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Outreach and Performance of Microfinance Institutions in Sub-Saharan Africa

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Abstract

Microfinance institutions is a form of financial institution that provides financial service to the poor individuals, jobless or peoples who can't obtain financial services from traditional banks. Most MFIs are suffering to balance being profitable in order to be self sustain and outreaching great number of poor people. This study aims to investigate the internal and external determinants that influence the outreach and financial performance of MFIs in sub-Saharan Africa (SSA). A quantitative research was employed using secondary data which was collected from MIX market and World Bank. In addition, the data was gathered from 43 MFIs and the determination of the MFIs that participate in the sample was dependent on the fulfillment of the data for five period of time between 2013 and 2017. The panel data was analyzed quantitatively using EViews software. The outcome in this examination is that size of MFIs is the major determinants that impacts both social and financial performance of MFIs. However, GDP growth is insignificant factor on both outreach and financial performance. The study recognizes factors contributing to the success of MFIs as well as conveys significant information to the stakeholders of MFIs.

Keywords: MFIs; Outreach; Profitability; Microfinance schism; Internal and external determinants; Sub-Saharan Africa.

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1. Introduction

1.1 Background

Poverty is regarded as one of the essential issues goes up against the developing nations. 10% of the world's population uses under \$2 per day, while 41.1% of Sub-Saharan Africa population lives on under \$1.90 per day [1]. One of the most important causes behind this is lack of access to loan. This is basically because of the fact that poor customers do not get service from the banks due to lack of collaterals to make safe the credit, and additionally the operating expenses of giving financial support to the low-income individuals is excessively expensive for banks, hence these brought the lack of awareness of poor population from the banks [2]. The removal of poor individuals from the conventional financial frameworks has denied the poor from approaching credit, afterwards, some of these poor individuals began getting credit from casual moneylenders and struggling with the high rates that the moneylenders has charged. An effective strategy against poverty has developed in 1970s which connects the poor by offering small credit without collateral. Professor Muhammad Yunus, an economist of Bangladeshi Grameen Bank was the first one who began and pioneered the idea of microfinance in 1974 [3]. Subsequently, the concept of microfinance has spread to the world wide, but the effective microfinance programs exist in Asia [4]. Bank Rakyat Indonesia is perhaps the biggest bank in Indonesia; it focuses on lending little amount and microfinance approach to its around 30 million customers by the way of its more than 4000 branches [5]. Microfinance institutions is a contemporary approach that is intended to eliminate poverty, authorize women and generate awareness that lastly brings maintainable progress of the nations development [6]. In addition, microfinance is a useful program for poverty reduction and is accomplished to take the poor people into prosperity life if it suitably put into practice [7]. The most important goal of Microfinance institutions and their optimum promise is to outreach the poor population which is meant connecting to poor people by means of providing financial services in a maintainable support and to be profitable in order to be self sustain [8]. The mission that microfinance institutions strive for is eradicating poverty throughout offering financial supports to the needy individuals living in both urban and rustic areas; the financial services consist of saving, credit and insurance [9]. In addition, microfinance schemes endeavor to be financially sustainable in consideration of covering their working expenses and provide their clients continuous premise of financial service [10]. Hence, the performance of microfinance institutions is assessed along these measurements outreach and profitability. Nevertheless, accomplishing these double objectives is challenge for microfinance institutions and it began the discussion about the tradeoff between microfinance objectives. An argument concerning about the profitability of microfinance institutions has risen during 1990s and yet stays unsettled. Initially microfinance schemes were totally donors' endowment among small funds, restricted time phase, inadequate financial activity and restricted environmental location [11]. In 1990s many donor institutions and several microfinance schemes started to discuss about the self sufficient of microfinance associations, indicating that microfinance institutions should get the ability to cover the whole expenses by the returns that their operations generate. As microfinance schemes achieve monetarily independence level, they would obtain loan from markets and cross their reliance on donors. The defenders of this theory contend this is the path for microfinance that assist to achieve acquiring a bigger resources to fund their activities than by depending on contributors, and along these lines to operate a totally more number of needy individuals [12]. The opposite side of the discussion worries that when microfinance foundations seek to generate revenues and transform into

business organizations, they will wind up serving wealthier customers who can assimilate bigger advances, and that these customers swarm out the low-income people. They fear that the idea of commercializing microfinance institutions remove the poorest customers and serve wealthier clients, despite the fact that serving poorest ones was the mission of microfinance [12]. In Sub-Saharan Africa (SSA), microfinance segment has experienced a huge change while the executions of the money related part changes which began in 1990's. The industry has encountered a quick development as far as the quantity of firms, land zone secured, and the quantity of clients served [13]. The advancement of microfinance institutions in SSA were discovered in terms of the removal of low-income individuals from official banking system and the contributor support that have diverted to certain politics administrated by government authorities [14]. In spite of the huge endeavors by the MFIs in the previous two decades, numerous MFIs in sub-Saharan Africa fail to meet expectations and battle to endure. The breakdown of Pride Zambia in 2009 and the disappointments of more than 30 MFIs in 2013 in Ghana brought the point of budgetary manageability of the microfinance business to a more extensive open banter. Indeed, even after these occasions, numerous MFIs in SSA still rely upon critical giver subsidizing to endure, which implies they are not monetarily sustainable [15]. As the most microfinance institutions in sub-Saharan Africa fail to achieve their objectives, this study aims to explore the internal and external factors that influence the performance of microfinance institutions.

1.2 Issue

Microfinance must be profitable in order to be self sustain and outreach to the poor people so as to change their lives [16]. Better performing Microfinance Institutions have the ability to generate revenues, become self-sustain and outreach more poor people [17]. However, accomplishing the dual mission of microfinance institutions is challenge for them. When microfinance schemes concentrate on the profitability or financial sustainability is difficult for them to reach the poorest people. In addition, microfinance institutions that fundamentally immediate their consideration towards connecting the poorest ones can threaten their progression in giving microfinance [18]. Moreover, many more Microfinance schemes failed in finding balance of becoming profitable which is necessary for the sustainability of the organization and being socially responsible which is meant by outreaching enough poor people [19]. In addition, most Microfinance Institutions experience the issue of accomplishing financial and social goal synchronously [20]. Unsuccessful Microfinance Institutions might not contribute the development of the economy and alleviating poverty. Moreover, failed Microfinance Institutions causes in preventing the poor people who are kept out from the official financial schemes for obtaining financial supports that can assist them enlarge and expand their financial actions by this means defeating poverty. The tradeoff between outreach and profitability may cause mission drift which is serving wealthier clients in order to generate profit and this is against the ultimate goal of Microfinance Institutions which is poverty reduction [8]. 44% of Microfinance provisions are more beneficial compared to business banks [21]. Reaching the poorest individuals is very expensive and extremely poor customers will most likely be unable to deal with those higher costs. Additionally, Hermes identifies that profitability contrasts the intended goal of microfinance which is serving and supporting the low-income individuals [2]. In addition, most of Sub-Saharan African countries are underdeveloped as well as is where the poorest population in the globe lives. Microfinance institutions in sub-Saharan Africa are hard to figure out the issue of poverty or to outreach sufficient number of poor people due to the broadness of poverty that they are experiencing [22]. As the goal

of Microfinance Institutions is to do a valuable and long haul commitment for enhancing the outreach of poor people as well as becoming self sustain, the most essential factors that influence Microfinance performance are size of the MFI, age of the MFI and institutional type [2]. In addition, the external conditions (like the GDP per capita) encompassing the Microfinance Institution impacts it's performance [18]. Thus, this study is performed to examine the internal and external determinants that influence on outreach and financial performance of microfinance institutions in sub-Saharan Africa.

2. Literature review

2.1 Microfinance Scheme

Microfinance institutions enhance the well-being of its clients [23]. Therefore, the optimum device for supporting low-income individuals which is providing financial services brings by two different tools which are welferists and institutionalists [12]. However, both of them share the target of eradicating poverty [20]. Numerous examinations have addressed if there is a tradeoff among the two essential targets for the most part sought after by microfinance institution's which are: extended outreach and profitability. A few examinations discovered a critical negative connection among the two targets which proposes that a trade off prevails, and hence accomplishing one of the two targets needs surrendering the other, others discovered a noteworthy positive relationship which recommends that the two goals can be accomplished at the same time, while some others did not locate any huge connection among the two targets [24]. The correlation between social and financial performance of microfinance institutions goes into two different ways of welferist and institutionalist. The welferist approach focuses on social execution while it's not refusing long run profitability. Institutional approach appraises that the initial great financial performance is the optimum approach to accomplish long run social performance [24]. From Welfares sights financial sustainability and profitability negatively affect on outreach to the poor people. Microfinance foundations that emphasize on sustainability spares self couple of wealthier customers since the vast majority of the poor can't pay the market cost of the services [25]. Institutionalist sees, monetary execution of Microfinance establishments is the reason for achieving the essential target of effort to poor people. A gainful Microfinance foundation creates abundance assets for reinvestment permitting the extension, and development of the organizations regarding customer base, incomes, geological inclusion and resource base [26]. The welferist approach considers about developing corporations like NGOs or institutions which hold microfinance like a great instrument for minimizing the poverty of the least-income individuals [20]. The most famous instance of welferist method is the Garmeen Bank. The one-sided ones of welferist approach utilize 'household studies' to measure the advantage of microloans. The aim is to assess the influence on the livelihood situation of the marked households which is the trend happened due to the good fortune and the worth full animation of the recipients. They require evaluating the condition before the provision of financial support and later than that. Therefore, they are concerned about the trends of the well-being, educational level, nourishment, health care operations and insurance to the low-income individuals. On the other hand, institutionalist criticize that this sort of researches to be excessively abstract and lead to extreme expenses in further to the methodological troubles that may experience [20]. The institutionalists attempt to set microcredit programs inside the rationale market. They are informed the restricted ability of contributors to fulfill the huge need for microcredit. Defenders of this approach desire the setting up a maintainable microfinance framework including the desire of providing credits and reaching the poorest individuals. Every

microfinance institutions should go for financial sustainability by expanding its adequacy and profitability so as to achieve financial independence. As a result, they should charge its customers exceptionally high financing costs in order to conceal operational costs identified with any microcredit [20]. The goal is not centered on enhancing the welfare of the extremely poor individuals but instead that serving on customers near the neediness line and having greatly gainful operations with short generation cycle are the objective [25]. The significance for microfinance institutions to accomplish financial sustainability has been featured by different writers. Financial sustainability is vital to organizational sustainability [27]. Unsustainable microfinance institutions would not have the option to continue supporting the poor in future since they would stop to exist [28]. However, the nonattendance of microfinance institutions is much preferred than having unsustainable ones [29]. Additional endeavors are required for microfinance institutions to accomplish sustainability for two points: first, to qualify the organizations to get from outer sources (capital markets and banks) to expand their tasks [30]; second, to empower them to accomplish their long haul objective of poverty eradication [31].

2.2 Outreach Performance of Microfinance Institutions

Microfinance is seen like an advancement instrument for the purpose of eradicating poverty [32]. As a whole, microfinance institutions have two goals. The first one is social goal which is to offer financial support to a significant number of poor households. In addition, the second one is financial goal which is to make profit in order to be self-reliant and able to stand on without subsidies [33]. Microfinance institutions look for to accomplish two broad goals, the first is to outreach poor people. Furthermore, second goal is to be self-sustain by concealing its expenses and being free from contributors' resource [34]. MFIs are in significant position in developing nations by giving credit to destitute individuals who do not obtain official loan which generally are required collateral [35]. Outreach is evaluated by depth and breadth which is necessary for operations of MFIs. Depth outreach is estimated by Average loan balance per borrower; in addition, the breath outreach is estimated by number of active borrowers. The upward trend of average loan balance per borrower indicates poor social performance as well as the raise of the number of active borrowers illustrates better social performance [36]. Thinking about outreach regarding destitution, a microfinance program may choose to focus on an explicit customer assemble that is viewed as limited from access to money related administrations either in view of their qualities or as a result of physical imperatives. Such target bunches incorporate ladies, individuals in country territories (instead of urban ones, provincial zones are commonly meagerly populated and have poorer framework), ethnic minorities, ignorant individuals, etc. Notwithstanding those achieving the plain poor, those helping in extreme to achieve customers could similarly be supposed to have profound outreach [8]. Truth be told, ladies are an average target gathering of microfinance agendas. Ladies are further regularly credit-obliged than males in creating nations, since males commonly employ in bigger organizations in the official area, although ladies stay independently worked in the casual segment. Since they can't get to credit from formal money related foundations, ladies are bound to acknowledge the friend weight and the tedious strategies that gather loaning involves. In addition, the bank may have a monetary motivator to give advances to ladies, as they are normally increasingly reasonable in their utilization of cash and have been demonstrated to exhibit superior reimbursement charge [37]. In addition, microfinance institutions should try to have attention to the rural poor people that might drive the poor people to get credit [38].

2.3 Performance of Microfinance Institutions In Sub-Saharan Africa

2.3.1 Outreach to the poor people

Table 2.1: Outreach to the poor people of 43 MFIs in sub-Saharan Africa (2013-2017)

Year	Total Number of Active Borrowers	Percentage of women Borrowers	Average Loan balance Per Borrower
2013	2,130,349	61.25%	523
2014	2,372,486	58.43%	531
2015	2,483,023	58.35%	543
2016	2,530,105	58.89%	578
2017	2,498,966	55.92%	721

Source: Researcher’s calculation from MIX, 2019

As indicated table 2.1, the total number of borrowers increased to 2.53 million in 2016 from 2.1 million in 2013 then decreased to 2.5 million in 2017, In addition, the Average Loan balance Per Borrower increased to 721 in 2017 from 523 in 2013. However, the percentage of women borrowers decreased to 56% in 2017 from 61% in 2013.

2.3.2 Profitability of Microfinance Institutions

The main normal estimation that is broadly utilized for profitability that mirrors the establishment's productivity and the overall revenue is an return on assets (RoA), which is the capacity of the association to utilize its benefits in a beneficial way and measure how well the advantages of foundations has been utilized and return on equity (RoE) in which the created profits for the speculation of proprietors are estimated.

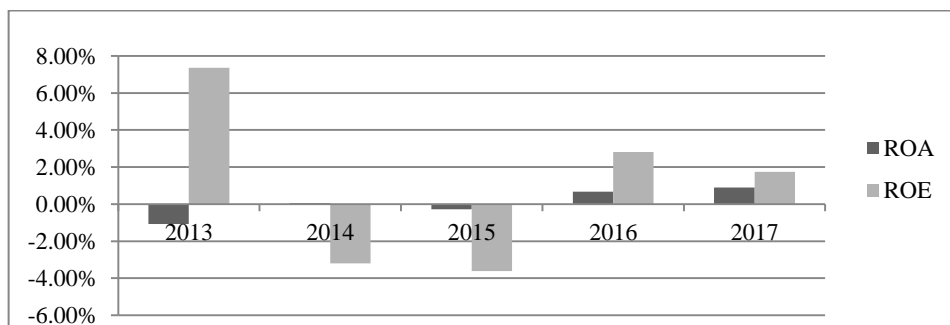


Figure 2.1: Return on Asset and Return on Equity of 43 MFIs in sub-Saharan Africa (2013-2017)

Source: Researcher’s calculation from MIX, 2019

Figure 2.1 depicts the computed RoA and RoE from 43 microfinance Institutions in Sub-Saharan Africa, both

RoA and RoE have experienced fluctuation. In 2013 the RoA was -1.08% and rise to 0.05% in 2014, however, in 2015 the ROA fall into -0.28% and then in 2016 and 2017 increased steadily to 0.67% and 0.89% respectively. In addition, the RoE was 7.36% in 2013 and went down dramatically to -3.20% in 2014. Moreover, the ROE fell in to -3.62% in 2015. However, in 2016 the ROE went up greatly to 2.81% although in 2017 it decreased to 1.75%. In short, the overall trend reveals that the MFIs in sub-Saharan Africa experienced poor profitability during the study period.

2.3.3 Sustainability of Microfinance Institutions

Operational self-sufficient (OSS) is the major pointer of profitability that measures the working income as a level of budgetary and working cost; it incorporates costs of credit arrangement. MFI can just take care of its entire costs with their very own income that produced from their money related or activity when this proportion (OSS) is more noteworthy than 100 %. It implies that MFIs ought not to be reliant on the sponsorships from contributors to take care of their task expense. A rundown of OSS of fifteen East African MFIs is abridged in the beneath:

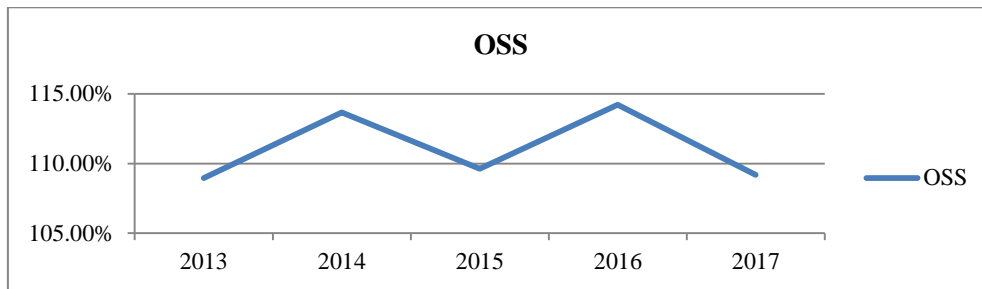


Figure 2.2: operational self-sufficient of 43 MFIs in sub-Saharan Africa (2013-2017)

Table 2.2

OSS	2013	2014	2015	2016	2017
	108.96%	113.68%	109.62%	114.23%	109.18%

Source: Researcher’s calculation from MIX, 2019

According to Figure 2.2, it could be seen that the operational self-sufficient of MFIs in sub-Saharan Africa in was above 100% in all five periods which means they were able to cover the entire expenses of the microfinance institution without reliant on donors.

As indicated figure 2.3, the proportion of risk portfolio was moving around 5.29% to 4.85% between 2013 and 2014. In addition, the MFIs experienced and upward trend of PAR >30 which reached 8.23% in 2016. Afterwards, the PAR went down to 6.78% in 2017.

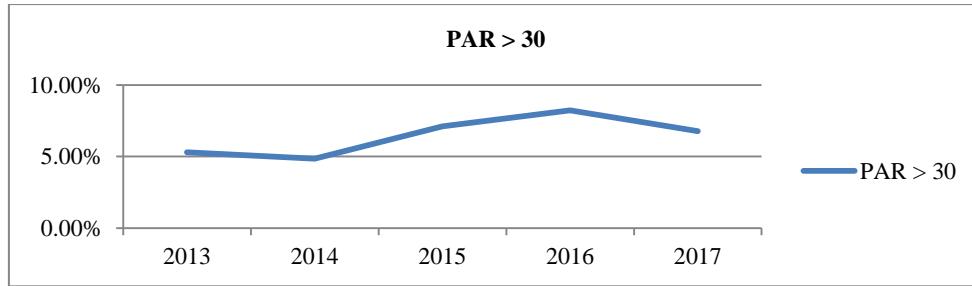


Figure 2.3: Portfolio at risk > 30 days of 43 MFIs in sub-Saharan Africa (2013-2017)

Table 2.3

PAR > 30	2013	2014	2015	2016	2017
	5.29%	4.85%	7.12%	8.23%	6.78%

Source: Researcher’s calculation from MIX, 2019

2.4 DETERMINANTS OF OUTREACH AND PERFORMANCE OF MICROFINANCE INSTITUTIONS

As the objective of Microfinance Institutions is to complete a significant and whole deal responsibility for upgrading the outreach of needy individuals and getting self persist, the most fundamental factors that impact Microfinance execution are size of the MFI, age of the MFI and institutional sort [2]. Furthermore, the outside conditions (like the GDP per capita) encircling the Microfinance Institution impacts it’s execution [18].

2.4.1 Size of the MFIs

The size of the microfinance institution directly influences with both financial performance and outreach. Some studies contend that this finding mirrors the way that a vast MFI has more noteworthy capacity to oblige chance through expansion and to improve efficiency. The impact of advantage structure is observed to be like that of the span of MFIs: an all the more dominant foundation of fixed resources might be a purpose behind their prosperity. Size is significant factor in microfinance performance [2].

H1: the size of MFIs has positive impact on outreach and profitability.

2.4.2 Age of the MFIs

Age is significant factor in microfinance performance [2]. However some studies revealed that age of Microfinance Institutions has negative effect on social and financial performance. Moreover, some others depict that age does not have any correlation with performance of Microfinance Institutions. Furthermore others enumerate that age directly influences on outreach and profitability of Microfinance Institutions [39].

H2: the age of MFIs has positive impact on outreach and profitability.

2.4.3 Portfolio quality

It is a fact that the portfolio quality and profitability have positive relationship; better portfolio quality indicates better profitability and the other way around [40]. MFIs offer uncollateralized loan and the higher proportion of portfolio at risk demonstrates the fruitless and misadministration of the employees [36].

H3: portfolio quality has positive impact on outreach and profitability.

2.4.4 Macro-economic factor

The Macroeconomic determinants are beyond the control of microfinance managers and might influence MFI execution in a few different ways [17]. A developing economy might expand motivations of little scale business visionaries to contribute as well as broaden existing undertakings and business openings bringing about higher interest for MFI administrations or potentially improving reimbursement execution of MFI borrowers. In the two cases, MFI execution might be decidedly influenced. In the meantime, in any case, a developing economy may likewise decrease interest for administrations from MFIs as families and business people can back activities from benefits or potentially can get to fund from formal channels, for example, banks. Thus, MFIs' budgetary execution might be adversely influenced [2]. The outside conditions (like the GDP) encircling the Microfinance Institution impacts its execution [18].

H4: GDP growth has positive influence on both outreach and profitability.

3. Methodology

This study employs quantitative research using secondary data which was collected from MIX market and World Bank. Furthermore, the data was taken from 43 MFIs that operate in SSA and the confirmation of the MFIs that took part in the sample was reliant on the completion of the data for seven period of time between 2013 and 2017. In addition, the panel data was analyzed Eviews software.

4. Findings and Discussion

4.1 Regression Analysis

This part enumerates the results of regression analysis. Regarding to chapter three, the theoretical model used to identify determinants influencing outreach and financial performance of microfinance institutions in SSA is as follows:

$$NBA_{it} = \beta_0 Age_{it} + \beta_1 Size_{it} + \beta_2 PAR_{it} + \beta_3 GDP_{it} + \epsilon_{it}$$

$$ROA_{it} = \beta_0 Age_{it} + \beta_1 Size_{it} + \beta_2 PAR_{it} + \beta_3 GDP_{it} + \epsilon_{it}$$

The evaluation result from outreach panel data regression model which employed in this study is illustrated in table 4.1. The size of microfinance institutions in SSA significantly influences number of active borrowers at 1% and percentage of female borrowers 5%. In addition, the age of MFIs in SSA have significant relation with average loan balance per borrower at 1% and percentage of female borrowers at 5%. Furthermore, the portfolio

quality of MFIs in SSA impacts on the number of active borrowers at 10% and percentage of female borrowers at 1%. Moreover, GDP growth has insignificant influence with all outreach factors. In accordance with the coefficient numbers of the independent factors, the coefficient of all independent factors have positive relation with number of active borrowers excluding portfolio at risk. Furthermore, the coefficient of all independent factors have direct relation with average loan balance per borrower, consequently, the increase of these independent factors causes the increase of average loan balance per borrower. However the coefficient of all independent factors have inverse relation with the percentage of women borrowers which means the increase of these factors causes the decrease of the percentage of female borrowers.

Table 4.1: Independent factors on outreach of MFIs in SSA

Variable	NAB		ALB		% of WB	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	26334.36	0.0239	112.2221	0.5508	0.775440	0.0000
Size	0.000178*	0.0000	2.24E-07	0.1708	-1.05E-10**	0.0486
Age	386.8536	0.4471	31.59658*	0.0017	-0.00974**	0.0035
PAR	-64350.05***	0.0824	127.4883	0.5912	-0.266059*	0.0029
GDP	124371.0	0.4659	301.9943	0.8268	-0.587509	0.2491

(*), (**) and (***) are significant at 1%, 5% and 10% respectively.

As table 4.2 enumerates the size has significant relation with return on asset and operational self-sufficient at 5%. Moreover, age of microfinance institutions has significance influence on return on asset at 10%. As the coefficient of the independent factors depict, all the factors have positive relation with the financial performance factors except portfolio at risk.

Table 4.2: Independent factors on financial performance of MFIs in SSA

Variable	ROA		ROE		OSS	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	2.835931	0.0192	-0.240481	0.0957	1.011655	0.0000
Size	1.49E-09**	0.0359	9.70E-11	0.3529	1.46E-10**	0.0210
Age	0.090727***	0.0867	0.008677	0.2344	0.002351	0.5800
PAR	-2.244464	0.5580	0.264863	0.3529	0.203833	0.1651
GDP	-19.11556	0.2805	2.121562	0.2032	0.745049	0.3497

(**) and (***) is significant at 5% and 10% respectively.

4.2 Analysis and Discussion

Previous section presented the regression results for the selected microfinance institutions in SSA. This part demonstrates the analysis and attempt to test the hypothesis.

4.2.1 Research Hypothesis

As it presented in chapter two, for the examination of the determinants influencing outreach and financial performance of microfinance institutions in SSA, the study adapted the four hypotheses mentioned below:

H1: the size of MFIs has significant impact on outreach and profitability.

H2: the age of MFIs has significant impact on outreach and profitability.

H3: portfolio quality has significant impact on outreach and profitability.

H4: GDP growth has significant influence on both outreach and profitability.

4.2.2 Analysis of the results

The analysis was done in accordance with theoretical basis and the outputs of regression analysis for the gathered data. This research incorporates internal and external determinants that could influence outreach and financial performance. The internal determinants contain: size of MFIs, age of MFIs, and portfolio quality. The external determinant included in the study is GDP growth.

Size

Size is the most effective and essential determinant that influences both outreach and financial performance as well as contributes the success of MFIs and these findings is consistent with [2]. The size of microfinance institutions in SSA has positive significant influence on the depth outreach at 1% which means the increase of the total assets of the microfinance institution directly increases the number of active borrowers, the more it gets the capacity to reach its clients, and vice versa. However, as the result indicates the expansion of microfinance institutions has negative significant relation with the percentage of women borrowers at 5%, as the size of microfinance institutions increase the percentage of women borrowers decreases and vice versa. Additionally, Size of microfinance institutions in SSA significantly influences the return on asset at and operational self sufficient at 5% which means the larger size of microfinance institutions is the more efficient that they are utilizing institutions' assets to generate profit as well as the larger size of microfinance institutions is the more that they can operationally be self-sufficient (their operating incomes can conceal their operating expenses) and able to endure without donors' endowment. Overall, it could be said the size of microfinance institutions in SSA is a key determinant of outreach and financial performance. Thus, this study fails to reject the hypothesis that states size has a significant impact on both outreach and financial performance of microfinance institutions.

Age

The age of MFIs in SSA have positive relation with breadth of outreach at 5% and percentage of female

borrowers at 1%. This means as the number of years that microfinance institutions operate increases, the average loan balance per borrower increases which indicates the poverty issue in SSA is extremely broad since the average loan balance rises year after year, and this is consistent with [22] that indicated even though the microfinance institutions in SSA are performing well, they are not to figure out the issue of poverty due to its broadness. Furthermore, the elder of microfinance institutions may even tend to increase the loan balance per borrower and concentrate moderately rich customers who afford to return that large amount of loan and this causes mission drift which is moving from the original goal of reaching the poor. Moreover, as the age of microfinance institutions in SSA increases the percentage of women borrowers increases which specifies that microfinance institutions in SSA empowers women through investing and this participates the economic growth and the development of the region as the women are the most vulnerable and great number in the society, thus their contribution will indeed be more beneficial for the economic growth of the region. Moreover, the age of MFIs in SSA has significant influence on return on asset of microfinance institutions in SSA, it implies that the elder of microfinance institutions is the more efficient that they are utilizing institutions' assets to generate profit. In brief, this study found that age is a part of internal factors that have significant influence on both outreach and profitability of microfinance institutions in SSA.

Portfolio Quality

The portfolio at risk more than 30 days was used to estimate the portfolio quality of microfinance institutions in SSA; portfolio quality has negative relation with significant impact on the depth outreach and percentage of female borrowers. The result is indicating that the increase of uncollectable loans decreases number of active borrowers as well as the percentage of women borrowers. Hence it could be said the portfolio quality is a determinant on outreach of microfinance institutions in SSA.

Macroeconomic Determinant

In this study, only one external determinant was used – real GDP growth – it had a direct relation with all dependant factors excluding return on asset and percentage of women borrowers. However, as the study indicates GDP has insignificant influence on outreach and performance of microfinance institutions in SSA. Implying the development in economic circumstances estimated in terms of real GDP growth had not influenced outreach and performance of microfinance institutions in SSA during the study period. Thus this study discovered that real GDP growth is not influential factor for outreach and performance of microfinance institutions in SSA. Therefore, the hypothesis states that GDP growth has a significant influence on both outreach and performance of microfinance institutions is rejected or data did not assist the outcome.

5. Conclusion

Most of studies of sub-Saharan Africa did not investigate the effect of size of microfinance institutions, age of microfinance institutions, institutional type and the GDP growth on financial and social performance of microfinance institutions. Thus, this research intends to fill this gap in order to obtain microfinance institutions that are successful on both financial and social performance in sub-Saharan Africa. As the financial and

outreach performance is highly reliant on internal (managable) determinants. Nevertheless, external (non managable) determinants also greatly influence the performance of both outreach and profitability of a given microfinance. Internal (managable) factors that are used in this research are size, age, institutional type and portfolio quality. Moreover, the external determinants that employed in this investigation are macroeconomic conditions like GDP growth and inflation rate of the nations that microfinance institutions are located in. This research investigated the internal and external factors that affect outreach and financial performance of microfinance institutions in Sub-Saharan Africa. To achieve the objective of the study, this investigation employed secondary data which was gathered from Microfinance Information eXchange (MIX) market and World Bank. Moreover, the data was gathered from 43 microfinance institutions based in sub-Saharan Africa and the determination of MFIs that have taken part in the sample was reliant on the fulfillment of data for the five period of time which is from 2013 to 2017. In addition the panel data was analyzed quantitatively through pooled regression model on EViews software. In accordance with the gathered data, descriptive statistics and pooled regression analysis was used, hence the study offered the upcoming conclusions. This investigation concludes that the major factor that influences social and financial performance of microfinance institutions in sub-Saharan Africa is the size of MFIs (i.e. the asset of the MFIs). In essence whenever the capital of microfinance institutions expand is the better social and financial performance they are. Furthermore, the age of microfinance institutions in sub-Saharan Africa significantly influences on number of active borrowers, percentage of women borrowers and return on equity. Moreover, institutional type of microfinance institutions have positive correlation with the number of active borrowers, percentage of women borrowers and operational self sufficient. As well as, the study revealed that portfolio quality of microfinance institutions in sub-Saharan Africa have negative coefficient on the average loan balance per borrower, percentage of women borrowers and return on asset which implies as the quality of the asset reduces both average loan balance per borrower, percentage of women borrowers and profitability decrease. In addition, the GDP growth of sub-Saharan Africa significantly influences the operational self sufficient of microfinance institutions.

References

- [1]. World Bank, (2015). <https://data.worldbank.org/topic/poverty?locations=ZG&view=chart>
- [2]. Hermes, N. (2018). DETERMINANTS OF THE PERFORMANCE OF MICROFINANCE INSTITUTIONS : A SYSTEMATIC REVIEW, 00(0), 1–31. <https://doi.org/10.1111/joes.12290>
- [3]. Wikipedia, (2018). Microcredit. <https://en.wikipedia.org/wiki/Microcredit>
- [4]. Farooqui, F. (2013). Role of Micro Finance Institutions in Micro Insurance, 3(5), 535–540.
- [5]. Wikipedia, (2019). Bank Rakyat. https://en.wikipedia.org/wiki/Bank_Rakyat_Indonesia
- [6]. Hasan, A. A., & Batra, G. S. (2018). Performance Analysis of Microfinance Institutions in Ethiopia, 7(4), 55–66.
- [7]. Kasali, T. A., Ahmad, S. A., & Lim, H. E. (2017). The Role of Microfinance in Poverty Alleviation : Empirical Evidence from South-West Nigeria. *Asian Social Science*, 11(21), 183–192. <https://doi.org/10.5539/ass.v11n21p183>
- [8]. Kaupparakorkeakoulu, H. (2010). Profitability and outreach of microfinance : Mission drift theory and evidence from Uganda.
- [9]. Ojo, O. (2009). Impact of Microfinance on Entrepreneurial Development: The Case of Nigeria, the

International Conference on Economics and Administration, FAA, Bucharest, 14th November 2009

- [10]. Ledgerwood, J. (1999), *Microfinance handbook: An institutional and financial perspective. Sustainable banking with the poor*. Washington, DC: World Bank.
- [11]. Ledgerwood, J. (2001), *Microfinance Handbook: An Institutional and Financial Perspective*, World Bank Publications, Washington, DC.
- [12]. Morduch, J. (2000). The Microfinance Schism, 28(4), 617–629.
- [13]. Fabian, E., & Xianzhi, K. (2013). Sustainability , Profitability and Outreach Tradeoffs : Evidences from Microfinance Institutions in East Africa, 5(8), 136–149.
- [14]. Abdulai, A., & Tewari, D. D. (2017). Trade-off between outreach and sustainability of microfinance institutions: Evidence from sub-Saharan Africa. *Enterprise Development and Microfinance*, 28(3), 162–181. <https://doi.org/10.3362/1755-1986.16-00014>
- [15]. Hermes, N., Lensink, R., & Meesters, A. (2011). Outreach and efficiency of microfinance institutions. *World Development*, 39(6), 938–948.
- [16]. Brusky, B. & Bauwin, M. (2018). The challenge of microfinance: being responsible to be sustainable, being profitable to remain responsible. *Microfinance barometere*.
- [17]. Ahlin C, Lin J and Maio M (2011) Where does microfinance flourish? Microfinance institutions' performance in macroeconomic context. *Journal of Development Economics* 95: 105–120.
- [18]. El-maksoud, S. A. (2016). Performance of Microfinance Institutions, (November).
- [19]. Bera, A. (2018). Finding the right balance: the case of STEP, India. *Microfinance baometere*.
- [20]. Bassem, B. E. N. S. (2012). Social and financial performance of microfinance institutions : Is there a trade-off ?, 4(4), 92–100. <https://doi.org/10.5897/JEIF11.129>
- [21]. Rocha, A. R., Arturo, L., & Ponce, B. (2019). The determinants of outreach and profitability in MFI ' s : a structural equation approach Factores determinantes de alcance y rentabilidad en las IMF : una aproximación con ecuaciones estructurales, 14(1), 129–146.
- [22]. Brownstein, L., Fleck, P., Shetty, R., Sorensen, J., & Vadgama, V. (2007). Pathways out of Poverty, Microfinance to Empower Sub- Saharan Africa. Discussion paper series university of Mennesota, 1-57
- [23]. Ab-Rahim, R., & Shah, S. U. M. (2019). Does NGO microfinance alleviate poverty in pakistan? A quasi-experimental approach. *International Journal of Business and Society*, 20(3), 888–907.
- [24]. Berguiga, I., Said, Y., Adair, P., Berguiga, I., Said, Y., & Adair, P. (2017). The social and financial performance of Microfinance institutions in the MENA region : Do Islamic institutions perform better ? To cite this version : HAL Id : hal-01667406.
- [25]. Kablan, S. (2012). *Microfinance Efficiency in the West African Economic and Money Union, Have reforms Promoted Sustainability or Outreach*. Germany: University Library of Munich.
- [26]. Brau, J.C. and Woller, G.m. (2004) 'microfinance: a comprehensive review of the existing literature', *Journal of Entrepreneurial Finance and Business Ventures* 9(1): 1–26.
- [27]. Hollis, A. and Sweetman, A. (1998) 'microcredit: what can we learn from the past?' *World Development* 26: 1875–91.
- [28]. Schreiner M. (2002). Aspects of outreach: a framework for discussion of the social benefits of microfinance. *Journal of International Development* 14: 591–603.
- [29]. Nyamsogoro, G. (2010). *Microfinance institutions in Tanzania: A review of growth and performance*

- trends. *The Accountant Journal*, 26 (3), 3-16.
- [30]. Gibbons, D. and meehan, J. (2000) *The Microcredit Summit's Challenge: Working Towards Institutional Financial Self-Sufficiency while Maintaining a Commitment to Serving the Poorest Families*, mirzapur, india: CASHPor Financial & technical Services.
- [31]. Otero, M. (1999). *Bringing Development Back , into Microfinance*.
- [32]. Barr, M. (2005) 'Microfinance and Financial Development', *Michigan Journal of International Law*, 26, pp. 271–296.
- [33]. Vishwakarma, R. (2015) 'Effect of Governance on the Performance of Selected Indian Microfinance Institutions: An Empirical Study', *European Journal of Business and Management*, 7(4), pp. 172–179.
- [34]. Hartarska, V. (2005). Governance and performance of microfinance institutions in central and Eastern Europe and the newly independent states. *World Development*, 33(10), 1627–1643. <https://doi.org/10.1016/j.worlddev.2005.06.001>
- [35]. Quayes, S. (2015). Outreach and performance of microfinance institutions : a panel analysis Outreach and performance of microfinance institutions : a panel analysis, (April), 37–41. <https://doi.org/10.1080/00036846.2014.1002891>
- [36]. Saad, M. (2013). Determinants of Outreach Performance of Microfinance Institutions in Pakistan, 19–23.
- [37]. Armendáriz, & Morduch, J. (2005). *The economics of microfinance*. MIT Press: Cambridge, MA.
- [38]. Kasali, T. A., Ahmad, S. A., & Lim, H. E. (2016). Microfinance and rural poverty alleviation: A reality? *International Journal of Business and Society*, 17(3), 497–510. <https://doi.org/10.33736/ijbs.538.2016>
- [39]. Wijesiri, M., Vigano, L., & Meoli, M. (2015). Efficiency of microfinance institutions in Sri Lanka: A two-stage double bootstrap DEA approach. *Economic Modelling*, 47, 74-83.
- [40]. Ayayi, & Sene. (2010). What Drives Microfinance Institution's Financial Sustainability. *The Journal of Developing Areas*, 44(1), 303-324.