with financial performance of Ethiopian MFIs. In other words, holding all other variables constant, increasing age by one year MFI results to increase the ROA by 0.008 Birr.

The positive coefficient of age of MFIs implies that as MFIs become mature and get greater experience, they increase of achieving their financial performance. The result is in agreement with Dechasa, S. [17], Ashebir, A. [19] and Sima, G. [10].

Therefore, based on the regression result the study has concluded that age of MFIs was affected financial performance positively and statistically significant variables. Therefore, the hypothesis that states there is a significant relationship between age and MFI's financial performance is failed to be rejected.

4.8.5. Debt to Equity Ratio

Debt to equity ratio is the simplest and best-known measure of capital adequacy as it measures the overall leverage of the institution or in other words the extent to which it relies on debt as a source of financing. The regression result showed a negative coefficient of -0.021 and it is statistically significant with p-value of 0.0001 even at 1% significant level. This result implies that in the study period 2011 to 2018 there was significant negative relationship between debt to equity ratio and financial performance.

The result is inconsistent with Muriu, P. [2] and Dissanayake, D. [24] that is possibly more debt relative to equity is used to finance microfinance activities and that long term borrowings impact positively on profitability by accelerating MFIs growth than it would have been without debt financing. The result of the regression is agreement with Ashebir, A. [19] and Melkamu, T. [5].

In the other words, the result indicates that holding all other variables constant; increase debt to equity ratio by one unit causes to decrease the financial performance by nearly 0.021 Birr. Based on this regression result, the study failed to reject the hypothesis that there is a significant relationship between debt to equity ratio and financial performance of Ethiopian MFIs. Therefore, debt to equity ratio is a key factor for Ethiopian microfinance institutions financial performance.

4.8.6. Size of Microfinance Institutions

The size of microfinance institution is measured by using the natural logarithm of total assets of the MFIs. The coefficient of size was positive value with 0.029 and it is statistically insignificant (0.209) even at 10% significant level. The positive sign implies that holding all other variables constant, an increase in one birr in total asset causes

an increase the financial performance of MFIs and this shows there is the indication of the possibility that economies of scale exist. This is considering in scale efficiency theory, as the size of a firm expands so would be its market power and increase profitability. It means that Ethiopian MFIs with its larger size did benefit from economies of scale. Therefore, the hypothesis saying that there is a significant relationship between size and financial performance of an Ethiopian MFIs is rejected but in practice that the large MFIs constitute the largest portion of the market share from the industry.

According to Herfindahl -Hirschman index market concentration is measured with the sum of square of market share of the sample MFIs included in particular study to total asset of MFIs. The market share of each firm is measured by the ratio of the bank's total asset to total assets of all institutions [25]. The banking sector theories in market concentration argue that if the size and firm distribution of a specific sector is concentrated, the profitability of firms becomes higher because firms could get monopoly power to set prices for their products or services and determine the desired level of profits. Even though the descriptive statistics indicate there is high market concentration in Ethiopian MFIs, the regression result shows positive and statistically insignificant impact on its financial performance even at 10% significance level. The regression result shows that market concentration affects MFIs financial performance positively (0.17), and the effect was statistically insignificant (p-value 0.41). Hence, this study found out that there is no evidence to accept the hypothesis that states there is a significant relationship with financial performance of Ethiopian MFIs because the result was not support the hypothesis. The result of the regression is consistent with the findings of Brihanu, T. [26] and Ashebir, A. [19].

The regression equation of the model is formulated as follows:-

$$ROA = - 0.25 + 0.008 * AGE - 0.12 * CAR - 0.02 * DER + 0.17 * MC + 0.06 * OE - 0.007 * PQ + 0.029 * SIZE + \epsilon_{it}$$

5. Conclusions

The study used the secondary data to investigate the effect of MFI specific and industry specific factors on the financial performance of Ethiopian MFIs in the study period 2011 to 2018. MFI specific factors included in the study were capital to asset ratio, portfolio quality, operational efficiency, age, debt to equity ratio and size of MFIs which are under the control of the managerial body of the institutions. While External factor included in the study was market concentration which was beyond the management organ of the institutions.

In order to achieve the stated objective, longitudinal research design with quantitative research approach was employed. The data for the study were collected from the performance analysis report bulletin of AEMFI for internal factors and industry specific factors.

The data gathered from AEMFI was checked and entered in to MS-Excel and regressed by using multiple regression

analysis. To conduct the study, the researcher used E-view version 10 software. To avoid misspecification of the regression model, the researcher carried out different diagnostic tests for the model and which are normality test by Bera-Jarque statistics, multicollinearity by using correlation matrix, Heteroscedasticity by using ARCH, autocorrelation by Durbin-Watson test, panel unit root test and co-integration test via Kao (Eangle grander based) test.

Based on the descriptive analysis, regression result shows that MFIs in Ethiopia generating averagely positive (0.06) ROA during the study period indicating that MFIs were not only focused on poverty reduction but also on their profit orientation.

Regarding to capital to asset ratio, mean value suggested 33% of the total asset of MFI were financed by shareholders funds whereas the remaining 67% of the total asset was financed by another source and this is the above of the standard proposed by CGAP of 20%.

The mean value of debt to equity ratio indicated that the MFIs in Ethiopia was more leveraged (2.3) because the value

is more than the proposed minimum value 1.5 set by AEMFI. The mean value of market concentration 0.23 indicated that there is highly controlled by the few MFIs in Ethiopia. The mean value of portfolio quality greater than 30 days (6%) shows that there is averagely below which is set by AEMFI. Therefore, this is good and few MFIs found in high risk because the maximum value of portfolio quality greater than 30 days was 80%.

Age of MFIs which is measured with the time period (number of years) that microfinance institutions have been under operation indicated as a positive coefficient and statistically significant variable. This implies that as MFIs become mature and get more experience they get more financial performance which is profitable.

Capital to Asset Ratio of Ethiopian MFIs showed on average result greater than the statutory requirement set by AEMFI which is 20%, as the study verifies on average 33% of the MFIs asset is funded by owners' equity and the fund found that capital adequacy is a statistically significant financial performance factors of Ethiopian MFIs during the study period of 2011-2018.

Debt to equity ratio showed a negative coefficient against ROA, and statistically significant this indicating that the increment in debt to equity decrease the profitability in terms of ROA of Ethiopian MFIs.

Operational efficiency of MFIs calculated in terms of adjusted operating expense to adjusted average gross loan portfolio indicated a positive coefficient and it was statistically insignificant variable. The positive coefficient confirms that the higher the cost, the increment of the financial performance of Ethiopian MFIs.

Portfolio quality showed up a negative coefficient against ROA and also the variable was statistically insignificant. Regarding a negative coefficient, high portfolio at risk reflects to limit the revenue derived from micro credit operations and determines future revenues of an institution's ability to decrease the amount of lendable funds. This result would lead to the problem of credit outreach and finally the inability of institution's sustainably to supply quality services to their customers and have negative impact on the financial performance. Therefore, this negative coefficient of the portfolio at risk indicates this problem.

The other variables which are MC and size of MFIs were found to be statistically insignificant financial performance determinants in Ethiopian MFIs in the study period.

6. Recommendations

Based on the findings of the study the researcher has recommended some points what he thought to be very critical if considered and implemented by the microfinance institutions accordingly and properly. Capital to asset ratio, Debt to equity ratio, and Age are significant factors of financial performance of MFIs in Ethiopia in the study period from 2011 to 2018.

The capital to asset ratio helps MFI assesses its ability to meet its obligation and absorb unexpected losses. The

determination of an acceptable capital to asset ratio level is generally based on MFI's assessment of its expected losses as well as its financial strength and ability to absorb such losses. Thus, the management of an institution should develop sound savings mobilizing campaign strategy in order to collect adequate savings from depositors and mostly operate on shareholders contribution to well capitalize MFI for ensuring unexpected shocks and they also try to manage challenges from past experience. So that, institutions may increase their financial performance that help the MFIs to come out sustainable and to reach the poor.

In addition to this, the management of the institutions may ensure the efficiency of operations from year to year as learning experience to minimize the factors of financial performance of MFIs in Ethiopia and increasing the capacity and the skill of the institution's employee and management by using continuous training, experience sharing from successful MFI and providing advice and consulting are very important. Moreover, the Ethiopian MFIs have to learn experience from profit-making banking practices through the implementation of good financial performance and to assure their financial performance.

The other recommendation is that, microfinance institutions that employ higher debt in the capital structure are less financial performer, which means that highly leveraged microfinance institutions are less profitable (financial performance). So, the management organ may not give a great attention in debt financing and the new MFIs entering the industry must set out different set of goals and operational set of skills which leading to financial performance.

The study was examined to limited internal and external variables and using only 8 years of data because the variables in the study were not exhaustively included. The variables which are not included in this study like, breadth of outreach, depth of outreach, methods of borrowing, number of active borrowers from internal factors and unemployment rate, GDP and Inflation rate from external factors. Therefore, the researcher recommends future researchers to considering the above variables for the factors of financial performance of Ethiopian MFIs.

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