THE INFLUENCE OF INSTITUTIONAL CHARACTERISTICS ON THE FINANCIAL PERFORMANCE OF LICENSED MICROFINANCE INSTITUTIONS IN KENYA

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DECLARATION

This research is my original work and has not been presented for award of degree MBA in any other university

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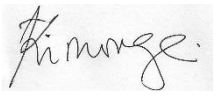
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This research has been submitted for examination with our approval as university supervisors.

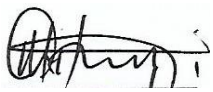
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DEDICATION

This research is devoted to my dear parents Mr. and Mrs. Kiai who educated me and enabled me to reach to this level and very grateful for their honest prayers, encouragement and finally their financial support. I also devote this research to my dear husband and child for their great patience, understanding and support.

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TABLE OF CONTENTS

CHAPTER ONE 1
INTRODUCTION 1
1.1. Background of the study 1
1.3 Statement of the problem 6
1.4 General objective 7
1.5 Specific objectives 7
1.6 Research Hypotheses 8
1.7 Significance of the study 8
1.8 Scope of the study 8
1.9 Limitations of the study 9
CHAPTER TWO 10
LITERATURE REVIEW 10
2.1 Introduction 10
2.2 Theoretical literature 10
2.3 Empirical review 14
2.4 Conceptual framework 25
CHAPTER THREE 27
RESEARCH METHODOLOGY 27
3.1 Introduction 27
3.2 Research Design 27
3.3 Target Population 27
3.4 Data collection procedure 28
3.6 Data analysis 28
3.7 Preliminary Diagnostic test 29
3.8 Operational and measurement of variables 29
3.9 Ethical considerations 29
CHAPTER FOUR 31
RESEARCH FINDINGS AND DISCUSSIONS 31
4.1 Introduction 31
4.2 Descriptive Statistical Analysis 31
4.5 Hypothesis Testing 38
4.6 Summary of Tests of Hypotheses 47

4.6 Conclusion 48
CHAPTER FIVE 49
SUMMARY, CONCLUSION, AND RECOMMENDATIONS 49
5.1 Introduction 49
5.2 Summary of the findings 49
5.3 Conclusions 51
5.4 Recommendations 52
5.5 Suggestion of further studies 53
APPENDICES 58
Appendix 1 58
List of licensed Micro-finance institutions in Kenya as at Dec 2020 58
Appendix 2 59
Data collection sheet summary (Ksh millions) 59
Appendix 3 62
University approval letter 62
Appendix 4 63
NACOSTI Permit 63

LIST OF TABLES

Table 2.1: Literature review summary and research gaps

Table 3.1: Operationalization and measurement of variables

Table 4.1: Descriptive statistics

Table 4.2: Correlation matrix

Table 4.3: Influence of institutional characteristics on financial performance

Table 4.4: Size of the firm as an independent variable

Table 4.5: Size of the firm as a moderator variable

Table 4.6: Hypothesis testing summary

LIST OF FIGURES

Figure 2.1: Conceptual Model

Figure 4.1: Trends in financial performance

Figure 4.2: Trends in liquidity

Figure 4.3: Trends in Operation efficiency

Figure 4.4: Trends in credit management practices

Figure 4.5: Trends in Firm size

ABBREVIATIONS

AEMFI	Association of Ethiopian Microfinance Institutions
CAPM	Capital Asset Pricing Model
CBK	Central Bank of Kenya
FSS	Financial self-sufficiency
GOK	Government of Kenya
KWFT	Kenya Women Finance Trust
MFI	Microfinance institutions
NACOSTI	National Commission for Science and Innovation
NGO	Non-Governmental Organization
OSS	Operational self-sufficiency
SMEP	Small and Medium Enterprises
SMES	Small and Medium Enterprises
STATA	Statistics/ Data analysis Software

OPERATIONAL DEFINITION OF TERMS

Credit Management practice: These are strategies used to gather and control credits and ensure effective collection of credits from customers to avoid loses and it safeguards loan portfolio of the companies, policies enforced when granting credits to customers.

Customer: Is an individual who purchases goods or service from a business

Financial performance: Monetary measure of firm's achievements on operations and set goal and objectives and can be compared between firms that are in the similar sector.

Financing: Process of providing Capital for business activities and investing to customers, institutions and investors to help them achieve their set goals and objectives.

Future dividend: equal to expected total revenues minus the obligated expenditures made to particular equity holders and the investment requirements.

Liquidity: Is how fast a company can convert its asset into liquid cash. The less time and asset take to be converted into cash the more liquid it is.

Low-income earners: These are persons whose household's disposable income per consumption unit is less than 60% of income of all households.

Micro-finance institutions: These are institutions that offers lending and other financial services to the low-income earners, and they are deposits taking institution (Microfinance act,2006) and they are subject to regulations by the central bank of Kenya.

SMEs: These are entities which are independent, and they meet certain restriction on employees and financial measures. They employ below 100 employees.

ABSTRACT

One of the key objectives of micro-finance institutions is to eradicate poverty achieved through financial assistance to the economy at large with lower interest rates which provide capital and economically boost activities of low-income earners therefore eradicating poverty. However, due to the structure of the financial sector in Kenya, microfinance institutions experience stiff competition from commercial banks and electronic money transfers which lead the slow development of the microfinance institutions. The aim of this research is to investigate the influence of institutional characteristics on the financial performance of licensed micro-finance institutions in Kenya which include liquidity, operational efficiency, credit management practices and the moderating variables firm size. The study drew its understanding from residual equity theory, liquidity management theory, asymmetric information theory and Capital asset pricing model (CAPM). The study embraced descriptive research design and used secondary data obtained from annual financial statements reports of the 13 licensed micro-finance institutions in Kenya. Data was analyzed using descriptive statistics and inferential statistics. Inferential statistic was used to analyze secondary data with the help of STATA. Ethical considerations were adhered to such as acquiring authorization letter from the school and relevant bodies and treating the information with much privacy and confidentiality. The study concluded that liquidity had a significant positive influence on the financial performance of microfinance institutions therefore a critical component affecting financial performance. Operational efficiency had a significant negative influence on the financial performance of microfinance institutions. Credit management had no significant influence on financial performance of licensed microfinance institutions in Kenya, while size of the firm had a significant moderating influence on the association between institutional characteristics and financial performance of licensed microfinance institutions in Kenya. The research study recommendation was that microfinance institutions should come up with strategies and policies to improve on their liquidity position since it leads to increased financial performance and set strict guideline to maintain their credit management practices in order to reduce credit risk. Microfinance institutions should also follow the proposed budget in order to make sure that operational expenses are minimized, and operational income maximized for optimal financial performance of the organization.

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CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Internationally microfinance institutions have been a means which over the years have been used for poverty eradication in most developing countries where financial services are offered to the community through savings, advise on credit management practices and other financial services. Through these practices the low-income earners are able to generate wealth (Harris, 2002). Micro-finance institutions put determinations in dealing with or combating poverty by developing the institutional financial systems capacity, through cost promotion and effective ways of lending money to poor households (Morduch, 2000). The least number of loans offered, the simple operations and lack of asset-based security are the main features that differentiate between Micro-finance institutions and other formal financial products (Seyed, 2011)

In Africa where we are the 3rd world countries, microfinance Sector has confirmed that the low-income earners are viable customers when financing need is met using the correct methods which involve that risks, unpleasant choice and agency complications are moderated (Dokulilova, Janda, & Zetek, 2009). Micro-finance institutions contribute to poverty eradication by boosting the activities of low-income earners through offering of low interest credit facilities which is dependent on availability of funds (Almas & Mukhtar, 2014). Better financial performance is the key objective of microfinance and therefore its serves as a solution to the unfortunate either abandoned or underserved by the recognized financial system.

A survey conducted by world bank (2005) indicated that big organizations depend on commercial banks and other lending institutions both regional and locally than small firms and this bring about the influence of liquidity and size of the micro-finance institutions. In the Kenyan economy the micro-finance institutions play a vital part by offering financial services and solutions to various stakeholders where large organization and business can easily obtain financing from financial institution in order to fund their business daily operations (Ledgerwood, 2007). The progress of micro-finance institutions in Kenya have been driven by constraints in accessing capital due to lack of collateral in the banks and also due to interest imposed by Government to the banks which have set strict and more requirement for loan application process therefore making it hard for

customers to access loans. The interest rate capping has made banks to be unwilling to lend and in turn the poorer and the riskier borrowers are the one that suffers most because banks are not willing to lend at low lending rates, therefore leading to the micro-finance institutions growth" John Ashbourne, Senior emerging market economist at capital economist.

1.2 Institutional characteristics

Institutional characteristics refers to variables enterprise that plays an important role in the business success or failures. According to Nekhili and Gatfaoui (2013), institutional characteristics are attributes of a firm. Every business has different but specific and unique attributes. Each institutional characteristics has specific objectives that influence the success and failures associated to financial performance of any organization. Institutional characteristics in this study include Liquidity, operational efficiency, credit management practices and firm size that influence the financial performance of microfinance institutions in Kenya.

1.2.1 Liquidity

Amount of capital that is readily accessible for spending and investing is called liquidity, thus capital which is used for investment and spending is brought about by liquidity of a firm through deposits which is essentially money saved up by customers that can be recollected at any point (Dang, 2011). Liquidity is the main element of financial performance in a firm. The capability of any organization to manage its financial responsibilities as and when they arise without distracting the usual operations of the organization is determined by liquidity. In case of loss of asset in the organization, capital reserve ensures that a firm is able to absorb the loses or cover the loss while maintaining financial sustainability of the organization (Adhikary, 2014). When micro-finance is not capable to finance its cash requirements and payments in a cost-efficient manner it leads to liquidity risk (Idama *et al*. 2014).

According to Brom (2009) micro-finance institutions with inadequate liquidity cannot be able to deal with future uncertainty, unable to meet refinancing, unable to meet growth projection and increased portfolio at risk because there would be a deficit which is brought about by a positive gap between asset and liabilities. According to Idama *et al.* (2014) cash that is generated from repayment of loans and saving deposits and cash that goes out in micro-finance institutions should be prepared and reconciled on a daily basis to avoid /reduce liquidity risk. Two main methods are used to measure liquidity which are

liquidity gap and liquidity ratios. The variance between asset and liabilities both present and the future called liquidity gap. Liquidity ratios are obtained from statement of financial position ratios such as quick ratio, current ratio etc. In this research liquidity position would be measured using current ratio. Therefore, a financial institution that is well-capitalized provides signal of better financial performance to the market in the presence of asymmetric information (Kahiga, 2014).

1.2.2 Operation efficiency

Operation efficiency is where the microfinance institution delivers services with minimum cost (Adhikary, 2014). As the key internal factor Operational efficiency defines the financial performance of the firm. Operation efficiency takes into account the cost of input /output. In order to signal the financial performance that show how well MFIs is streamlining its operation (Ongre & Gemechu, 2013). Efficiency is explained in terms of expenses when MFIs should ensure efficiency in offering credit where losses and bad debt occurs. The most major risk factor for sustainable microfinance is inefficiency as great number of institution are far from efficiency required to cover cost, therefore operation efficiency takes into account the cost /income of any entity. In order for the management of any institutions to utilize its resources efficiently and maximize on income then process on reducing operational costs should be implemented. Operational efficiency can be measured by financial ratios. Operation efficiency is measured using cost income ratio, therefore it should ensure lower cost income ratio which indicate operating cost are lower than operating income rate rather than higher cost income ratio (Dufera, 2010). The lower ratio also indicates more profitability for microfinance institutions.

1.2.3 Credit management practices

Credit Management practice are approaches used to collect and regulate credit payment from clienteles to avoid loses and ensures effective management of credit (Myers & Berkley, 2013). The most essential activities in a micro-finance which cannot be neglected is credit management practice as long as the entity is involved in credit line of business. It is a mechanism that ensures customers would pay for the service/product offered. According to Nelson (2002) credit management is the way enables micro-finance institutions oversee its credit sales in order to create greater opportunities for making higher returns. Credit management includes credit analysis, credit assessment, credit scoring and

credit reports and also it's a requirement for any industry involved in line of credit because to completely eliminate credit risk default is impossible. When it is done right and the debt collection policy are adhered such as collection enforcement, guarantor payment and continuous monitoring of loans and default the customers pays on time and bad debts reduces.

Microfinance institutions failure is determined by the quality of credit decisions and debt collection policy which lead to the quality of risky assets, therefore the success or failure of the micro-finance institutions is influenced by credit management practices and it is the top indicator of the quality of MFI credit portfolio (Nzotta, 2004) Bad debts experienced by defaulters in the Microfinance institutions can be reduced by better understanding of the financial strength of customers, credit account history, setting up the right credit repayment period and better payment methods. Therefore, credit management safeguards portfolio of the companies by strictly enforcing the policies and practices when granting credit facilities to customers to ensure effective repayments and reducing chances of non-repayments. In order to determine the percentage of bad debt, net bad debt ratio is used.

1.2.4 Size of the firm

Total asset is used to measure firm size of any kind of the organization. Size of the firm also determined the kind of relationship microfinance was enjoying outside and within its operating environment and this influenced its profitability level. Smaller microfinance institutions struggle to meet their operational costs with larger microfinance providers (Muriu 2011). Woodward (2011) concluded that the bigger the size of the firm in terms of supervision and management of the group or changes of set goal and objectives attainment is high the higher the profitability. Larger microfinance has greater market power and thus better financial performance in terms of profitability.

1.2.5 Financial performance

The whole financial situation of any firm for a specified period is measured by financial performance where the result obtained can be used to compare businesses in the same industry (Angola, 2014). It is the measure of firm's achievements on the set goal, objectives, policies and operations stated in monetary terms. Under microfinance institution, financial performance enables microfinance institution to be in day-to-day operations in accordance with microfinance objectives without donor support (Thapa, 2008). According to the study financial performance of microfinance institutions will be

attributed by liquidity, operational efficiency and credit management practices and size of the firm. Microfinance institution should strive to maximize performance in different areas either economic or social (Jorgensen, 2011) because the main aim of each and every microfinance institution is to be in operation that are profitable for improvement on sustainable growth and stability (Angola, 2014). Shareholders rewards for their investment is made possible by good financial performance (Ongore & Gemechu, 2013). According to (Baraza, 2014) in the view of shareholders a financial performance of an institution is measured by how the position of shareholders is made better at the end of a period than how they were at the start by using ratio from financial statements, for example balance sheet and income statements. According to Yensew (2014) Earning per share, return on asset (ROA), return on equity (ROE) or any generally accepted market rate ratio are used to measure financial performance. Return on asset (ROA) measures the efficiency with which entities manages its asset in order to generate profit hence very important financial performance ratio (Jorgensen ,2011).

1.2.6. Microfinance institution in Kenya

Microfinance bank/institutions are defined as the deposits taking institution according to (Microfinance Act, 2006) registered under microfinance Act (2006) though they aren't fully registered banks but regulated by the central bank of Kenya, and they depend on accumulated deposits from customers to raise funds for their independent loans (Alastair, 2015) and providing credit to customers. Therefore, to meet financial services of the unsatisfied needs of clients a variety of microfinance institutions have been introduced in the market in where some concentrate only on providing credit, others on deposit and credit facilities and others concentrate on deposit collection only (GOK, 2006). Through offering loan and technical assistance in businesses to the low-income community, Microfinance plays an important role in the economic growth of not only Kenya but many developing countries (Hartungi, 2007).

Microfinance institutions offer financial services to the poor communities and small medium enterprises business in order to boosting their livelihoods and economic activities. This contributes to poverty eradication which lead to the growth of the economy at large (Omino, 2005). In the recent past, micro-finance institutions have been well-known as either saving and credit–cooperative societies or NGO Framework in order to provide financial advice, services and credit to poor homes and SMEs in the urban and rural areas of Kenya. Over the years' microfinance institutions has been operating without a proper

policy and legal framework and till now it is not Cleary stated, therefore there is need to focus more on these institutions that offers saving, credit and financial services to the SMEs and the low-income earners in order to enhance their effectiveness in operations (Omino, 2005)

Micro-finance institutions in Kenya are about 251 with 13 being licensed as at 31 December 2020. Examples include, Caritas microfinance bank limited, (KWFT) Kenya women finance trust, Faulu Kenya, Rafiki microfinance bank, Small and Medium Enterprise Programme (SMEP), among others (Njenje & Bengi, 2016). The main purpose of micro-finance institutions is to deliver services of financial nature to small and medium enterprises (SMEs) and low incomes. Micro-finance institutions loans are very important to the society because they generate income for the poor people considering the low interest rate thus ensuring business operate smoothly. Thus, Micro-finance institutions' role is improving livelihood of many people especially those who live in less developed areas and the low-income earners. Therefore, the main characteristics that lead to financial performance of microfinance according to this study is liquidity, credit management practices and size of the microfinance which greatly affect the daily operations and the growth of microfinance.

1.3 Statement of the problem

Microfinance institutions play a very important part in the Kenyan economy that is eradication of poverty through improved and easy access to financial services. Therefore, the welfare of the low-income earners can only be sustained through accomplishing good financial performance in the micro-finance institutions. However, micro-finance institutions face great challenge which have defenseless affected their continued existence and financial performance despite their great support to the country economy, such threat includes competition from commercial banks (Addisalem, 2015). Therefore, financial performance of microfinance institutions has been the attention of researchers in the recent days. The experienced competition among commercial banks and telecommunication money transfer platform has led to micro-finance institutions change in market share and profitability such as MPESA (Okombo, 2015), therefore these bring innovation and the gap which can be closed by increase in liquidity which can be used to fund and facilitate the process according to the size of the micro-finance institutions. Most of the previous studies under this research addressed the characteristics that had an influence on the financial

performance of microfinance institutions but did not indicate the moderating variable to bring out the relationship between the independent variable and dependent. Therefore, the study seeks to close the gap by introducing the moderating variable, which researchers has not expounded on it.

Numerous scholars have studied on the influence of characteristic that affect the micro-finance institutions financial performance in Kenya. Biwott and Muturi (2014) studied on the determining factors of microfinance institutions financial performance in Kenya where they dedicated their attention on micro-finance institutions in Nakuru Town and established that capital adequacy, number of borrowers and operations efficiency had the ultimate effect on the performance of microfinance institution. According to Kihoro, Kimando and Njogu (2012) on their study that focused on influencing factors on financial sustainability of the microfinance institutions in Murang'a Municipality proved, clients attended, financial Regulations and coverage and credit given out extremely affected the financial sustainability of microfinance institutions.

There are various number of characteristics that had an impact microfinance institutions financial performance, some were substantial in one economy or applicable to the micro-finance institutions and others were not, Cull et al (2007). Most of the studies highlighted however studied on specific geographical areas in Kenya, thus bringing the concept of studying the influence of institutional characteristics to licensed microfinance institutions financial performance in Kenya. Numeral studies reviewed used descriptive and multiple regression analysis which the researcher used; however, the researcher would integrate a moderating variable as the fourth variables in the multiple regression analysis which previous researchers did not address in their studies. Therefore, the study would enable the researchers to get a perfect picture on the moderating effect between the independent and dependent variable.

1.4 General objective

To examine the influence of institutional characteristics on the Financial Performance of licensed microfinance institutions in Kenya

1.5 Specific objectives

1. To investigate the influence of liquidity to Financial Performance of licensed micro-finance institutions in Kenya.
2. To examine the influence of operational efficiency to Financial Performance of licensed microfinance institutions in Kenya.

3. To analyze the influence of credit management practices to Financial Performance of licensed microfinance institutions in Kenya.

4. To examine the moderating influence of firm size on the relationship between licensed microfinance institutions characteristics to Financial Performance in Kenya

1.6 Research Hypotheses

H_{01}: Liquidity has no significant influence on the financial performance of licensed microfinance institutions in Kenya.

H_{02}: Operational efficiency has no significant influence on the financial performance of licensed microfinance institutions in Kenya.

H_{03}: A Credit management practice has no significant influence on the financial performance of licensed microfinance Institutions in Kenya.

H_{04}: Firm size has no significant influence on the relationship between institutional characteristics and financial performance of licensed microfinance institutions in Kenya.

1.7 Significance of the study

The finding of the research study was to be of significant to stakeholders, scholars and academicians in order to supplement studies in areas that this research found unique. The study was also to be of great significance to researchers because they can use the empirical studies found for their research studies because the current studies enhanced the existing knowledge in the finance field and close the gap that existed in the study of institutional characteristics. Therefore, it was to bring new contributions to advance the policies and practice and the current information to the financial performance of institutional characteristics of microfinance institutions. The current research study provided a complete framework of looking at the changes arising in micro-finance institutional characteristics and financial performance from a theoretical perspective. The finding of the study research helped those institutions under study and other similar institutions, and it enabled the policy makers to make better policies.

1.8 Scope of the study

The research study done considered the impact of all micro-finance institutions in the economy of Kenya on financial performance. Detailed study of the 13 licensed micro-finance institutions or deposit taking microfinance institution in Kenya was done. The

secondary data was obtained from the CBK's website under bank supervision audited reports. The period under study was 5 years from 2016-2020. The scope of the study was restricted within the stated objectives which indicated out the variables that were studied.

1.9 Limitations of the study

Encountered restrictions in the study process was scarce resources in terms of time and money that might have led slow completion and even hindrance in the completion of the research study. This limitation was mitigated by the researcher through taking some time off from day-to-day activities to create time to do the research and used her savings and borrowed finances from other sources such as close family members. Another limitation was the accuracy of data gathered because the secondary data was consolidated by the microfinance and their reliability of the data was questionable. The process of sorting out data and coming up with the required figures and accurate information required was time consuming, where the researcher made sure that proper time and concentration was allocated to get true values. In order to guarantee that the information gathered and analyzed was treated with discretion and was only used for academic purposes the researcher would acquire a permit from NACOSTI.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review provides an evaluation of past studies in form of theories and the empirical review on the influence of institutions characteristics on micro-finance institutions financial performance. It also gives a clear picture on the variables in the conceptual framework and summary.

2.2 Theoretical literature

The following theories: Residual Equity Theory, Asymmetric information Theory and the capital asset pricing Model served as a basis to the proposed topic.

2.2.1 Residual Equity theory

Hendricken (1982) developed residual equity theory and it analyzes the change in asset valuation, Retained earnings, income and interest of other equity holders. It states that a change in the value of asset, change in reserve, change in profits and stakeholder's interests are indicated in the lasting equity of common stakeholders. Precise or specific equity includes creditors entitlements and the equities of preferred shareholders. The statement of financial position equation is Asset minus specific equities equal Residual equity. Residual equity approach main objective is to offer trusted financial reporting as a good financial management practice. But in a going concern situation, the current value of common stocks is primarily dependent upon the anticipation of future dividends. The financial situation depends on the expected income less the expenses or any obligations in terms of payments and any return from investment.

Financial reports are not prepared due on possible wound up or liquidation, thus information given out concerning the lasting equity is supposed to be handy in forecasting impending financial status to common stockholders. Therefore, Residual equity theory fits in the performance of micro-finance institutions because it's an all equity firm simply because it depends on member's savings, surplus, loan book and revenue reserve Fund. Reserve fund which is usually 20% of the gross surplus is used to finance any development of the firm thus growth in the micro-finance institutions. The main idea in this theory is to equip the management of the organization such as the micro-finance institutions with adequate information to be able to make informed decisions concerning the investment because future dividends of the company depend on its current situation of the value of a company's stock. Future dividend equal to estimated total revenues minus the obligated

expenditures made to the equity holders and the investment requirements. The theory is significant to this study and is linked to the operational efficiency variable as it points out the financial performance of the company from time to time and it indicates to the management on the financial performance and decisions to make. Revenue of any microfinance institution is derived from net operational income minus operational expenses in order to come up with surplus or dividends for the stakeholders after all deductions are made. Therefore, microfinance institutions should maintain lower operational costs which is indicated by lower cost income ratio for better financial profitability.

2.2.2 Asymmetric Information Theory

In the 1970s, Akerlof was the first to explain this theory. According to (Robinson, 2001), this theory states that's banks cannot be able differentiate between applicants who have low risk and high risk when giving out credit. It is thought that informal lenders can be able to access more useful information about applicants who are applying for credits than formal sector thus unable to compete successfully. This theory also put into consideration that it was not easy for banks to operate in profitability in developing countries and at the same time to attain widespread outreach. Economists, bankers, financial analysts, donors and government decision makers would find it difficult to promote commercial banks into micro credit markets on the basis of this theory. Therefore, it very critical for credit adequacy of financial institution to be established, and to follow the loan process which include the following five steps Pre-Loan Application interview, loan application, loan appraisal, loan approval, loan disbursal and post disbursement management when giving out credits to customers in order to avoid a lot of customers defaulting and as it known the main source of profit in MFI is loan book. Therefore, enough information on customers who are applying for Credits should be presented in order to avoid loss of income and to bring about growth in micro-finance institutions financial performance in Kenya.

The theory is linked to credit management practices as it enables the micro-finance institutions to develop various methods in implementing internal appraisal process such as informed approach. Micro-finance institutions use informed approach because it's simple and inexpensive in order to determine risk and quality of its customer's subject to the target group or the geographical location of the institution. Therefore, this theory is very useful in determining the credit worthiness of a customer which helps the managements or the credit management to make informed decisions in order to avoid bad debts on loans which

have great effect to the microfinance institutions financial performance. From this theory the conclusion can be, Management or credit team of any Micro-finance institutions can use the client evaluation concepts known as the 5C's of credit appraisal which are Character, Capacity, Collateral, Capital and Condition (Edward, 1997) in order to increase on the credit management practices and to ensure that bad loans are reduced .From the above statement ,if bad loans are reduced then the net bad debt ratio which a measure of credit management practices would significantly reduce hence improved financial performance.

2.2.3 Liability Management Theory

Diamond and Rajan (2001) noted that liability management theory concentration is on banks giving out liabilities in order to fulfill its liquidity wants where liquidity is closely connected with liabilities and in this study its linked with liquidity variable. Liquidity risk control aspect increases of the level of liquid asset and the management of deposit taking institutions such as microfinance institutions. Liquid asset and liability management are the most significant risk management measures in microfinance institutions and banks where it is the most essential tool for decision making process that maximizes stakeholders value. In order to prepare for negative effect and to remain in the business for long it is very important to follow up on external factors of asset and liability management in the market.

Management of total balance sheet or financial position statement is called asset liability management which involves decision making on asset, liability structure to capitalize on the interest earning of the perceived risk. The most important objectives of the asset liability management are to manage risk where the uncertainty of the proceeds is reduced in the near future and the institution monetary value is secured in the long run, therefore, liability management theory function consists of the unpredictability of the proceeds, capital adequacy, disposable interest margin, liquidity risk and a reasonable balance between risk and profitability growth (Diamond & Rajan, 2001).

This theory argues that an appropriate managed asset liability, profitability, liquidity and solvency of banks ensures microfinance institutions manage and reduce risk. These risks include: credit risk, liquidity risk and interest rate risk. The liabilities of the bank have different types of costs which depend on maturity pattern. The liability of a microfinance has different categories of cost which consist of different classifications with fluctuating earnings depending on the maturity and elements of risks. This theory is very significant in this study because it identifies the risks associated with low liquidity of the

microfinance institutions. To avoid such risk microfinance institutions should increase its liquidity level to be able to meet it daily obligations and increase on their investment level. Increase in liquidity level leads to increase in profitability which maximizes stakeholder's wealth. The research study adopted current ratio as a measure of liquidity and not liquidity risk

2.2.4 Capital Asset Pricing Model

This theory was created by Treynor, J. (1962), Sharpe, W. F. (1964), Lintner, J. (1965) and Massion, J. (1966) independently. The capital asset pricing model describes connection between systematic risk and expected return of the asset particular the market risk premium is known. Purchasing a common stock and holding it for an agreed specified period earns the investor a return which is equivalent to the cash dividends received plus the gain or minus loss of capital during the holding period of dividend by the acquisition price of the stock (Wu, 2006).

Actual returns may be at variance from expected returns due to fluctuating stock prices (Nyambura, *et al*., 2005) thus affecting the financial performance of financial institution. As much as the investment are diversified, it's not easy to get rid of all the risk. Therefore, the investor deserves a return that reward them for taking the risk. Through stable investment return investors are able to invest more in a financial institution especially micro-finance institutions which lead to increased financial performance and may aggregate organization productivity. Due to the CAPM assumption that there are many small investors such that no individual investor possesses enough wealth to sway the market therefore every investors or any institution has equal opportunity in earning interest and also is a risk-free asset where there is no restriction on borrowing and lending at the risk free rate and therefore one is sure of interest earned at the end of maturity period and finally there is access of information to all that need it therefore investors and institutions are able to make solid decisions on whether to invest or not in order to yield interest which in micro-finance institutions sectors is known as surplus which is essentially investment from Members savings, thus growth in financial performance.

This study finds the Capital asset pricing model very useful as it is linked to liquidity because the MFI are informed on the risk involved in investing their asset therefore are able to make solid decision on whether to invest or not. As stated in the research study growth in interest is one of the key contributors of micro-finance institutions better financial performance, therefore CAPM give the management the confidence of the return of their

asset because it assumes that the asset is a risk-free asset where there is no restriction on borrowing and lending. The earning of interest would give out a signal on whether the Micro-finance institutions institutional asset are being invested in a more productive way for better financial performance.

2.3 Empirical review

Ngumo *et al*. (2020) studied on the determinants of financial performance of microfinance institutions in Kenya. Descriptive research design was implemented, and secondary information was attained from 7 micro-finance institutions from 2011-2015. Correlation and regression analysis analyzed the collected data. Finding of the study stated that capital adequacy, firm size and operational efficiency showed a positive relationship with micro-finance institutions financial performance in Kenya. Liquidity risk, credit risk showed a negative connection with financial performance of micro-finance bank in Kenya. Therefore, this concluded that there was no effect of liquidity risk and on the financial performance of microfinance institutions bank. The set central bank of Kenya lowest liquidity ratio requirement enables microfinance institutions to ensure low credit risk levels. Conclusion of the study indicated existent of a direct association with operation efficiency, firm size, capital adequacy and financial performance of microfinance bank in Kenya.

Kiptala and Simuyu (2019) studied the effect of financial indicators on the financial performance of microfinance institutions banks in Kenya. The following indicators which included asset quality, capital adequacy, financial sustainability, investment growth and liquidity affected microfinance institutions financial performance in Kenya. Causal research design was used in the study. The study targeted the (13) thirteen licensed deposit taking microfinance institutions banks which are controlled by the central bank of Kenya. Due to the small number of licensed microfinance institutions sampling was not done but the study adopted census approach. The researcher secondary data was obtained from the CBK's banks supervision audited annual reports where 6-year period from 2012 to 2017 was under observation. Asset quality, capital adequacy, financial sustainability, investment growth and liquidity all were concluded to be the financial soundness indicators by explaining 68.43% disparity in performance of licensed microfinance institutions banks in Kenya.

Capital adequacy had a significant positive effect with performance of microfinance institutions. The study also substantiated asset quality had a significant negative effect with financial performance of microfinance institutions. It was proven that liquidity had a significant positive association with performance of the microfinance institutions. Loan delinquency which was used as a measure to financial Sustainability cover had a significant negative connection with the performance of microfinance institutions, while investment growth had a significant positive association with financial performance of microfinance institutions. Conclusion of the research established that asset quality, capital adequacy, financial sustainability, investment growth and liquidity, impacts financial performance of the licensed microfinance institutions in Kenya. Diversification of investment was highly recommended because it allows the microfinance institutions or banks to develop their commercial business while increasing asset worth of the organization.

Naz *et al.* (2019) studied on the determinants of sustainability of microfinance institutions in Pakistan. The study aimed to examine the determinants affecting the financial performance of the microfinance institutions such as profitability and sustainability in Pakistan and also to investigate if attaining profitability and sustainability is a contradictory goal in serving the poorer sections. 29 microfinance institutions from the period 2008-2014 was used as target population under observation. The paper utilized unbalanced panel data of the 29 microfinance institutions which was obtained from the market mix. The study decided that size of the firm, cost efficiency, portfolio at risk, average loan size and income on loan portfolio are the leading factors influencing pakistan microfinance institutions financial performance. The study also resolved that size of the firm increased financial sustainability and profitability of microfinance institutions in Pakistan. The study established that return on asset (ROA) had a positive and significant relationship of (0.006) with average loan size. These results showed that Pakistan microfinance institutions are very eager to attain profitability thus increasing the loan size.

Therefore, the study concluded that Pakistan should focus and offer their services to the poor borrowers because it gains lower cost and aids Pakistan microfinance institutions to fulfill their primary object of eradication of poverty to the poor households. According to the study, Pakistan microfinance institutions are not actually cost-efficient which in turn affect their financial sustainability and profitability. Therefore, Pakistan microfinance institutions should come up with cost reduction strategies in order to increase profitability. The study also concluded that efficient loan portfolio control and management was needed therefore loans should be offered after a thorough scrutiny and examination of

the clients to ensure loan repayment security and also to ensure that standardized loan policies are strictly adhered to. The policies should not be relaxed for any borrower to guarantee and increase financial sustainability of Pakistan microfinance institutions. Cost per borrower and operating expenses /loan portfolio was found to have an advance effect on the sustainability of Pakistans' Microfinance institutions

Odowa and Ali (2019) studied on the determinants of financial sustainability of microfinance institutions in Ethiopia. The study aimed to investigate on factors affecting operational self-sufficiency (OSS) and financial self-sufficiency (FSS) of microfinance institutions in Ethiopia. Secondary data was used which was obtained from all microfinance institutions in Ethiopia which are members of Association of Ethiopia microfinance institutions (AEMFI), which is a non-profit, non-governmental association of the Ethiopia microfinance institutions. The population used in the research study was 20microfiance institutions operating in Ethiopia whose performance report was produced by the association of Ethiopia microfinance institutions for the period (2009-2016). the independent variables were average loan per borrower, percentage of women borrowers, cost per borrower, debt to equity ratio, age and size while the dependent variable were operational self-sufficiency and financial self-sufficiency. Descriptive statistics was adopted in the study. Correlation analysis of explanatory variables and panel data regression model was also incorporated in the study.

The study concluded that microfinance institutions operational self-sufficiency is positively and significantly affected by average loan balance per borrower of the microfinance institutions. According to the study the financial self-sufficient was significant and positive swayed by the size and age of the microfinance institutions. Cost per borrower had a negative and significant impact on both operational self-sufficient and financial self- sufficient, the portfolio at risk (Par)>30 had a negative and significant influence on financial self-sufficient, therefore the loan balance, efficiency, portfolio quality size and age of microfinance institutions are the contributing factors o the financial sustainability of microfinance institutions in Ethiopia. The study recommends Ethiopian microfinance institutions to enhance their economies of scale which in turn would lead to increased efficiency the microfinance institutions. Another recommendation was that microfinance institutions should develop mechanism to reduce cost per borrower as well as portfolio at risk to enhance their level of financial sustainability.

Wafula (2016) studied on the determinants of microfinance institutions financial sustainability in Kenya where the study established that liquidity, operational expenses level, profitability and leverage influences financial sustainability of microfinance institutions. Descriptive survey research was conducted throughout the study. The target population was of all the 44 microfinance institutions obtained from the association of microfinance institution of Kenya where a census technique was used due to the small number of the population. To establish the relationship between determinants of financial stability of microfinance in Kenya linear regression was adopted in the study. Data analysis was conducted with the help of Statistical package for social sciences (SPSS). Finding of the study were that liquidity, capital adequacy and leverage are associated significantly with financial sustainability while financial performance is not. According to the study it was decided that liquidity was significantly and positively associated with financial sustainability thus it means that financial sustainability of microfinance institutions is totally dependent on the level of institutions liquidity. The higher the capital amount that is available for investment and spending the more the microfinance institutions become stable financially and hence increase in efficiency of operations.

Another conclusion of the study was that financial performance was positively but insignificantly associated with financial sustainability which concluded of the existed a positive relationship between financial performance and financial sustainability. According to the study, improved microfinance institutions' financial performance led to improved financial sustainability hence growth in assets and also increased in profits would lead to increased concentration which in turn lead to financial sustainability. The discovery of the study also concluded of existence of a negative association between capital adequacy with financial sustainability which simply concludes that higher debt leads higher debt to equity ratio which affect the amount of available equity for investment purposes. The study also concluded that leverage had negative relationship with financial sustainability which means that poor management of debts funds would relay affect the sustainability on the microfinance institutions.

Angola (2014) study determined the influence of credit policy to micro-finance institutions financial performance in Kenya. Objectives of the study was to determine the association between variables under observation where it adopted survey design and regression analysis. The researcher used frequency distribution tables and percentage to examine the institutional credit terms, financial performance, credit approach, challenges

faced in practicing credit policy, organizational membership and institutional branch coverage. The study discovered a positive connection between, credit risk controls, credit policy, credit appraisal and approval and post disbursement Management and financial performance. Financial performance can only be improved when credit appraisal and credit policy procedures on risk management are competent.

Findings of the study also demonstrated that credit risk controls, client appraisal and collection policy all had an effect on the financial performance of microfinance institutions. The study established that a unit increase in financial performance and increase in credit appraisal leads to improvement of financial performance, therefore more allocation of resources needed to be set aside for the improvement of collection policy. The study concludes that microfinance institutions are involved in decision making and management of credit policy by coming up with credit risk decisions through a standardized procedural process, documentation, observation of credit rating and terms and making a follow up on loan portfolio. The study brought out the aspect that financial performance is related to customer retention and improved collection policy. The study recommends that micro-finance institutions should develop policies that ensure effective debt recovery.

Baraza (2014) investigated whether the funding structure has an effect of financial performance to micro-finance institutions in Kenya. Study Purpose was to determine the association between funding structure and financial performance of microfinance institutions in Kenya. Researcher embraced descriptive research design to carry out the research and used secondary data in the research study was obtained from the market mix and annual reports of the sampled micro-finance institutions used where the study was done over a period of 5years (2009-2013). The conclusion of the research study was that a negative correlation between debt-to-equity ratio and financial performance, thus a firm that employ more debt in financing its operations register poor financial performance. The target population was 56 microfinance institutions registered and that are operating in Kenya. From the 56 registered microfinance institutions a sample of 25 was obtained from this population as representative of the whole population. Statistical package for social sciences (SPSS) was used to analyze data and the findings presented using figures and tables.

Multiple correlation analysis was used to determine the connection between variables under study. According to the study funding structure implemented by microfinance institutions affected financial performance of the organization. The finding

of the study showed that the return on asset for the 25 sampled microfinance institutions had a mean average of 28.51% during the period under study. This study also indicated that a microfinance institution that receives more deposits, the higher the financial performance hence a positive correlation between deposits to asset ratio and financial performance, therefore microfinance that accept deposits would perform financially better than those microfinances that do not accept. The study also concluded that microfinance with high deposit to equity ratio perform better than those with low deposit to equity ratio. According to the finding of the study loan portfolio had a very strong positive correlation with financial performance where loan portfolio small increase causes an increase to the financial performance because according to the study microfinance institutions with high loan portfolio were found to perform better

Kisengo (2014) examined the effect of organization features on the financial performance of Micro-finance institutions in Kenya, in Nakuru. The aim of the study was to analyze the effect of the firm characteristics on the performance of microfinance institutions in Kenya. Census study was adopted on the 48 institutions offering microfinance services and which are registered with (AMFI) association of microfinance institutions that are operating in Nakuru town. Descriptive statistics analyzed and summarized data on firm characteristics and organizational performance. Pearson's product moment correlation coefficient was used to determine the relationship between firm characteristics and performance. The effect of firm characteristics was determined by multiple regression analysis. The research study embraced correlation research design to observe the connection between firm characteristics and micro-finance institutions performance. Primary data was gathered using questionnaire which was enhanced with secondary data. The outcomes of the study were firm characteristic had a significant positive effect on the performance of micro-finance institutions which was determined by regression analysis, where structure related characteristics had the greatest effect. Microfinance with high capital structure performed better than those with low capital. Related market characteristics had a moderate effect while capital related had a weak influence on the financial performance of microfinance institutions. Recommendations of the study was that experts need to seriously look in to firm characteristics and further research should be adopted.

Mwangi (2014) analyzed the liquidity and deposits taking microfinance institutions financial performance in Kenya. Researcher used only secondary data that was retrieved from published audited annual financial reports from the association of microfinance institution report (AMFI) together with Central bank of Kenya supervision audited annual reports for 5 years (2008-2013). Inferential statistics was used to expound on the key features of quantitative data collected. Linear and correlation regression analysis analyzed the data. Cash and cash equivalent divided by aggregate average assets measured liquidity of the microfinance institutions while financial performance was measured using return on asset. According to the result it concluded that positive association between liquidity and financial performance was identified where liquidity gave 91% of the discrepancy in the financial performance. The conclusion of the research study was to identify on efforts to encourage the microfinance institutions increase its financial performance which in return lead to increase in operations efficiency in the microfinance sector

Gibson (2012) studied the determinants of microfinance institutions operational sustainability in Kenya. Factors that affected operational sustainability were found to be operational expense/loan portfolio and capital/asset ratio. The research study discovered the factors that determine micro-finance institutional operational sustainability. The study applied descriptive research design and a target population of 30 microfinance institutions listed in the association of microfinance institutions (AMFI) in Kenya was the basis of the study. Audited financial statements of the targeted MFIs in Kenya was used to gather secondary data. The data which was gathered from the audited financial reports included capital structure variables and comprised of debt, equity, total asset etc.

Analyzation of data collected was done using multiple regression analysis. Study concluded that the financial data of microfinance institutions from Kenya suggests that operating expenses, loan portfolio, capital asset ratio and portfolio at risk>30 are the main factors which affect sustainability of microfinance institutions. The study incorporated the model of operational self-sufficient and financial index which is comprehensive for microfinance institutions. Microfinance in Kenya can quantify the level of operational and financial sustainability with the help of this model. The study also found that the model can be used to create a sustainability index for various countries and help in identifying strong and weak areas of the sector which can also be considered as a step in the process of emergence of the microfinance standards.

2.3.1 Summary and Research Gap

From the above studies we can conclude that financial performance revolves around the following five broad categories, liquidity, profitability, repayment capacity and operational efficiency which arises from the discussion on micro-finance institutions characteristics to financial performance in Kenya. Micro-finance institutions strive to bring financial control to individuals who need it most and those who are already to invest through mobilization of saving and lastly giving out credits. It is evident from the literature review that most microfinance institutions fully depend on the liquidity to smoothen their operations, therefore a significant positive influence between liquidity and financial performance of microfinance institutions in Kenya was concluded thus microfinance institutions are able to run their operations in an efficient manner (Mwangi (2014); Wafula (2016); Kiptala and Simuyu (2019). Credit management practices showed a positive influence with financial performance of licensed microfinance institutions which was all about proper decision making on credit policies to avoid credit risk which has a negative relationship with microfinance institutions in Kenya (Angola, 2014). According to Ngumo *et al*. (2020), firm size and operational efficiency showed a positive relationship with financial performance of microfinance banks in Kenya.

From the literature reviewed, most of the researchers had different opinions on how firm characteristics affect financial performance where a substantial relationship was established between the independent and dependent variables. However, some researchers did not point out a direct relationship between moderating variable and its influence on financial performance. Thus, this study seeks to address these knowledge gaps. Most of the reviewed literature addressed different effects of Micro-finance institutions characteristics on certain region therefore this study intends to close the gap by studying institutions characteristics influence of the financial performance of licensed micro-finance institutions on the selected variables: Liquidity, Operational efficiency, Credit management practices and size of the firm as moderating variable between licensed micro-finance institutions characteristics and financial performance in Kenya.

Table 2.1: Summary of the studies

Author and year	Study	Objectives	Findings	Research (gap)s
Ngumo *et al*. (2020)	Microfinance institutions determinants of financial performance of microfinance institutions banks in Kenya.	Examine the determinants of microfinance bank financial performance.	The finding found there existed a positive relationship between capital adequacy, operational efficiency, firm size and microfinance institutions financial performance in Kenya.	The researcher introduced new variables and firm size was moderate the effect between institutional characteristic and financial performance
Kiptala and Simuyu (2019)	The effect of financial indicators on the financial performance of microfinance institutions banks in Kenya.	To determine the effect of, asset quality, capital, adequacy, financial continuity, liquidity and investment growth of microfinance institutions financial performance.	The study established that, asset quality, capital adequacy liquidity, financial sustainability and investment growth influences financial performance of the deposit taking microfinance institutions	The researcher introduced new variable that affect the microfinance institutions and introduce firm size as a moderating variable.
Naz F, *et al.* (2019)	The determinants of microfinance institutions financial sustainability in Pakistan.	The study aimed to observe the determinants affecting the financial performance of the microfinance institutions such as profitability and sustainability in Pakistan	The study resolved that size of the firm, cost efficiency, portfolio at risk, average loan size and income on loan portfolio are the leading factors influencing the financial performance of microfinance institutions in Pakistan.	The researcher introduced size of the firm as moderating variable.
Odowa, K. H., & Ali, L. (2019)	The determinants of microfinance institutions	To investigate on factors affecting operational self-sufficiency and	The loan balance, efficiency, portfolio quality size and age of microfinance	The researcher introduced new variables and firm size was

	financial sustainability in Ethiopia.	financial self-sufficiency of microfinance institutions in Ethiopia.	institutions are the contributing factors of microfinance institutions financial sustainability in Ethiopia.	moderated the effect between institutional characteristic and financial performance
Wafula (2016)	Determining factors of microfinance institutions financial sustainability of in Kenya	To come up with determinants of microfinance institutions financial sustainability of in Kenya	The study found out that liquidity, level operational expenses, profitability and leverage influences financial sustainability of microfinance institutions.	Researcher introduced new variable such as credit management practices and firm size as moderating variable.
Tonney Angola (2014)	The influence of Credit policy to micro-finance institutions financial performance in Kenya	To determine the link between credit policy and financial performance of Micro-finance institutions in Kenya.	The research study discovered credit risk controls, credit policy credit appraisal and collection policy has a positive relationship to the Micro-finance institutions financial performance in Kenya.	Credit policy management is a diverse area therefore; the researcher applied new indicators such debt collection policy, loan process that was help understand a client from the start to the end such and better payment methods and period.
Baraza (2014)	The effect on funding structure on micro-finance institutions financial performance in Kenya	To investigate the relationship between funding structure and financial performance of Micro-finance institutions in Kenya.	Funding structures composed of deposits to assets ratio, debt to equity ratio and loan portfolio employed by Micro-finance institutions influences	The researcher closed the gap by introducing additional indicators.

			financial performance of the firm	
Kisengo (2014)	Effect of organizational features on financial performance of the Micro-finance sector in Nakuru, Kenya	To investigate firm characteristics (age, size and ownership) outcome on financial performance of the Micro-finance institutions sector in Nakuru Kenya	Firm characteristics had a substantial positive effect on the performance of Micro-finance institutions	The researcher introduced size of the firm as moderate the effect between institutional characteristics and financial performance
Mwangi (2014)	Effect of liquidity on deposits taking microfinance institutions financial performance in Kenya.	To analyze the influence of liquidity and financial performance of deposits taking microfinance institutions in Kenya	Liquidity showed a positive relationship with financial performance.	The researcher introduced new variables in the study.
Gibson (2012)	The determinants of microfinance institutions operational sustainability in Kenya.	The factors that determine micro-finance institutional operational sustainability in Kenya	The study found out that factors that affect operational sustainability are capital/asset ratio and operational expense/loan portfolio.	The researcher introduced new variable and indicators that influence profitability.

2.4 Conceptual framework

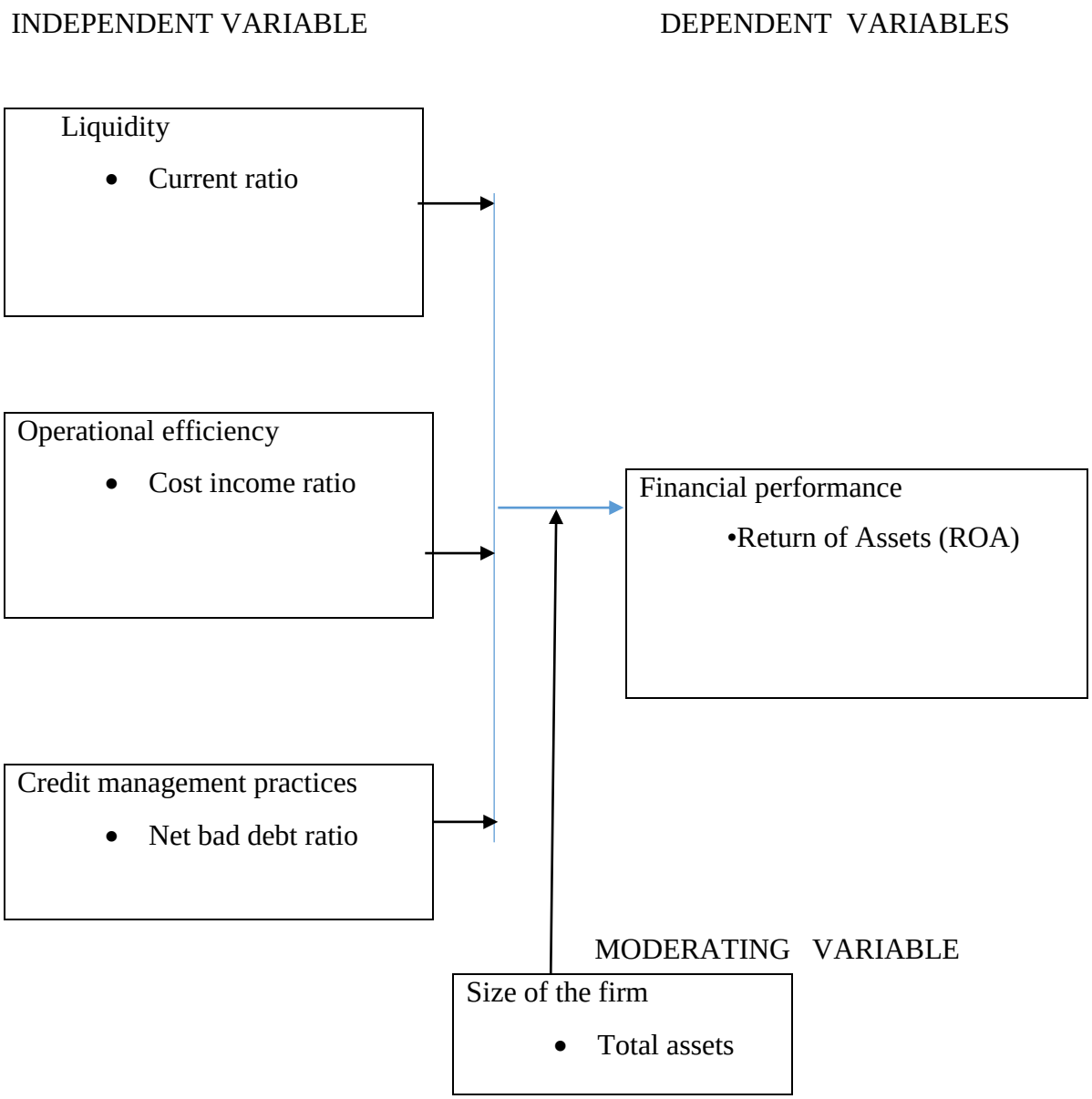


Figure 2.1: Conceptual Model

Relationship between institutional characteristics and financial performance.

Conceptual framework forms the idea on how to relate the variables discussed in the research study and shows the relationship in a graph Mugenda and Mugenda (2003). The independent variables are the characteristics that contribute to the financial performance of licensed micro-finance institutions. The diagram above demonstrations the association between the research variables that was used in this research study. The independent variables are availability of Liquidity, operational efficiency and credit management practices and financial performance is the dependent variable. Size of the firm moderated the influence of these institutional characteristics on the performance of microfinance institutions. The two sets of variables show some levels of interrelationship between one another as shown below, Liquidity which is brought about by saving mobilization in MFIs have a positive relationship on the financial performance as it is able to meet its financial obligation without having to use its reserve.

Operational efficiency takes into account the price of output and cost of input to determine how well microfinance is financially performing, therefore the operational efficiency had an indirect relationship to financial performance where the lower the cost income ratio the lower operational cost hence more profitability. Credit management practices improves the repayment of credit and proper debt collection policy of the micro-finance institutions. These practices enable the microfinance institutions to avoid losses and bad debts hence growth in profits which lead to increase in financial performance, thus a positive relationship between the debt collection and financial performance while an indirect relationship between the bad debt ratio and the financial performance. Size of the firm was measured by total asset because it measures how a firm uses its assets efficiently to generate returns. Increase in total asset leads to increase in size of the firm which means the larger the firm, the larger its operations will be thus, more returns will be generated leading to increased financial performance and the vise-versa applies. The Financial performance was measured using Return of assets (ROA) because it measures the efficiency with which entities manages its asset in order to generate profit hence very important financial performance ratio.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The used methodology in the study is explained in this chapter. It begins by describing the research design, target population, the data collection procedure and the data analysis. This chapter also presents ethical considerations issues.

3.2 Research Design

Research design is the overall strategy that integrates different components of the study in a logical way (William, 2006). According to Mugenda and Mugenda (2003), information collected without changing the environment is descriptive research, at times referred to as "observational" studies. The descriptive research design illustrates patterns in the data collected and reports the way things are Creswell (2002) and also brings better connection between the respondents and the investigator due to a sound planned questionnaire. The researcher also used descriptive research design to show influence between micro-finance institutions features and performance because the relationship of the study variables is joint in nature Mugenda (2005). The study used quantitative data because it attempts to gather information from target population to determine existing position of the variables. The design enabled for systematic gathering and presentation of information in order to determine the micro-finance institutions characteristics to the performance of micro-finance institutions in Kenya

3.3 Target Population

Population is a group of people, events or things of interest which the researcher wishes to study (Saunders (2003). According to Mugenda and Mugenda (2011) population is the entire entities or elements from which a sample was derived. The researcher focused on 13 licensed micro-finance institutions as at 31st December 2020 as per the Central bank of Kenya (CBK). Adoption of census on of all the licensed 13 microfinance institutions was embraced in the study. The target population was small and manageable therefore no sampling was done and according to Mugenda and Mugenda (2003) entire population should be considered when it is small and manageable to allow comprehensive representation of all the element of the research.

3.4 Data collection procedure

Collection of data was achieved by concentrating on secondary data only. Secondary data was obtained from financial statements reports of the micro-finance institutions which was derived from CBK's website under bank supervision audited reports. The data from the annual financial reports enabled to identify the performance of the micro-finance institutions. To ensure objectivity the researcher used annual reports collected over a period of 5 years.

3.6 Data analysis

Analysis of information collected was done using descriptive statistic which involves using graphs and description and tabulation of information collected from the sample of a given research (Sekaran & Bougie, 2011). Descriptive statistics also applies Mean, Percentage and standard deviation in data analysis. The quantitative information gathered was analyzed using inferential statistic with the aid of STATA. The connection between the independent & dependent study variables was concluded using the correlation and regression analysis which was employed in the research study.

This study used multiple regression because is a method of data analysis which is flexible when predicting quantitative variables which are the independent and dependent variables.

The multiple regression equation is:

$Y_{it} = \alpha + \beta_1 L_{it} + \beta_2 OP_{it} + \beta_3 CM_{it} + \varepsilon_{it}$..... (Equation 3.1)

Where,

Y=Financial performance as it was measure by Return on Assets (profitability)

α= Constant term normally distributed to a mean of 0 for the purpose of computation.

β=Beta Coefficient- Measures how many standard deviations of the dependent variable changes with the increase in the standard deviation of the independent variable

L_1=Liquidity

OP_2=Operational efficiency

CM_3= Credit management practices

ε_{it} = error term

To measure the moderating effect, the following model was used:

$Y_{it} = \alpha + \beta_1 L_{it} + \beta_2 OP_{it} + \beta_3 CM_{it} + \beta_4 S_{it} + \beta_{11} (L_{it} S_t) + \beta_{22} (OP_{it} S_t) + \beta_{33} (CM_{it} S_t) + \varepsilon_{it}$…….. (Equation 3.2)

Where S is the Size of the Firm

The MacKinnon method of measuring the moderating effect was reviewed by Mackinoon and Fairchild (2008) where the model explains how the independent variable and dependent variable relate. Moderating effect was tested using multiple regression analysis to improve interpretation of regression coefficient.

3.7 Preliminary Diagnostic test

The study performed multicollinearity test as a precursor to multiple regression analysis. Multicollinearity occurs where two or more independent variables in multiple regression model are highly correlated (Cohen *et al*, 2013). When the correlation coefficient is greater than 0.8 it shows the existence of severe multicollinearity.

3.8 Operational and measurement of variables

Table 3.1: Operationalization and measurement of variables

Variable name	Category	Operationalization	Measurement tool	definitions
Institutional characteristics	Independence	Liquidity	Current ratio	Current asset/Current liabilities
	Independence	Operational Efficiency	Cost income ratio	Operating expenses /Operating income
	Independence	Credit management practices	Net bad debt ratio	Bad loans/Total loans outstanding
	Moderating	Size of the firm	Total asset	Total asset
Financial performance	Dependent	Profitability	Return on asset (ROA)	Net operating income/Average asset

3.9 Ethical considerations

The researcher attained an introduction letter from the university giving the go ahead to collect data. The researcher also obtained an authority letter permitting the collection of data from relevant regulation bodies such as NACOSTI and a letter from the

institution that the researcher intends to research on. The researcher remained anonymous, and no personal details was required throughout the entire period of the study because the researcher secondary data was acquired from CBK' website. The information obtained during the study was treated with confidentiality and with a lot of privacy used not for any other purpose except for research approved by the institution and the scope of the study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

Presentation of this chapter is derived from the findings of the research study on the influence of institutional characteristics on the financial performance of licensed microfinance institutions in Kenya. This chapter begins with the presentation and discussions of the descriptive statistics analysis and trend analysis then the outcomes of the correlation analysis were presented. The chapter then concludes with inferential tests results and discussions and a summary of the tests of the hypothesis. Presentation of outcomes are prepared using tables and narrations. Data which was collected using secondary data was evaluated using regression and correlation analysis.

4.2 Descriptive Statistical Analysis

Descriptive statistical analysis presents the descriptive statistics for the study variables, return on assets, liquidity, operational efficiency, credit management and firm size. Descriptive statistics present the summaries and discussions of the main characteristics of the study variables.

The following Table 4.1shows descriptive statistics for the data used in the analysis.

Table 4.1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on Assets	65	-.0747138	.1327316	-4	.09
Liquidity	65	1.623385	1.839543	.1	12.1
Operational Efficiency	65	1.772	1.353229	.6	7.3
Credit Management	65	.1623692	.5011699	-1.3	3.2
Firm Size	65	5567.298	10162.1	54	32153

Source: Study data (2021)

Results in Table 4.1 show the summary of the descriptive statistics of Financial Performance, Liquidity, Operational efficiency, Credit management and size of the firm which is the moderating variable.

The total mean of Financial Performance for the period 2016 to 2020 was -0.7471 with a standard deviation of 0.1327 indicating a small variability in financial performance over time. The minimum and maximum values of ROA over the same period of time were

-4 and 0.09 respectively. The negative ROA means that the microfinance institutions were on average decreasing their levels of financial performance although some companies were vesting as reflected by positive maximum observed value of ROA.

From the results displayed by Table 4.1, the total mean of Liquidity for the period 2016 to 2020 was 1.623 with a standard deviation of 1.8395 indicating small variability over time. The minimum and maximum values of Liquidity over the same period of time were 0.1 to 12.1 respectively. This indicates the Inflation Risk over the five years grew at a minimal rate.

The total mean of Credit management for the period 2016 to 2020 was 0.1624. The variation was relatively low as evidenced by a standard deviation of 0.5012. The minimum and maximum values of Credit management over the same period of time were -1.3 and 3.2 respectively. This implies that some institutions were able to increase their access to credit facilities over the period.

Further, the results displayed by Table 4.1, the total mean of Operational efficiency for the period 2016 to 2020 was 1.772 with a standard deviation of 1.3532. Also noted is that the minimum and maximum values of Operational efficiency over the same period of time were 0.6 to 7.3 respectively which show there was a significant improvement in the last five years.

Finally, the results show that the mean of Firm Size for the period 2016 to 2020 was 5567.29 with a standard deviation of 10162.1 indicating a large variability over time. The minimum and maximum values of Firm Size over the same period of time were 54 to 32153 respectively. This indicates the Firm Size over the five years grew at a rapid rate.

4.3 Trend analysis

Trends on analysis for the variable's liquidity, operational efficiency, credit management and firm size of licensed microfinance institutions in Kenya are also presented. The variation of the research variables was done overtime to determine the time influence of the study variables and whether their data was still over time or not. The result on Figure 4.1, 4.2, 4.3, 4.4 and 4.5 indicate that all the study variables indicated variations over time.

4.3.1 Trend in Financial Performance

The returns on assets were used to measure financial performance in this study. The resulting trend for the five-year period is as indicated below:

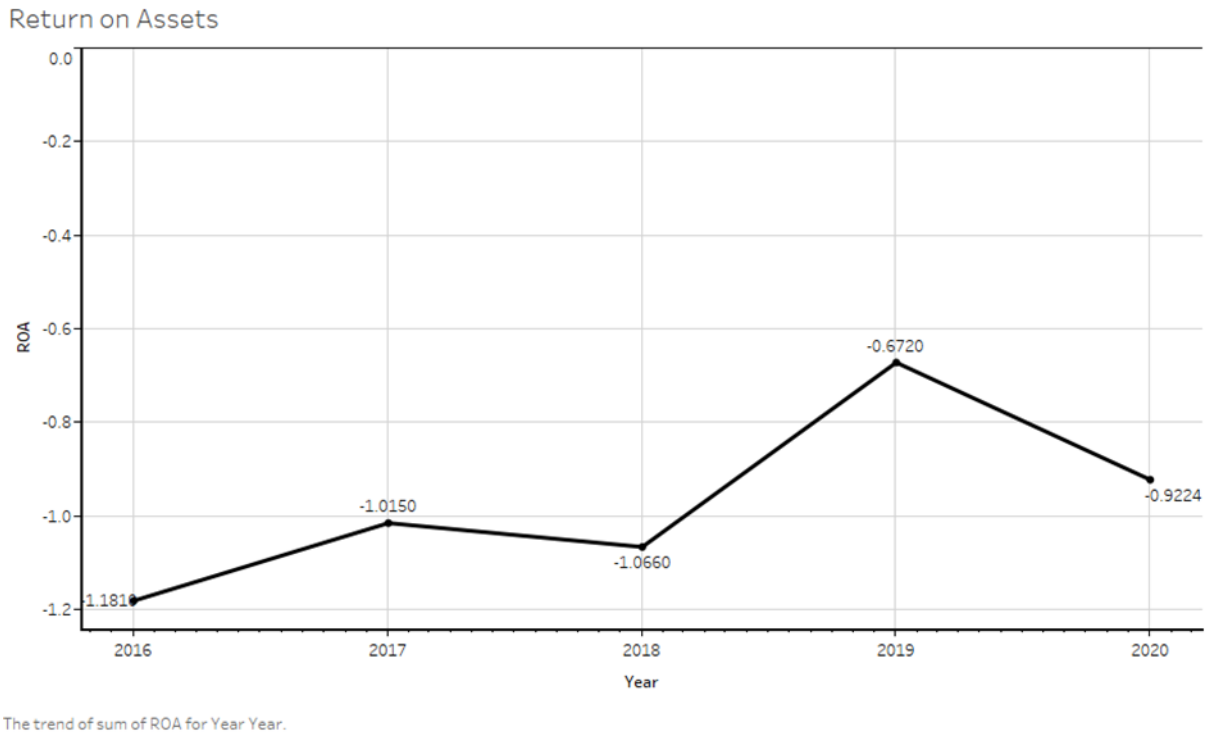


Figure 4.1: Trend in financial performance

The return on assets trend on figure 4.1, is used to represent the financial performance of the licensed MFIs. Return on assets was used as a measure of financial performance of the microfinance institutions. The minimum ROA (return on assets) was negative 1.181 which was attained in 2016 and the maximum ROA was negative 0.6720 attained in 2019. As presented in table 4.1, the mean value of Return on Assets showed a negative 0.0747 for 65 observations with standard deviation of 0.1327316 which indicated the thirteen licensed microfinance institutions did not generate profits in the given study period of five years, 2016 to 2020. However, there was a significant improvement in the last two years.

4.3.2 Trend in Liquidity

The current ratio was used to measure liquidity in this study. The resulting trend for the five-year period is as indicated below:

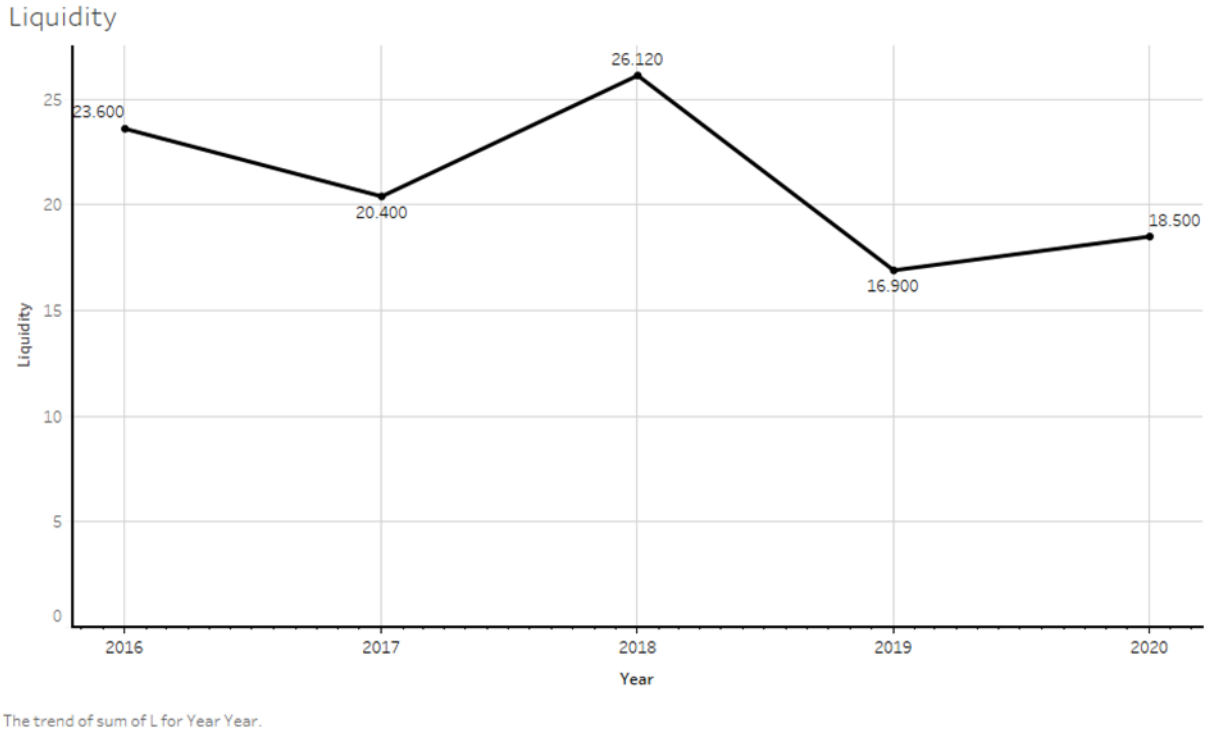


Figure 4.2: Trend in Liquidity

The figure 4.2 above indicates a mixed trend on liquidity. The trend shows a decline in year 2017 which is followed by an increase to 26.120 in 2018 which was the maximum in the five-year period. The Central Bank of Kenya established various reform in 2018 to enhance the supervision of MFIs during the period which included among them to increase MFIs minimum core capital and the liquidity ratio (Central Bank of Kenya, 2018). However, there was a sharp decrease in the year 2019.

4.3.3 Trend in Operational Efficiency

The operational efficiency was measured using the cost income ratio in this study. The resulting trend for the five-year period is as indicated below:

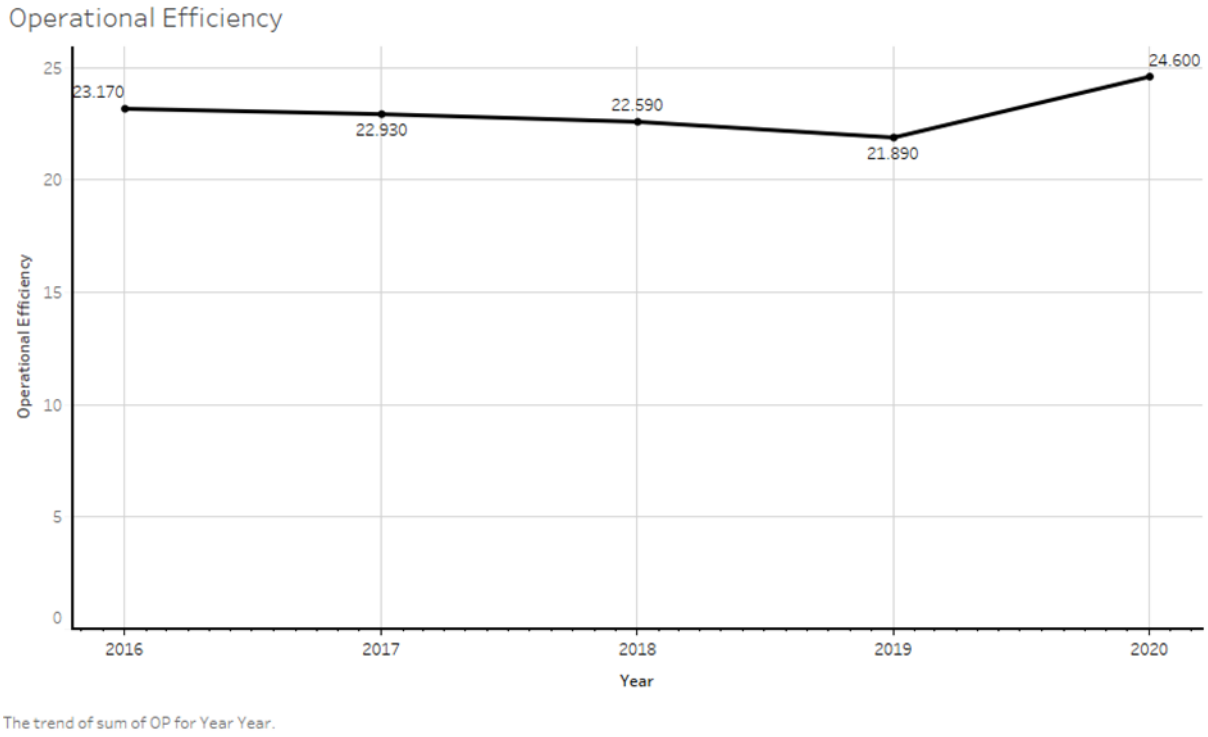


Figure 4.3: Trend in Operational Efficiency

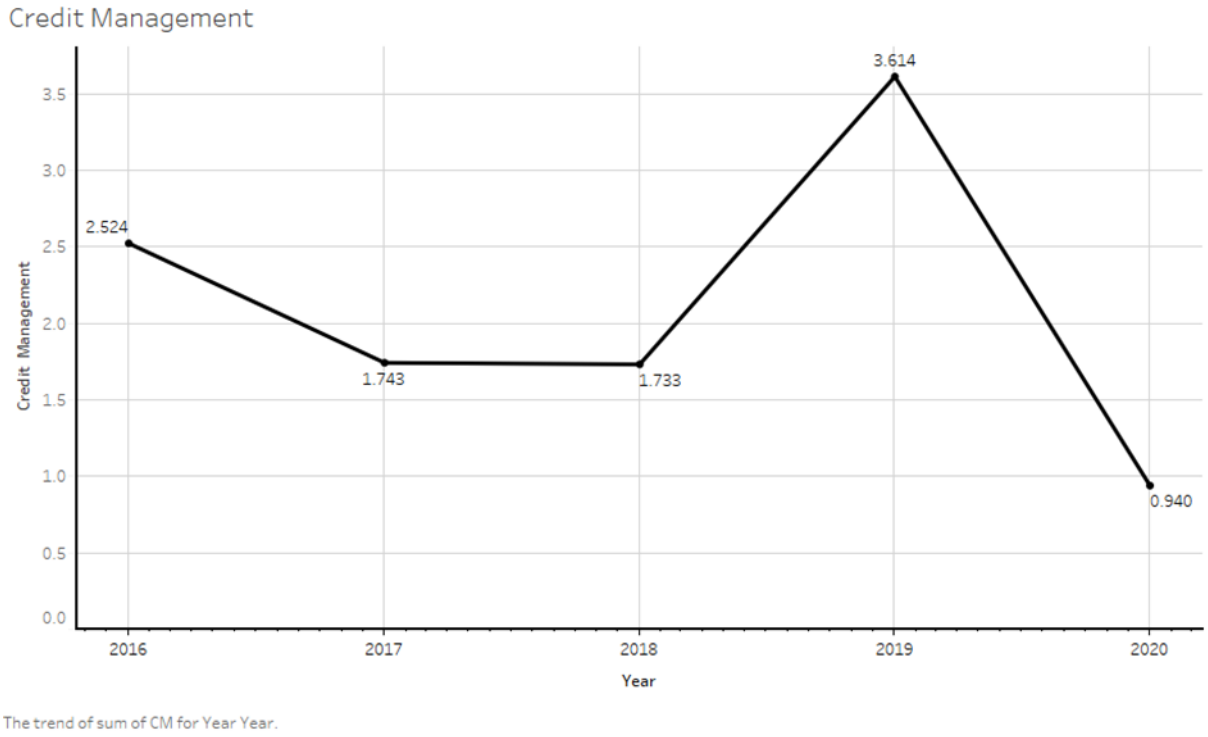
The Figure 4.3 above indicates the trend in operational efficiency within the period. The figure shows a soft downwards trend up to the year 2019 and thereafter a steady increase in operational efficiency for the rest of the period.

4.3.4 Trend in Credit Management practices

The Credit management was measured using the net debt ratio in this study. The resulting trend for the five-year period is as indicated below:

Figure 4.4: Trend in Credit Management practices

The figure 4.4 below indicates that credit management showed mixed trend within the period under study. Credit Management was measured using the net debt ratio Its trend showed a decline between 2016 and 2017 then followed by a constant between 2017 and 2018, then a sharp upward trend in year 2019 and finally a decline in year 2020. These disparities indicated that MFIs are affected by credit management differently depending on time fluctuations within the period

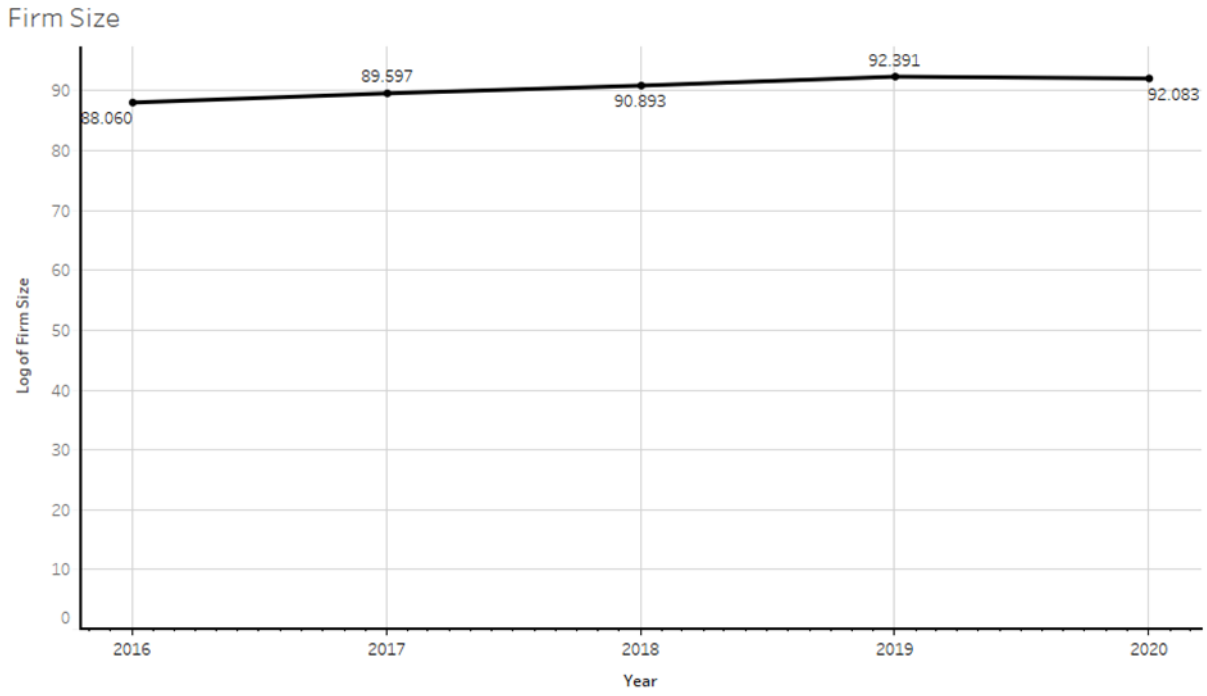


4.3.5 Trend in Firm Size

The firm size was measured using total asset in this study. The resulting trend for the five-year period is as indicated below:

Figure 4.5: Trend in Firm Size

The Figure 4.5 below indicates the trend in firm size within the period. The trend showed that MFIs indicated a steady growth on the asset base within the period. Firm size was estimated using the total assets held by the MFIs within the period under study



4.4 Multicollinearity Test Results

Table 4.2: Correlation Matrix

	Return on Assets	Liquidity	Operational Efficiency	Credit Management	Firm Size
Return on Assets	1.0000				
Liquidity	0.0827	1.0000			
Operational Efficiency	-0.2973	-0.0039	1.0000		
Credit Management	0.3194	0.2756	-0.0491	1.0000	
Firm Size	0.3561	-0.1210	-0.0735	-0.0226	1.0000

As presented in table 4.2, Test for multicollinearity in the study was conducted using correlation matrix. Liquidity, Operational efficiency, Credit Management, and Firm Size were the explanatory variables used in this study. The outcomes showed that the correlation coefficients for all variables were less than 0.8 suggesting that the study data did not reveal severe multicollinearity as commended by (Gujarati, 2003; Cooper & Schindler, 2008).

4.5 Hypothesis Testing

The hypothesis test results are presented in this section. The study estimated equation 3.1 in multiple regression. The estimation results for equations 3.1 is presented in Table 4.3.

Null hypotheses indicated below were tested:

H_{01}: Liquidity has no significant inluence on the financial performance of microfinance institutions in Kenya.

H_{02}: Operational efficiency has no influence on the financial performance of microfinance institutions in Kenya.

H_{03}: Credit management has no significant influence on the financial performance of microfinance institutions in Kenya.

The three hypotheses listed above were tested with respect to the financial performance of licensed microfinance institutions in Kenya. Assessment of the respective models was reported in the following table 4.3

Table 4.3: The Influence of institutional characteristics on financial performance

ROA	**Coef.**	**Std. Err.**	**T**	**P>|*t*|**	**[95% Conf. Interval]**	
Liquidity	.0436444	.0157721	2.77	0.007	.0121062	.0751826
Operational Efficiency	-.1033448	.0107862	-9.58	0.000	-.1249132	-.0817765
Credit Management	-.0098675	.0219534	0.45	0.655	-.034031	.053766
_cons	-.040606	.011794	-3.44	0.001	-.6641894	-.0170225
Number of obs = 65 R-squared = 0.6685 F (3, 61) = 41.1 Prob > F = 0.0000						

Source: Study data (2021)

The regression model below is formulated as follows:

$Y_{it=} \alpha + \beta_1 L_{it} + \beta_2 OP_{it} + \beta_3 CM_{it} + \varepsilon_{it}$

$Y_{it} = -0.406 + 0.044 L_{it} + -0.103 OP_{it} + -0.0099 CM_{it} + 0.0118$

Where,

Y_{it}=Financial performance

L_{it}=Liquidity

OP_{it}=Operational efficiency

CM_{it}= Credit management practices

ę = error term

The outcomes from Table 4.3 above indicated liquidity had a significant positive relationship (β= 0.044, p= 0.007) hence indicated, an increase in unit in liquidity lead to an slight increase in financial performance by 0.044 units, p value (0.007) is below .05 thus the alternative hypothesis was accepted and concluded that there is sufficient evidence, at 5% level of significance, that there is strong positive influence between liquidity and microfinance institutions financial performance in Kenya. Operational efficiency had a significant negative relationship of (p=0.000, β= -0.103) this was an indication that an increase in unit in operational efficiency, lead to a decrease in financial performance by 0.103 units, the p value (0.000) was below .05 alternative hypotheses was accepted and concluded that there was sufficient evidence, at 5% level of significance. This implied that there existed a strong positive influence between operational efficiency and microfinance institutions financial performance in Kenya. Credit management practices had an insignificant negative influence of (p=0.655, β= -0.0099) this indicated that an increase in unit in credit management practices products, lead to a decrease in financial performance by 0.0099 units, the p value which was (0.655) was above .05 thus alternative hypotheses was not rejected and concluded that there was insufficient evidence, at 5% level of significance. This indicated a moderate negative influence between credit management practices and microfinance institutions financial performance in Kenya.

Kiptala and Simuyu (2019) in their study on the influence of financial indicators on the licensed deposit taking microfinance institutions financial performance in Kenya concluded that Liquidity showed a significant negative association with financial performance of the microfinance institutions where the p- value was p=0.000 and coefficient was β=-0.091013. Ngumo *et al.* (2020) did a study on the determinants of microfinance institutions financial performance in Kenya and brought out the concept that operation efficiency had a significant positive effect of, (p=0.00, β=0.031). This was an indication that operational efficiency had a significant effect with financial performance. Credit management practices is practiced in order to reduce default or credit risk especially where credit approach and credit policy are strictly followed. Angola (2014) discovered a positive connection between credit risk controls, credit policy, credit appraisal and approval and post disbursement Management and financial performance contrast to this study where credit management practices indicated no significant association with the financial performance of microfinance institutions.

The results from Table 4.3 indicated a F value generated by the F-test, as well as the P-value. The F value in the table is 41.1 with a distribution F (3, 61). The probability of observing a value greater than or equal to 41.1 is less than 0.025 as shown by the significance value of 0.000 which is less than 0.025 testing at 5% level. The result interpretation suggested that solid evidence that the regression model advanced was significance whereby the discrepancy in the outcomes was insignificant. Therefore, it is clear from the results that the relationship between the variables is statistically significant. The relationship between the dependent and the independent variables is tested by the F-test where the level of significant is achieved. Processed data of the population had a significance level of P= 0.000. This showed that the information was perfect in concluding on the population's parameter as the p-value was less than the significance level of 0.05. The finding stated that P-value was 0.000 which was actually less than the generally used criterion of 0.05, therefore, the null hypothesis was rejected, signifying that the coefficients were not all together equal to zero.

4.5.1 Influence of liquidity to the financial performance of licensed Microfinance Institutions in Kenya.

The Null Hypothesis indicated below ware tested:

H_{01}: Liquidity has no significant influence on the financial performance of licensed microfinance institutions in Kenya.

Liquidity showed $\beta = 0.0436$ as the coefficient and P- value = $0.007 < 0.05$. Therefore, since the P-value < 0.05, we do reject the null hypothesis and conclude that there is sufficient evidence at 5% level of significance thus Liquidity has significant effect on the financial performance of microfinance institutions in Kenya. The coefficient of positive 4.3% indicates that Liquidity has a positive effect on the financial performance of MFIs. Therefore, Liquidity has a significant positive effect on financial performance of microfinance institutions in Kenya. Liquidity was measured using current ratio

This finding was consistent with (Mwangi (2014), Wafula (2016), and Kiptala and Simuyu (2019) who concluded in their study liquidity indicated a significant positive influence on microfinance institutions financial performance in Kenya thus microfinance institutions were able to run its operations in an efficient manner. This is an indication that microfinance institution should increase in capital which lead to increased liquidity position of the organization.

4.5.2 Influence of operational efficiency of the of licensed microfinance institutions financial performance in Kenya.

The following Null Hypothesis below was tested:

H02: Operational efficiency has no significant influence on the financial performance of licensed microfinance institutions in Kenya.

Operational efficiency had β = (0.1033) as the coefficient and P- value = 0.000 < 0.05. The P- value was less than 0.05, therefore, the null hypothesis was rejected and conclude that there was sufficient evidence at 5% level of significance. With P-0.000 operational efficiency had a significant influence on the financial performance of microfinance institutions in Kenya. A coefficient of value -0.1033 indicated that operational efficiency had a negative influence on the financial performance. Therefore, concluding that operational efficiency had a significant negative influence on the financial performance of microfinance institutions. Cost income ratio was used to measure operational efficiency.

The finding of this study did not agree with (Mwangi (2014) and Ngumo *et al* (2020) who concluded in their study that operational efficiency had positive relationship with the financial performance of microfinance institution in Kenya. The finding of the research study agrees with (Mwangi (2014) and Ngumo *et al* (2020) on the conclusion that operational efficiency indicated a strong significant association with financial performance of microfinance in Kenya.

4.5.3 Influence of credit management practices on the financial performance of licensed Microfinance Institutions in Kenya.

The following Null Hypothesis was tested:

H03: Credit management practices has no significant influence on the financial performance of licensed Microfinance Institutions in Kenya.

Credit management practices showed β = (0.0099) as a coefficient and P-value = 0.655 > 0.05. Since the P-value is more than 0.05, we do not reject Ho that Credit management practices had no significant influence on the financial performance of licensed microfinance institutions. The outcomes showed credit management practices had no significant influence on the financial performance of microfinance institutions in Kenya. A coefficient which is negative 0.9% indicates that credit management practices have an

indirect influence on financial performance. Credit management practices was measured using the net bad debt ratio.

Credit management practices if not fully monitored may lead to credit risk. According to Angola (2014) the study concluded, credit risk showed a negative association with financial performance. The study concluded that client appraisal, collection policy and credit risk controls all had an influence on microfinance institutions financial performance in Kenya. A unit increase on the collection policy leads to an increase in financial performance, credit risk control increase leads to financial performance increase and an increase in credit appraisal leads to improvement of financial performance. This is a clear indication that the MFIs need to allocate more resources on the improvement of collection policy. Credit appraisal and credit risk controls to enable attaining of maximum financial performance. Angola (2014) found that credit policy, credit risk controls, credit appraisal and collection policy had a positive association between financial performance, contrary to the researcher study where credit management practices had no significant influence on financial performance of microfinance institutions.

4.5.4 Analysis of Moderating Effect of Firm Size

At 95 percent confidence level (α=0.05) multiple linear regression was conducted to determine the level of significance of the hypothesized relationships of the variables. The hypothesis intended to examine the moderating effect of the size of the firm on the influence of institutional characteristics on the financial performance of the licensed microfinance institutions in Kenya. To test this hypothesis, the MacKinnon method of measuring the moderating effect proposed by MacKinnon & Fairchild, (2008) was used.

H04: Size of the firm has no significant moderation effect on the institutional characteristics influence on the financial performance of licensed Microfinance Institutions in Kenya.

Firm size as an Independent Variable

The independent variable size of the firm was analyzed in this section. Presentation of the outcomes are indicated as table 4.4 below

Table 4.4: Size of the firm as an Independent Variable

ROA	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
Liquidity	.0445407	.0133445	3.34	0.001	.0178477	.0712337
Operational Efficiency	-.077045	.0105208	-7.32	0.000	-.0980897	-.0560003
Credit Management	-.0153013	.0186042	0.82	0.414	-.0219127	.0525153
Firm Size	.0259107	.0051587	0.52	0.315	.0155917	.0362296
_cons	-.2336049	.0396996	-5.88	0.000	-.3130159	-.1541939
Number of obs = 65						
R-squared = 0.7666						
F (4, 60) = 49.28						
Prob > F = 0.0000						

Source: 2021 study data

Results in the above table 4.4 indicate R squared of 76.66% implying that institutional characteristics and firm size had explanatory power on the licensed microfinance institutions financial performance in Kenya. This indicated that combination of these variables can adequately explain variation in financial performances. The P-value from the findings of the study which was 0.000 that was less than 0.005 indicated the institutional characteristics and size of the firm were significant in clearing up the deviation in the financial performance of microfinance institutions.

The outcomes indicated that liquidity had a coefficient (β = 0.0445) and a P- value = (0.001 < 0.05) which showed P- value that was less than 0.05. This indicated liquidity had a significant positive influence with the financial performance (Return on Assets) of licensed microfinance institutions. The result indicated that Liquidity variable had an explanatory influence on the financial performance accounting for 4.45%.

The results indicated the coefficient of operational efficiency (β = (0.077), P- value = 0.000 < 0.05) which showed P- value that was less than 0.05. This indicated operational efficiency had a significant negative influence on the financial performance (Return on Assets) of licensed MFIs. The result indicated that operational efficiency variable had an explanatory sway on the financial performance of microfinance institutions accounting for 7.70%.

The results indicated the coefficient of Credit management (β = (0.0153), P- value = 0.414 > 0.05) which showed P- value greater than 0.05. This conclusion indicated credit management practices had a negative influence on the financial performance (Return on

Assets) of licensed microfinance institutions in Kenya. The result indicates that Credit management variable had an explanatory influence to the financial performance of licensed microfinance institutions accounting for 1.53%.

The results indicated firm size coefficient of (β = 0.0259, P-value = 0.315) that is greater than 0.05, denotes that there is no significant direct relationship between firm size and financial performance. This implies that size of the firm does not directly influence financial performance and thus it is not a predictor variable to financial performance.

Size of the firm as a Moderator Variable

Size of the firm presented as moderator variable outcomes are presented in the table 4.5 below.

Table 4.5: Size of the firm as a Moderator Variable

ROA	**Coef.**	**Std. Err.**	**T**	**P>|*t*|**	**[95% Conf. Interval]**	
Liquidity	.1666228	.0769175	2.17	0.034	.0125982	.3206474
Operational Efficiency	-.0505652	.0760187	0.67	0.509	-.1016596	-.20279
Credit Management	-.1676599	.159024	-1.05	0.296	-.4861	.1507801
Firm Size	.0254461	.0057896	4.40	0.000	.0138526	.0370396
Liquidity * Firm Size	-.0205457	.01413241	-1.45	0.151	-.0488287	.0077372
Operational Efficiency * Firm Size	-.0245821	.0143328	-1.72	0.092	-.053283	.0041188
Credit Management * Firm Size	.0287851	.025014	1.15	0.255	-.0213046	.0788748
_cons	-.040606	.011794	-3.44	0.001	-.6641894	-.0170225
Number of obs = 65 R-squared = 0.7846 F (7, 57) = 29.65 Prob > F = 0.0000						

Source: Study data (2021)

$$Y_{it} = \alpha + \beta_1 L_{it} + \beta_2 OP_{it} + \beta_3 CM_{it} + \beta_4 S_{it} + \beta_{11} (L_{it} S_t) + \beta_{22} (OP_{it} S_t) + \beta_{33} (CM_{it} S_t) + \varepsilon_{it}$$

$$Y_{it} = -0.041 + 0.167 L_{it} + -0.051 OP_{it} + -0.168 CM_{it} + 0.025 S_{it} + -0.205 (L_{it} S_t) + -0.025 (OP_{it} S_t) + 0.029 (CM_{it} S_t) + 0.118$$

Where,

Y_{it}=Financial performance

L_{it}=Liquidity

OP_{it}=Operational efficiency

CM_{it}= Credit management practices

S_{it} =Firm size

ę = error term

The interaction of Liquidity and Size of the firm to financial performance showed a negative coefficient β = -0.0205 and a p-value = 0.151 > 0.05. From the finding p-value was greater than 0.05, Therefore Liquidity * Size of the firm had no significant influence on the financial performance of licensed microfinance institutions in Kenya. Coefficient of -0.0205 obtained in this case indicates that the interaction of Liquidity and size of the firm had a negative influence on financial performance. Therefore, microfinance whether big or small should strive to boost their liquidity because from the study the liquidity of the organization is not determined the firm size therefore small and big microfinance have an opportunity to grow its liquidity in order to be able to operate smoothly and hence growth in its financial performance.

Relation of operational efficiency and size of the firm to the financial performance showed β = -0.0246 as the coefficient and p = 0.092 > 0.05. Therefore, p-value obtained is greater than 0.05 hence operational efficiency * Size of the firm had no significant influence on the financial performance (Return on Assets) of licensed microfinance institutions in Kenya. Attained coefficient of negative 2.46% indicated that the interaction of operational efficiency and firm size showed a negative influence on financial performance. Therefore, from the above assumption operation efficiency and firm size had no interaction or relation in order to perform financially better. Therefore, microfinance institutions should strive to maintain and follow the set budget in order to regulate on operational expenses and making sure to meet the target on operational income in order to increase its financial performance.

The relations of credit management practices and size of the firm to the financial performance showed a coefficient β = 0.0288 and a p-value of = 0.255 > 0.05. Therefore, p-value attained is greater than 0.05 hence credit management * size of the firm had no significant influence on the financial performance (Return on Assets) of licensed microfinance institutions. The coefficient of positive 2.88% attained indicated the interaction of credit management and size of the firm which concluded it had a positive impact on the financial performance. From the above finding firm size contributes to the

strict following of credit management practices due to increase in number of client served and huge amount of loan portfolio. Therefore, increase in unit in firm size and credit management practices lead to financial performance increase of the microfinance institutions.

The results indicated R squared of 0.7846. This indicated the introduction of the size of the firm as a moderator variable to the influence of institutional characteristics on financial performance of licensed microfinance institutions improved on the explanatory influence accounting for 78.46% of the financial performance of licensed microfinance institutions in Kenya. F-test value obtained was 29.65 that had a P - value of 0.000. From the conclusion (p=0.000) was found to be lesser than the significance level of 0.05, which therefore indicated a significant change. this indicated that institutional characteristics and size of the firm as were mutually significant in clarifying discrepancies in financial performance. The outcomes indicating the null hypothesis of size of the firm has no significant moderating effect on the influence between institutional characteristics and financial performance of licensed Microfinance Institutions was rejected at a 5 percent significant level and established that size of the firm had a significant moderation effect on the influence between institutional characteristics and financial performance of licensed Microfinance Institutions in Kenya. The study is consistence with Kisengo and Kombo's (2014) conclusion of a positive relationship between firm characteristics and financial performance of microfinance institutions.

4.6 Summary of Tests of Hypotheses

Table 4.6 presents a summary of the results of tests of hypotheses as discussed above.

Table 4.6. Hypotheses testing summary

Hypotheses	**Results**	**Decision**	**Findings**
H_{01}: Liquidity had no significant influence on the financial performance of licensed microfinance Institutions	P =0.007<0.05	Reject H_0	Liquidity had a significant positive influence on the financial performance of licensed microfinance Institutions in Kenya.
H_{02}: Operational efficiency had no significant influence on the financial performance of licensed microfinance Institutions	P=0.000<0.05	Reject H_0	Operational efficiency had a significant negative influence on the financial performance of licensed microfinance Institutions in Kenya
H_{03}: Credit management had no significant influence on the financial performance of licensed microfinance Institutions	P=0.655>0.05	Failed to reject H_0	Credit management had no significant influence on the financial performance of licensed microfinance Institutions in Kenya.

H_{04}:	Firm size had no significant moderation effect on the influence between institutional characteristics on the financial performance of licensed microfinance Institutions	P=0.000<0.05	Reject H_0	Firm size moderated the institutional characteristics and financial performance of licensed Microfinance Institutions in Kenya.

Source: Study Data (2021)

4.6 Conclusion

The chapter dealt with the results from the study findings and interpretation. It analyzed data using descriptive analysis using mean and standard deviation of the variables. It also showed the results from the diagnostic tests and the consequent Hypothesis testing.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the findings, summary and conclusion derived from empirical results on every specific objective, the contribution of the study to knowledge, and recommendations resulting from conclusions made. The study also brings out recommendations for further study from the of research gaps that were identified in the study.

5.2 Summary of the findings

The objective of the research study was to examine the influence of institutional characteristics on the financial performance of licensed microfinance institutions in Kenya. The institutional characteristics liquidity, operational efficiency and credit management practices. The variables were moderated by the size of the firm. The Variable under study influenced the financial performance of microfinance institution differently.

5.2.1 Liquidity

The first objective investigated the influence of liquidity to financial performance of licensed micro-finance institutions in Kenya. Findings in this study revealed that liquidity has a positive influence on the financial performance of MFIs. Therefore, Liquidity had a significant positive influence on financial performance of microfinance institutions in Kenya which simply denotes an expansion in liquidity leads to an expansion in financial performance and sustainability of microfinance institutions in Kenya.

Liquidity being the measure of an organization's ability to settle its immediate liabilities is key in running a company explaining how the business is performing financially as well as its future endeavors. The Microfinance institutions ought to ensure that they're adequate plans for liquidity planning in order to ensure the business remains float and is able to meet its shirt term expenses. It important that microfinance institutions find ways to boost liquidity which some may be; repayments of loans, reduction of overheads, selling of unused asset, improvement in invoice collection processes, managing the accounts payables, monitoring savings from clients and among other things preparing cash flow projections

5.2.2 Operational Efficiency

The second objective investigated the influence of operational efficiency to the financial performance of licensed microfinance institutions in Kenya. Operational efficiency had a significant negative influence on the financial performance of microfinance institutions in

Kenya, therefore increased operational expenses lead to decreased financial performance of the licensed microfinance institutions.

Leveraging the diverse technologies is key in ensuring operation efficiency by closely monitoring processes that need constant improvements. Some of the areas that can improve operational efficiency include: improvements on gross yields from the loans, reducing of cost involved in operations, efficient utilization of resources as well as increments of the value of the firm's assets.

Microfinance institutions need to ensure that they have in place key performance indicators which include having their processes and schedules are highly optimized and that maintenance are done on time thus being more proactive than reactive in issues that affect the microfinance institutions. Planning of lost time need to be well thought in order to avoid inconveniences to the clients as the total cost for lost time is huge. Other key financial performance indicators include maximizing the use of resources at its disposal and ensuring all systems perform effectively.

5.2.3 Credit Management

The third objective of this research study was to analyze the influence of credit management practices to Financial Performance of licensed micro-finance institutions in Kenya. The results show that Credit management had no significant influence on the financial performance of MFIs in Kenya. Credit management practices was measured using the net bad debt ratio.

Microfinance institutions ought to ensure they have what is required in order to ensure that the rules and laws set are strictly followed professionally. Policies must be well drafted and implemented to ensure that clients are attracted, feel safe and are well taken care of. Leadership in the microfinance institutions ought to create teams that perform and ensure effectiveness in the organization. The study also concludes that microfinance institutions are involved in the management of credit policy by making decisions on credit risk through a standardized procedural process, documentation, observance of credit ratings and terms and inspecting the amount of loan portfolio. Findings from the study also concludes that regular meetings with the credit officers or staff enables awareness of the risks facing the organization and the best way forward to mitigate them. This implies that when the credit officers are well trained on customer relationship then market awareness outreach is improved which will lead to increased lending in terms of loan uptake. The study further

establishes that financial performance is related to improved collection policy which will lead to customer retention. This means that the firm will be able to moderate the defaulting rate thus, reducing the credit risk with a great margin therefore avoiding bad loans which automatically reduces the number of loans that are written off in the organizations

5.2.4 Size of the firm as a moderating Variable

The study was intended to find out the moderating influence of size of the firm to the institutional characteristics influence on the financial performance of licensed MFIs in Kenya. The research study settled that size of the firm had a significant positive effect moderating the association between institutional characteristics on the financial performance of microfinance institutions in Kenya. The leadership of the microfinance institutions need to also focus on the size and growth of their respective microfinance institutions and should ensure that proper expansion plans are in line with the profits earned by the respective microfinance institutions

5.3 Conclusions

Conclusions of the study was derived from the study of the variables and their influence on financial performance of licensed microfinance in Kenya. The study concluded that liquidity was a critical component affecting performance of the microfinance institutions. From the study it was concluded that liquidity had a significant positive influence on the financial sustainability thus it means that liquidity lead to increased financial performance of licensed microfinance institutions in Kenya. Microfinance institutions in Kenya is totally dependent to the level of institutions liquidity in order to function. The higher the capital amount that is available for investment and spending the more the microfinance institutions become stable financially and hence increase in efficiency of operations.

The study findings also lead to the conclusion that operational efficiency has significant negative influence on the financial performance of the microfinance institutions in Kenya. Therefore, microfinance main focus should be on their operational expenses in order not to surpass their operational income for better financial performance. Credit management practices was concluded not to have any influence on the financial performance of microfinance institution. Concludes the study was that microfinance institutions are involved in decision making and management of credit policy by coming up with credit risk decisions through a standardized procedural process, documentation, observation of credit rating and terms and making a follow up on loan portfolio. The study

brought out the aspect that financial performance is related to customer retention and improved collection policy. Firm size was concluded to have a significant positive influence moderating between microfinance institutional characteristics and financial performance of the microfinance institutional. This simply explain that large microfinance performs better than small microfinance institutions in Kenya.

5.4 Recommendations

Based on the findings of the study the researcher recommendation to the microfinance institutions is to identify ways and strategies on how to improve their liquidity position since it had a significant and positive influence on financial performance. Strategies that should be put on priority is to increase on the cash flows that would be used for investment and other spending which would finally lead to increased financial performance. Operational efficiency generally leads to increase in financial performance of the microfinance institutions in Kenya. Due to microfinance competition on achieving better financial performance, microfinance institutions should strive to reduce their operational expenses especially those exaggerated director's allowances and remuneration and training expenses, procurement of unnecessary equipment's in the organization and payment of own delayed overtime allowances, among others. When budget is fully and strictly followed the organization and expenses fully monitored the microfinance would really improve on their financial performance due to increased operation income hence growth of the microfinance institution.

From the conclusion that credit management practice had no significant influence on financial performance, therefore microfinance should set strict credit policy to avoid credit risk. Microfinance should strive to increase their asset which was in turn lead to increase in their firm size. As the finding state that firm size had a significant and positive influence on financial performance of licensed microfinance in Kenya. Therefore, the study indicate that large microfinance performs better than small microfinance in Kenya. Lastly the study further recommends that microfinance institutions should implement financial management practices to promote profitability and create wealth to the shareholders. The culture of any organization also key aim is to ensure success as when the norms and values are developed and well taken in the organization then employees feel the need to follow the routines, norms and values entrenched. The study concludes that training of both new employees and continuing employees enhances efficient through sharpening of skills and

also new knowledge to cope with new challenges that face the industry thus promotes better financial performance.

5.5 Suggestion of further studies

The study done encountered various limitations that really need other researchers to expound their research in microfinance institutions to increase the target population number so that to comprehend the financial performance of microfinance institutions and sectors in Kenya. The researcher should also take into considerations other institutional characteristics that influenced financial performance of microfinance in Kenya by doing a more detailed study considering that each factor was differently influence another factor. Comparison from different studies done from various sector would really help in construction of recommendation to be considered by numerous appropriate authorities to certify effectiveness to financial performance in Kenya, therefore researchers are encouraged to undertake studies on various sectors.

The above study focused on secondary data therefore further studies should consider applying primary data for data collection. This would lead to comprehensive information gathered from original sources which actually would portray accurate and dependable results that explains the content of the study. Microfinance institutions banks need to utilize their resources in an optimum manner including asset in order to increase their profitability margin and for carrying out its daily operations. The study used data that was within the last 5 years (2016-2020), therefore further studies could purpose to use a longer period of time for a similar research study, for more detailed and informed results.

REFERENCES

Addisalem, G. F. (2015). *The Influence of Competition on Performance of Microfinance Institutions in Ethiopia* (Unpublished MBA Project). Addis Ababa University, Ethiopia.

Adhikary, S. (2014*). Financial Performance of Microfinance Institutions and Outreach to the Poor in South Asia* (Unpublished Dissertation). Aristotle University of Thessaloniki.

Agola, T. (2014*). Credit Policy and Financial Performance of Microfinance Institutions in Kenya* (Unpublished MBA Project). University of Nairobi, Kenya.

Alastair, M. S. (2015). Inclusive Growth: Improving Microfinance Regulation to Support Growth and Innovation in Micro-enterprise. *The Republic of Kenya Background Country Report.* Economic and Social Research Council.

Almas, H. & Mukhtar, M. (2014). *Measuring the Performance and Achievement of Microfinance Institutions Incorporating Subsidy Dependence Index and Outreach Index in Pakistan's Case.* International Islamic University Islamabad, Pakistan.

Baraza, E. O. (2014). *The Relationship between Funding Structure and Financial Performance of Microfinance Institutions in Kenya* (Unpublished MBA Project). University of Nairobi.

Bengi R. M. & Njenje, D. (2016). Assessment of the Influence of Financial Factors on the Growth of Microfinance Institutions in Bahati Sub-County, Kenya. *International Journal of Economics, Commerce and Management*, 4(3), 415-437

Biwott, J. K. & Muturi, W. (2014). Determinants of Financial Performance of Microfinance Institutions in Kenya: A Case of Microfinance Institutions in Nakuru Town, Kenya. *International Journal of Accounting and Financial Management Research*, 4(6), 1-16

Brom, K. (2009). Assets and Liability Management for Deposit-Taking Microfinance Institutions, *Focus Note* no. 55, CGAP, June 2009.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.

Cull, R., Demirgùç-Kunt, A., & Morduch, J. (2007). Financial Performance and Outreach: A Global Analysis of Leading Micro Bank. *Economic Journal*, 117, 107-133.

Diamond, W. & Rajan, G. (2001). *Liquidity risk, liquidity creation, and financial fragility: a theory of banking*, *The Journal of Political Economy*, 109(2):287-327.

Dokulilova, L., Janda, K. & Zetek, P. (2009). Sustainability of Microfinance Institutions in Financial Crisis. *European Financial and Accounting Journal*, 4(2), 7-33.

Dang, U. (2011). The CAMEL Rating System in Banking Supervision: A Case Study. *Unpublished Thesis*. Arcada University of Applied Sciences

Dufera, A. (2010). *Financial Performance Evaluation: A Case Study of Awash International Bank (AIB)* (Unpublished Msc. Project). Mekelle University, Ethiopia

Farah, N. A. Z., Salim, S., Rehman, R., Ahmad, M. I., & Rizwan, A. L. I. (2019). Determinants of financial sustainability of microfinance institutions in Pakistan. *Upravlenets*, *10*(4), 51-64.

Gibson, A. B. (2012). *Determinants of Operational Sustainability of Micro Finance Institutions in Kenya* (Unpublished MBA Project). University of Nairobi, Kenya

G.O.K (2006). Micro and Small Enterprises for wealth and Employment Creation for Poverty Reduction. *Sessional Paper No. 2*, Nairobi, Government printer.

Goldmann, K. (2016). *Financial Liquidity and Profitability Management in Practice of Polish Business*. Financial Environment and Business Development, 103-112.

Idama, A., Asongo, A. I. & Nyor, N. (2014). Credit Risk Portfolio Management in Microfinance Banks: Conceptual and Practical Insights. *Universal Journal of Applied Science*, 2(6), 111-119

Jørgensen, A. N. (2011). *The Profitability of Microfinance Institutions and the Connection to the Yield on the Gross Portfolio.* Unpublished Thesis. Copenhagen Business School

Kahiga, D. M. (2014). Effect of Financial Innovation on Profitability of Deposit-Taking Microfinance Institutions in Kenya. *Unpublished MBA Project*. University of Nairobi

Kimando, L. N., Kihoro, J. M. & Njogu, G. W. (2012). Factors Influencing the Sustainability of Micro-Finance Institutions in Murang'a Municipality. *International Journal of Business and Commerce*, 1(10), 21-45.

Kisengo, Z. M. (2014). *Effect of firm characteristics on performance of the microfinance sector in Nakuru, Kenya* (Doctoral dissertation, Egerton University).

Lintner, J. (1965), *The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets*. The Review of Economics and Statistics, 47(1), 13-37.

MacKinnon, D. & Fairchild, A. (2008). A General Model for Testing Mediation and Moderation Effects. Prevention science: *The official journal of the Society for Prevention Research.* 10. 87-99. http://doi.org/10.1007/s11121-008-0109-6.

Morduch, J. (2000). The Microfinance Schism, World Development. *Journal of Development Economics*. 28, No. 4.

Mossin, J. (1966), Equilibrium in a capital asset market. *Econometrica*, 34(4), 768-783

Mugenda, O. & Mugenda, G. (2003). *Research Methods.* Nairobi: Acts Press.

Mugenda, O. M. & Mugenda, A. G. (2005). *Research Methods: Quantities and qualitative approaches*. Nairobi: Act Press.

Muriu, P. (2011). *Microfinance Profitability: Does Financing Choice Matter?* (Unpublished Doctoral Thesis). University of Birmingham.

Mwangi, M. N. (2014). *The effects of liquidity on financial performance of deposit taking micro finance institutions in Kenya* (Doctoral dissertation). University of Nairobi.

Mwizarubi, M., Singh, H. & Mnzava, B. (2015). *Emerging Paradigms of Financing Tanzanian Microfinance Institutions and their Impact on Financial Sustainability*. A paper presented at the 11th International Business and Social Science Research Conference, Dubai, UAE.

Myers, C. & Brealey, R. (2013). *Principles of Corporate Finance*. New York: McGraw-Hill.

Nelson, L. (2002). *Solving Credit Problem*. Retrieved from http://www.cfo.com (4/05/17).

Ngumo, K. O. S., Collins, K. W., & David, S. H. (2020). Determinants of financial performance of microfinance banks in Kenya. *arXiv preprint arXiv:2010.12569*.

Odowa, K. H., & Ali, L. (2019) *Determinants of Financial Sustainability of Microfinance Institutions in Ethiopia.*

Okombo, T. O. (2015). Effect of Electronic Banking on Financial Performance of Deposit Taking Micro Finance Institutions in Kisii Town. *IOSR Journal of Business and Management*, 17(2), 90-94.

Omino, G. (2005). *Regulation and Supervision of Microfinance Institutions in Kenya*. Central Bank of Kenya. Essay on Regulation Supervision Series.

Ongore, O. K. & Gemechu, B. (2013) Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3, 237- 252.

Talibong, J. K. & Simiyu, E. M. (2019). Financial soundness indicators and financial performance of deposit taking micro finance banks in Kenya. *African Journal of Emerging Issues*, *1*(11), 67-84.

Sekaran, U. & Bougie, R. (2011). *Research Methods for Business* (5th edition). Chichester: John Wiley & Sons.

Seyed, A. (2011). An Examination of Challenges and Prospects of Microfinance Sector of Pakistan. *European Journal of Economics, Finance and Administrative Sciences*.

Sharpe, W.F. (1964), Capital asset prices: A theory of market equilibrium under conditions of risk. *The Journal of Finance*, 19(3), 425-442.

Thapa, G. (2008). Sustainability and Governance of Microfinance Institutions: Recent experiences and some lessons of South East Asia. *Working Paper No. 07-11*, Rome.

Treynor, J. L. (1962), Toward a theory of market value of risky assets, *unpublished manuscript*. A final version was published in 1999. In: Korajczyk, R.A., editor. Asset Pricing and Portfolio Performance: Models, Strategy and Performance Metrics. London: Risk Books. p15-22

Wafula, D. N. (2016). *Determinants of Financial Sustainability of Microfinance Institutions in Kenya* (Unpublished PhD thesis). Jomo Kenyatta University of Agriculture and Technology, Kenya.

Yenesew, A. (2014). *Determinants of Financial Performance: A Study on Selected Micro Finance Institutions in Ethiopia.* (Unpublished Project). JIMMA University, Ethiopia.

APPENDICES

Appendix 1

List of licensed Micro-finance institutions in Kenya as at Dec 2020

1. Caritas Microfinance Bank Limited
2. Century Microfinance Bank Limited
3. Choice Microfinance Bank Limited
4. Daraja Microfinance Bank Limited
5. Faulu Microfinance Bank Limited
6. Kenya Women Microfinance Bank Limited
7. Rafiki Microfinance Bank Limited
8. Key Microfinance Bank Limited
9. SMEP Microfinance Bank Limited
10. Sumac Microfinance Bank Limited
11. U & I Microfinance Bank Limited
12. Uwezo Microfinance Bank Limited
13. Maisha Microfinance Bank

Source: Central bank of Kenya 2020(www.centralbank.go.ke)

Appendix 2

Data collection sheet summary (Ksh millions)

Microfinance ID	*Year*	*CA*	*CL*	*OPEX*	*OI*	*BD*	*TLO*	*NOI*	*AVA*	*Total Asset*
Microfinance 1	*2020*	22,547	23,443	5,874	5,058	3,751	16,741	-816	29,326	28,038
	2019	*25,481*	*24,021*	*5,594*	*5,976*	*3,194*	*18,972*	*504*	*30,098*	*30,613*
	2018	*25,860*	*24,227*	*6,206*	*5,958*	*3,453*	*19,997*	*-13*	*29,257*	*29,582*
	2017	*25,533*	*23,148*	*6,012*	*7,029*	*3,269*	*19,374*	*999*	*30,542*	*28,931*
	2016	*29,081*	*26,230*	*6,126*	*7,523*	*3,150*	*22,189*	*1,295*	*32,007*	*32,153*
Microfinance 2	*2020*	26,073	24,948	5,244	*5,185*	*358*	*17,561*	*18*	*29,481*	*29,279*
	2019	*26,531*	*24,458*	*4,630*	*5,643*	*-163*	*19,777*	*868*	*28,454*	*29,682*
	2018	*24,420*	*22,961*	*4025*	*4797*	*57*	*16,935*	*679*	*26,275*	*27,225*
	2017	*22,837*	*20,022*	*3,932*	*4,653*	*2,257*	*16,958*	*642*	*26347*	*25,325*
	2016	*25,152*	*21,758*	*4,339*	*4,818*	*1,025*	*17,955*	*425*	*26,347*	*27,369*
Microfinance 3	*2020*	*5,264*	*3,753*	*899*	*886*	*1,132*	*4,095*	*4*	*5,970*	*6,005*
	2019	*5,026*	*3,211*	*766*	*807*	*857*	*3,040*	*42*	*5,992.5*	*5,935*
	2018	*5,057*	*3,018*	*1,013*	*803*	*697*	*2,723*	*-128*	*6,388.5*	*6,050*
	2017	*6,204*	*4,478*	*1,140*	*794*	*738*	*2,856*	*-223*	*7027*	*6,727*
	2016	*6,884*	*4,996*	*1,548*	*1,218*	*668*	*3,661*	*-167*	*7,528*	*7,327*
Microfinance 4	*2020*	*2,903*	*2,799*	*671*	*620*	*3*	*1,761*	*-22*	*3,380*	*3,446*
	2019	*2,788*	*2,624*	*755*	*838*	*-13*	*1,982*	*70*	*3.128*	*3,314*
	2018	*2,420*	*2,383*	*612*	*654*	*32*	*1,647*	*36*	*2,838*	*2,942*
	2017	*2,246*	*2,186*	*616*	*563*	*91*	*1,677*	*34*	*26,965*	*2,734*
	2016	*2,233*	*2,075*	*663*	*569*	*158*	*1,677*	*-82*	*2625.5*	*2,659*
Microfinance 5	*2020*	*2,139*	*1,943*	*274*	*285*	*43*	*1,411*	*11*	*3,996*	*2,284*
	2019	*1,555*	*1,432*	*271*	*226*	*77*	*758*	*-44*	*1,478*	*1,712*
	2018	*1,155*	*960*	*240*	*158*	*25*	*751*	*-83*	*10,616*	*1,244*
	2017	*819*	*585*	*158*	*88*	*17*	*351*	*-70*	*726.5*	*879*
	2016	*507*	*287*	*112*	*38*	*0*	*141*	*-74*	*380*	*574*
Microfinance 6	*2020*	*2,191*	*1,706*	*281*	*400*	*330*	*1,314*	*115*	*2161.5*	*2,310*
	2019	*1,896*	*1,431*	*227*	*378*	*122*	*1,199*	*142*	*1771.5*	*2,013*
	2018	*1,422*	*1,125*	*187*	*315*	*290*	*919*	*117*	*1333.5*	*1,530*
	2017	*1,021*	*808*	*167*	*232*	*26*	*623*	*60*	*970*	*1,137*
	2016	*695*	*460*	*144*	*201*	*7*	*538*	*53*	*705.5*	*803*
Microfinance 7	*2020*	*224*	*184*	*54*	*38*	*33*	*98*	*-17*	*365.5*	*307*
	2019	*321*	*232*	*84*	*64*	*51*	*158*	*1*	*419*	*406*
	2018	*363*	*268*	*105*	*73*	*48*	*231*	*--3*	*393.5*	*433*
	2017	*312*	*176*	*86*	*69*	*43*	*218*	*-10*	*358*	*354*
	2016	*324*	*173*	*88*	*80*	*46*	*244*	*-4*	*379.5*	*362*

Microfinance 8	*2020*	*784*	*604*	*96*	*135*	*15*	*700*	*33*	*745.7*	*805*
	2019	*663.69*	*511*	*97*	*117*	*19*	*601.72*	*17*	*610.2*	*686.4*
	2018	*514*	*358*	*87*	*109*	*38*	*443*	*17*	*470*	*534*
	2017	*386*	*239*	*80*	*102*	*22*	*325*	*17*	*378.5*	*406*
	2016	*329*	*228*	*50*	*66*	*7*	*271*	*11*	*267.5*	*351*
Microfinance 9	*2020*	*71*	*10*	*40*	*16*	*30*	*39*	*-17*	*151*	*134*
	2019	*107*	*25*	*114*	*43*	*34*	*68*	*-31*	*196.5*	*168*
	2018	*193*	*16*	*74*	*43*	*76*	*135*	*-27*	*218.5*	*225*
	2017	*177*	*29*	*58*	*46*	*79*	*126*	*-9*	*213*	*212*
	2016	*197*	*29*	*53*	*66*	*50*	*151*	*3*	*220*	*214*
Microfinance 10	*2020*	*39*	*97*	*44*	*6*	*-2*	*2*	*-40*	*128.5*	*124*
	2019	*44*	*107*	*60*	*14*	*-13*	*10*	*-32*	*152.5*	*133*
	2018	*93*	*126*	*68*	*24*	*0*	*42*	*-0.32*	*170*	*172*
	2017	*94*	*95*	*80*	*20*	*-5*	*53*	*-47*	*174*	*168*
	2016	*122*	*85*	*63*	*17*	*0*	*51*	*-28*	*131.5*	*180*
Microfinance 11	*2020*	*543*	*781*	*326*	*390*	*-9*	*307*	*65*	*1464.5*	*1665*
	2019	*352*	*446*	*125*	*87*	*5*	*188*	*-38*	*776.5*	*1264*
	2018	*223*	*262*	*174*	*55*	*0*	*138*	*-199*	*295.5*	*289*
	2017	*238*	*231*	*87*	*37*	*10*	*156*	*-42*	*236.5*	*302*
	2016	*128*	*78*	*56*	*10*	*0*	*22*	*-32*	*85.5*	*171*
Microfinance 12	*2020*	*228*	*279*	*112*	*53*	*18*	*114*	*-59*	*322*	*296*
	2019	*267*	*275*	*125*	*82*	*27*	*187*	*-43*	*389.5*	*348*
	2018	*366*	*342*	*107*	*82*	*13*	*195*	*-25*	*359.5*	*431*
	2017	*215*	*240*	*101*	*38*	*17*	*103*	*-63*	*256.5*	*288*
	2016	*153*	*160*	*87*	*46*	*12*	*107*	*-41*	*211*	*225*
Microfinance 13	*2020*	*18*	*103*	*34*	*9*	*-3*	*6*	*-25*	*66.5*	*54*
	2019	*37*	*102*	*35*	*8*	*1*	*11*	*-27*	*88.5*	*79*
	2018	*47*	*120*	*72*	*14*	*0*	*22*	*-41*	*117*	*98*
	2017	*60*	*91*	*71*	*19*	*0*	*31*	*-37*	*129*	*136*
	2016	*68*	*71*	*87*	*46*	*3*	*35*	*-34*	*99.5*	*122*

Where,

CA-Current asset

CL-Current liabilities

OPEX-Operating expense

OI-Operating income

BD-Bad loans

TLO-Total loans outstanding

ROA- Net operating income after taxes

AVA- Average asset

Microfinance Id Names

1. Kenya Women Microfinance Bank Limited
2. Faulu microfinance Bank Limited
3. Rafiki microfinance Bank Limited
4. SMEP microfinance Bank Limited
5. Caritas microfinance Bank Limited
6. Sumac microfinance Bank Limited
7. Key microfinance Bank Limited
8. U & I microfinance Bank Limited
9. Uwezo microfinance Bank Limited
10. Daraja microfinance Bank Limited
11. Maisha microfinance Bank
12. Century microfinance Bank Limited
13. Choice microfinance Bank Limited

Appendix 3

University approval letter

ST. PAUL'S UNIVERSITY

Private Bag 00217 LIMURU, KENYA
Email: office@spu.ac.ke
Website: www.spu.ac.ke

Tel Office: +254 (0) 20 - 2020505/10
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(0) 736 - 424440

24th May 2021

National Commission for Science and Technology,
P.O. BOX 30623-00100,
Nairobi.

Dear Sir/Madam,

RE: RECOMMENDATION FOR ANN NJERI KIAI- MBALMR856419 TO CONDUCT RESEARCH

This letter confirms the above named person is a student of the Masters of Business Administration program at St. Paul's University.

The second year consists of a major research work leading to a dissertation. The student's selected topic is *'The influence of institutional characteristics on the financial performance of licensed micro-finance institutions in Kenya'.*

Kindly grant this student the required permit.

Yours Faithfully,

Dr. Julius Kahuthia
Director, Board of Postgraduate Studies

DIRECTOR POSTGRADUATE STUDIES
ST. PAUL'S UNIVERSITY
2 MAY 2021
TEL: 020-2020505/20-20510
P.O. PRIVATE BAG - 00217, LIMURU

Appendix 4

NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **474536**

Date of Issue: **26/May/2021**

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This is to Certify that Miss.. Ann Njeri Kiai of St. Paul's University, has been licensed to conduct research in Nairobi on the topic: THE INFLUENCE OF INSTITUTIONAL CHARACTERISTICS ON THE FINANCIAL PERFOMANCE OF LICENSED MICRO-FINANACE INSTITUTION IN KENYA for the period ending : 26/May/2022.

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