

**EFFECTS OF SELECTED INTERNAL FACTORS ON GROWTH OF MICRO  
FINANCE INSTITUTIONS IN KENYA**

**BY**

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**DECLARATION**

This research thesis is my original work and has not been presented for any award in any other university.

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## **DEDICATION**

I dedicate this work to the Almighty God and to my family for their encouragement and support throughout my studies.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ADR:</b>	American depository receipt
<b>AMFI:</b>	Association of Micro Finance Institution of Kenya
<b>CBK:</b>	Central Bank Kenya
<b>CDR:</b>	Commission on Dietetic registration
<b>CR:</b>	Craigslist
<b>DEA:</b>	Data envelopment analysis
<b>DMB:</b>	Deposit money banks
<b>GDP:</b>	Gross Domestic Products
<b>GOK:</b>	Government of Kenya
<b>MFI:</b>	Micro Finance Institutions
<b>MKTCAP:</b>	Market Capitalization
<b>NGO:</b>	Non-Governmental Organization
<b>NSE:</b>	Nairobi Security Exchange
<b>PAR:</b>	Portfolio at Risk
<b>ROA:</b>	Return on Asset
<b>ROE:</b>	Return on Equity
<b>SEM:</b>	Structural Equity Model
<b>WOR:</b>	Write-off-Ratio

## ABSTRACT

MFIs are financial firms which offer saving and credit services to lower income earners. Although the role of the micro finance bodies is to serve those who the formal banking system have left out, a growing concern that there is still lack of credit facilities to many Kenyans exists. The Association of Microfinance Institutions statistics show that there is lack of access to formal financial services to more than 60% of Kenyans. The reason for this is that the concentration of most micro-credit firms is in towns and cities. Majority of the individuals that lack credit are in rural areas. The objective of the study was to determine the effects of selected internal factors on growth of Micro Finance Institutions in Kenya. The study used descriptive research design. All the companies listed by the Directory-of-Licensed-Microfinance-Banks were employed for this research's purpose. This study adopted census approach and thus all the listed firms formed the study sample frame. The study findings revealed that asset quality have a negative and significant effect on growth of MFIs. The study findings also revealed that capital adequacy, liquidity and operational cost efficiency have a positive and significant effect on growth of MFIs. The study concluded that asset quality have a negative but significant impact on growth of MFIs. The study concluded that capital adequacy have a positive and significant impact on growth of MFIs. The study concluded that capital adequacy, liquidity and operational cost efficiency have a positive and significant impact on growth of MFIs. The study recommend that the management of MFIs should improving their investment assets levels and improve their assets quality by reducing the rate of nonperforming loans through credit risk identification, measurement, monitoring and controlling. This will improve the growth of the MFIs. The study also recommends that the management of the MFIs should ensure there is a wide capital base in the MFIs to strengthen confidence of depositors. The study also recommends that to facilitate favorable growth of these institutions, strategies to facilitate increased liquidity of MFIs should be adopted by the institutions for their efficiency in financial operations. The study also recommends that improvements in operational efficiency should be facilitated through application of modern technology and innovative operational strategies to effectively bring about growth in the MFIs.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Poverty is all over the world. It is a problem that needs a solution. The micro finance sector has chipped in to counter this menace known as poverty, through giving the poor cheap loans, deposit of small amounts of money and so forth. However, MFIs strain between achieving financial sustainability and poverty eradication. Globalization is a sensation that has drawn the attention of the whole world. It is increasing over time due to technological advancements resulting to efficiency in institutions. Whereby, communications are fast and effective, transfer of money is no longer cumbersome and so on. One of the institutions affected by this occurrence is the MFIs'. They depend on competitive strategy to govern their growth (Gul, Mohammad & Ahmad, 2011).

The study was anchored on four theories which are; Pecking Order Theory, The Shiftability Theory, Capital Assets Pricing Model Theory and the Economic Theory. The Pecking Order theory observes that companies choose internal ways of financing opposed to costly external sources of finance (Myers, 1984; Chittenden, 1996). Shiftability Theory holds that organizations preserve some significant amount of assets which can be easily transferred to other banks with no loss at all, that is, when a need arise (Moulton, 1918).The Capital Asset Pricing Model explains that investors have to distinguish portfolios that belong to them and have a given fraction of the market share of the bank. Investors without special investment knowledge are advised to hold diversified portfolios. What we call efficient markets hypothesis (Black, 1971) while in the Economic Theory microfinance institutions have been treated as infant industries, whereas the psychological theory has differentiated the microfinance entrepreneurs from the traditional money lenders through portraying them as people driven by social consciousness

In Kenya MFIs' face a stiff competition from commercial banks. For commercial banks are more stable financially opposed to MFIs, so that banks are at a good position to shift to new technology in case of a discovery. This means that commercial banks are better placed

to offer fast, reliable, efficient banking services to customers (Juma, 2013). Therefore, the growth of MFIs is affected because customers prefer commercial banks for their better services. To counter this problem this study intends to focus on the selected internal factors that influence the growth of MFIs’.

Previous studies show that the growth of Microfinance Institutions (MFIs) in developing countries cannot be ignored if societies are to prosper, but there are some factors that hinder their growth (Manyumbu, Mutanga & Siwadi, 2014). Natalia (2013) found that the major problem areas hindering the growth of micro finance institutions in Tanzania were lack of capital, high cost of operation and lack of regulatory and policy framework. Recently, MFIs’ have been known to foster the development of small scale businesses which in turn contribute to the general development of a nation. In the United States, small businesses bring about new job opportunities and they form the building blocks of the largest corporations (Brown, 2017). So, if MFIs’ were to grow then the economy of a nation would improve.

### **1.1.1 Selected Internal Factors**

Selected internal factors are independent variables that affect the growth of MFIs’. They can either be strong or weak. Selected internal factors vary from one MFI to the other. This paper focused on four selected internal factors namely; liquidity, asset quality, operational cost efficiency and capital adequacy. The choice of these factors is justifiable because they focus on the financial statement, macroeconomic data, funding sources, cash flow and budget thus observing the dynamic aspects of the institutions such as growth (Deyoung *et al.*, 2001). Capital is the money already invested in business or investable (Geoffrey, 2014). The use of a portfolio approach will help us define capital adequacy. Capital is adequate either when it decreases risk of collapse in the future to some level that is predetermined or when a bank pays enough premiums to an insurer per the expected losses (Maisel, 1979). Moulton (1918) in his theory of shiftability reveals that firms should have assets that can easily be shifted to other firms. This helps to counter the problem of capital adequacy.

Liquidity is the availability of money that can be used to finance a project or institution’s ability to finance an increase in assets and to repay liabilities in time (Adrian & Shin, 2010). It is also the ability to settle obligations within the stipulated time. It can be measured using

the following concepts; money overhang, the price gap, nominal money gap and the real money gap (Polleit & Gerdesmeier, 2005). Asset quality is a factor that determines the state of an institute. Examples of asset qualities of a micro finance institute are; loans, securities, off- balance sheet items, cash, due from accounts, premises and so forth (Schaeck, 2008). Asset quality is evaluated through rating, what is known as asset quality rating. This rating reflects on the existing and possible credit risk associated with the asset qualities.

Xiaoqing, Maggie and Heffernan, (2007) defines operational cost efficiency as the extent a program has gone or will go in converting its resources into results for a remarkable outcome; at a lower price compared to its alternative. Operational cost efficiency is measured by several approaches. One of the approaches is measuring efficiency by use of indicators (ratio) analysis. Another approach is the use of parametric programming, also the use of DMUs efficiency frontiers to construct measures of efficiency and so on (Tuškan & Stojanović, 2016).

### **1.1.2 Organizational Growth**

Growth is the event of increase, whereby a firm or an institution moves from one level to the other over time, that is, the firm or institution is not retardant as far as expansion is concerned. Economic growth is commonly measured through change in Gross Domestic Product. Gross Domestic Product measures the value added of the total produced goods and services (Gråsjö&Arvemo2010). An increase in growth rate is determined by various factors, namely; resources, capital good, technology, cost efficiency etcetera. In a case of resources, an increase in resources would increase the growth rate. An example of a fast-growing economy is Ethiopia, registering an impressive GDP Growth for some years. Heavy investments have been made by the government in large-scale social, infrastructural and energy projects. As a result, there is flow of significant amounts of capital into the public sector (Durane, 2015).

Robert and Trevor (1956) in their neo-classical growth models showed that the output per worker (growth per unit of labor) does increase with the output per capita (growth per unit of capital) although at a decreasing rate. Aghion and Howitt(2007) in their research reveals that growth is influenced by capital accumulation but it is mainly influenced by technological advancements and unless there are advancements in technology growth will

not be experienced. Continuing rapid economic growth enables a country's economy to meet the demand of its citizens in terms of quality food, homes, quality resources for health and education for all (Shaw, 1999).

### **1.1.3 Selected Internal Factors and Organizational Growth**

Internal factors in firms show how management strategies of business can influence on judgment concerning firm's growth. The world is in a competition, the environment is constantly changing thus there is need of continual development of the selected internal factors for growth. Therefore micro finance institution should be an effective development agent and alleviate poverty (OECD, 1996). This means that credit will be given. It is known that credit is based on the ability of a client to repay and manage their business. At the same time sustainability of the MFIs' that translates to growth should be looked into. In this case MFIs' introduce guarantors

This attempt to guard the micro finance sustainability leads to a problem, whereby the lower income class withdraws due to lack of a surety. They fear to convince their guarantor because they are not sure if they are able to repay (Wilson, 2001). Thus, an innovative idea which serves as the internal factor should be developed to solve this predicament. To ensure that no customer withdraws and at the same time the firm is safe as it lends for continuous growth.

The Council of the Microfinance Equity Funds in 2012 explained that the use of independent directors should be a prioritized to improve performance among MFIs which will bring about growth. If this approach is well embraced by MFIs' then the results will be expansion of the institutions. Bank profitability is a function of selected internal factors. It is also true for MFIs' and their profitability translates to their growth (Makokha, 2016). According to Oware (2012), lack of a cost-effective technology prevent the affected programs to increase their outreach within their operational areas, irrespective of whether urban or rural; therefore there is need of constant review of selected internal factors to enhance the effectiveness of MFIs'. This will lead to their growth.

#### **1.1.4 Micro-Finance Institutions**

Micro-Finance Institutions are financial firms which offer saving and credit services to lower income earners. That is, to people who have limited access to credit services. MFIs' are well known to reach out to grassroots workers (Conroy, 2003). Some of the MFIs' objectives are as follows; creating financial markets and building up avenues for civilization in the outskirts, promoting socio-economic development at the grass root level, starting Self-Help Groups and facilitating them, providing livelihood training to marginalized groups, empowering women and promoting programs for the disabled among many. Their financial activities in the less developed countries have a some features, that is, strong social feeling appearing ( active attitude of the poor smallholders), poverty in rural areas, timeframe in which the services of MFIs' are evident et cetera. The development of the MFIs rose when the new states originated, (Srncic & Svobodová, 2009).

In Kenya microfinance institutions showed up in 1984 through Kenya Rural Enterprise Program (K-Rep) an NGO by World Bank. Its aim was to empower small enterprises (Cherotich, 2013). Today the number of MFIs' have grown tremendously. An annual report dated 13<sup>th</sup> June 2017 by Association of Micro Finance Institution of Kenya (AMFI) showed that there were 13 Microfinance banks and 43 Credit only Microfinance providers. However, the report was restricted to 30 institutions who shared their data. MFIs' are regulated by the Microfinance Act. This act regulates the establishment, supervision as well as licensing of large microfinance institutions under the control of the CBK (The Microfinance Act, 2006). According to the Directory-of-Licensed-Microfinance-Banks-March-2017 the following are the licensed MFIs in Kenya, Uwezo, U&I, Choice Microfinance Bank, Daraja, Faulu, Sumac, Kenya Women Microfinance bank limited, Century, SMEP, Rafiki, REMU, Caritas and Maisha Microfinance Bank Ltd.

MFIs have expanded throughout the world and are now serving over 10 million households worldwide, (Cherotich, 2013). FinAccess (2016) reported an increase of MFIs usage in Kenya from 3.5% in 2013 to 3.6% in 2016. Although there is an increase in terms of their usage their profitability is not promising. A recent consulting paper by Central Bank Kenya (CBK) reported a drop in performance as at December 2017. CBK made some proposals aimed at boosting MFIs' (bankelele.co.ke, 2018).



## 1.2 Research Problem

As indicated by Conroy (2003) MFIs are financial firms which offer saving and credit services to lower income earners. Although the role of the micro finance bodies is to serve those who the formal banking system have left out, a growing concern that there is still lack of credit facilities to many Kenyans exists. The Association of Microfinance Institutions statistics show that there is lack of access to formal financial services to more than 60% of Kenyans. The reason for this is that the concentration of most micro-credit firms is in towns and cities. Majority of the individuals that lack credit are in rural areas. The question now becomes how can the growth of MFIs be facilitated to cover all areas (Tilman, 2016)?

Although MFIs have expanded throughout the world and are now serving over 10 million households worldwide, (Cherotich, 2013) and as also reported by FinAccess (2016) an increase of MFIs usage in Kenya from 3.5% in 2013 to 3.6% in 2016 their profitability is not promising. A recent consulting paper by Central Bank Kenya (CBK) reported a drop in performance as at December 2017. CBK made some proposals aimed at boosting MFIs' (bankelele.co.ke, 2018).

Tilman, (2016) noted that though microfinance activity has considerably gone up in recent years, there is still lack of significant growth and a significant portion of the population that lacks access to formal financial services cannot access the MFIs. Information on a standard blueprint is little to reveal to us how these characteristics can be achieved and how the growth of the microfinance industry can be ensured. To a great extent, the growth ought to be market driven (Amando, 2015).

Furthermore, studies carried out in Kenya such as Cherotich (2013) and Amando (2015), have indicated that although the microfinance sector has been experiencing growth over the past few years, there hasn't been much growth in most individual institutions. Also much of growth of the MFIs has been spontaneous. This therefore forms the background of this study whose aim is to assess effects of selected internal factors on growth of Micro Finance Institutions in Kenya.

### **1.3 Research Objective**

To determine the effects of selected internal factors on growth of Micro Finance Institutions in Kenya.

### **1.4 Value of the Study**

The paper may benefit researchers in the Micro finance field to build on their studies since it provides updated information in this field. The findings may also help to understand shiftability theory, pecking order theory as well as the Capital Asset Pricing Model Theory, their usage and how they contribute to the growth of MFIs'. In addition this study may serve as a basis to further development of the theories.

This paper may serve the management boards of MFIs' to make informed decisions for growth of MFIs because the paper shows how the different selected internal factors influence growth. The study may also help existing MFIs' to make changes in the selected internal factors to boost their growth. It may also help upcoming MFIs to put up current strategies.

The study may help the regulator of MFIs', that is, CBK in revising the legal and regulatory framework that oversee the microfinance institutions in Kenya to ensure it is up to date and relevant to this field. It also serves as a point of reference for any amendments to be made in the Microfinance Act. The information in this study may help people with the interest to join MFIs.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter was divided into three sections. The first section explained the theories related to the study variables. The second section brought out the design methods used, findings, recommendations' of previous studies and how they connect with this study. Finally, a summary of how the review relates to the study is done.

#### **2.2 Theoretical Literature**

A theory is a set of principles used to explain, account for a certain action. It gives evidence of the various decisions that have been made. The following theories were used in this study;

##### **2.2.1 The Shiftability Theory**

The shiftability theory was proposed by Moulton (1918). It states that if organizations preserve some significant amount of assets which can be easily transferred to other banks with no loss at all, that is, when a need arise. These assets are applicable to market investments that are short-term namely; bills of exchange and treasury bills. Similarly, for large companies their shares and debentures are considered as sound assets that can be translated to other banks. In a case where all banks need liquid cash, banks can turn to the central bank as the last resort. Marriner Stoddard Eccles was the author of the Banking Act of 1935, which went ahead to point out that the liquidity of bank asset during bad times depended on the Central bank's ability to exchange those assets for credit or currency. Therefore, the central bank advices banks to hold on assets that can be easily shifted.

The theory shows that banks receive assets that are in good condition and also receive shares, debentures from enterprises. This has motivated lending by banks. Shiftability theory has some demerits. First, it doesn't provide liquidity to the banking system. Also a disastrous environment to both lenders and borrowers is created; in a case where all banks shift their assets at the same time. This theory informs our study through bank's motivation to lend. As a result, there is increase in money supply to the MFIs'. If money is supplied to the MFIs' then growth occurs.

### **2.2.2 Pecking Order Theory**

This theory was introduced by Donaldson in 1961 later advanced by Stewart C. Myers and Nicolas Majluf in 1984. They observed that companies choose internal ways of financing opposed to costly sources of finance. Pecking order theory holds that firms that make a high rate of earning are those that spend less of debt capital. This theory unveils how companies arise to trade their equity when the market is overvalued (Myers, 1984, Chittenden, 1996). It explains the different ways of financing and their preference. The first preferred way is internal sources, if they are depleted then the next source which is debt or equity is taken. Debt is preferred second as a way of financing and if the set limit of borrowing is hit then equity is used as the last resort.

Pecking order theory explains the relationship between profitability and debt ratios, whereby Friend and Lang (1995) and Kester showed that profitability was negatively related to debt-to-asset ratios. Fama and French (1998) suggested that there was a positive connection between profitability and leverage opposed to Rajan and Zingales (1995) and Wald (1999). It was observed that a high amount of leverage caused problems amongst stakeholders and creditors which resulted into a negative connection between leverage and profitability. Booth and Aivazian (2001) investigated capital structure and profitability in different countries and found that the variables that affected the choice of the capital structure of firms were similar. This theory connects with our study because a micro finance firm will know the profit and debt margin through the theory for good decision making. The good decisions made by the firm leads to stability that brings about growth.

### **2.2.3 The Capital Asset Pricing Model Theory**

The Capital Asset Pricing Model Theory was propelled by Sharpe (1964), later it was improved by Linter (1965) as well as by Black (1972). This model explains that investors have to distinguish portfolios that belong to them and have a given fraction of the market share of the bank. Investors without special investment knowledge are advised to hold diversified portfolios. What we call efficient markets hypothesis (Black, 1971). When informational asymmetries and contract enforcement problems show up, some banks retrieve resources to businesses with high returns. It is wise to make corrections on estimation errors because it improves investment performance. It is clear from this model

that investors avoid risks and they only look at the variance and mean on their return on investment during a single period when choosing portfolios Fofack (2009). Since portfolios reduce the variance of portfolio return, given expected profits, and increase expected returns, given variance; investors always choose mean variance-efficient portfolios.

This model makes some assumption that the loans or assets' qualities are primary items in the portfolio of any given bank. The bank now has to come up with some portfolios that make the high returns risk free at an affordable cost. This model is essential to this study because it is used to estimate the cost of capital and make corrections on estimation errors. This will bring about growth in terms of performance.

#### **2.2.4 The Economic Theory**

The economic theory was proposed by Karl Marx (1964). In this theory microfinance institutions have been treated as infant industries, whereas the psychological theory has differentiated the microfinance entrepreneurs from the traditional money lenders through portraying them as people driven by social consciousness. Remenyi (2000) posits that the economic argument gist is that for any business venture to succeed, microfinance institutions included, the entrepreneurs must be able to deliver appropriate services and in a profitable manner. Some microfinance institutions at best cover their operating costs whereas some of the well understood among them have the ability to cover in part the subsidized cost of capital employed. This situation suggests that in the long run, microfinance institutions won't be financially viable. This problem's solution is treating microfinance institutions like infant industries in order to ensure the subsidization of micro-lending businesses in their initial operation stages. If they are subsidized, it will benefit both the society and economy since it will assist micro lenders to achieve economies of scale as well as productivity fillip which comes with profitability.

The logic is that as time goes by, as microfinance institutions' clients, micro entrepreneurs will improve their skills in dealing with resource management, money management and contractual obligations through establishing their economic contracts with retailers, suppliers of production units, government employees and banks. Such skills should decrease the transaction cost, aid in disseminating information as well as raise the ability of micro entrepreneurs in assessing available information for making business decisions

that are sound in an effective manner. The society therefore benefits from productive process that is in effect and creates public goods as spin-offs from microfinance growth.

Depending on the extent of the value of these public goods, they form a basis that is legitimate for providing subsidies to microfinance institutions whereas the widespread outreach to poor households' transition is taking place (Remenyi, 2000). The Wealth of Nation does not say much regarding the theory's psychological aspect. Kenya is one of the many countries where microfinance institutions' regulation approaches are complicated because most institutions involve themselves in the provision of microfinance services under legal structures that are different.

In the present there is a challenge in the identification of a regulating approach that is appropriate and that is conducive to the development of the sector while ensuring the provision of adequate facility to the activities of the microfinance institutions. The recommended tiered approach for Kenya does recognize the inappropriateness of the legalization of the current banking in order to regulate specialized microfinance institutions' activities as well as the diversity of the institutions that engage in the sector that is less regulated. Although, microfinance institutions which operate as SACCOs , Kenya Post Office Saving Bank and banking institutions have regulations as per the act of parliament which specifies their different supervisory authority. This theory is in line with our study as it informs on how micro entrepreneurs will improve their skills dealing with resource management, money management and contractual obligations through establishing their economic contracts with retailers, suppliers of production, government employees as well as banks thus leading to growth of the micro financial institutions

## **2.3 Determinants of Organizational Growth**

This section discussed the determinants of organizational growth. These factors included; asset quality, capital adequacy, liquidity and operational costs efficiency.

### **2.3.1 Asset Quality**

Asset quality is a factor that determines the state of an organization. Examples of asset qualities of a micro finance institute are; loans, securities, off- balance sheet items, cash, due from accounts, premises and so forth (Schaeck, 2008). Asset quality is evaluated

through rating, what is known as asset quality rating. This rating reflects on the existing and possible credit risk associated with the asset qualities.

### **2.3.2 Capital Adequacy**

Capital is the money already invested in business or investable (Geoffrey, 2014). Capital is adequate either when it decreases risk of collapse in the future to some level that is predetermined or when a bank pays enough premiums to an insurer per the expected losses (Maisel, 1979). Moulton (1918) in his theory of shiftability reveals that firms should have assets that can easily be shifted to other firms. This helps to counter the problem of capital adequacy.

### **2.3.3 Liquidity**

Liquidity is the availability of money that can be used to finance a project or institution's ability to finance an increase in assets and to repay liabilities in time (Adrian & Shin, 2010). It is also the ability to settle obligations within the stipulated time. It can be measured using the following concepts; money overhang, the price gap, nominal money gap and the real money gap (Polleit & Gerdesmeier, 2005).

### **2.3.4 Operational Cost Efficiency**

Xiaoqing, Maggie and Heffernan, (2007) defines operational cost efficiency as the extent a program has gone or will go in converting its resources into results for a remarkable outcome; at a lower price compared to its alternative. Operational cost efficiency is measured by several approaches. One of the approaches is measuring efficiency by use of indicators (ratio) analysis. Another approach is the use of parametric programming, also the use of DMUs efficiency frontiers to construct measures of efficiency and so on (Tuškan & Stojanović, 2016).

## **2.4 Empirical Review**

The study reviewed various studies in view of the study variables and study conceptualization

### **2.4.1 Effect on Asset Quality on Growth**

Gonzalez (2007) sought the association between four indicators of Micro Finance Institution portfolio risk and changes in GNI per capita (GROWTH): quality at Risk over 30Days (PAR-30), Portfolio at Risk over 90 Days (PAR-90), Write-off Ratio (WOR) and Loan loss Rate (LLR). He tested the fitness of the models differently for results approval and also tested for the impact caused by different growth rates based on the loans disbursed. These tests suggested that microfinance portfolios are well grounded to counter any crises. Specifically, Gonzalez (2007) only found an association that is significant between PAR-30 and growth. The rates in the banking sector keep on changing, so by now PAR-30 may not be the only indicator that affects growth. In the recent past the government lowered the lending rates. Thus this paper is aimed at filling this gap of the time frame to find out any changes that would cause growth.

Mwongela (2015) examined the relationship between asset quality and Kenya's commercial banks' financial performance. This study utilized the descriptive research design. The data was obtained from secondary sources like company reports and the NSE handbooks. The results showed that only NIE, EQASS, INFL and MKTCAP are negatively related to ROA. Moreover, only LLP, NII, and GMS are positively related to ROA. But only LLP is statistically significant at 5 percent confidence interval. Therefore, asset quality as measured by LLP positively influences ROA of commercial banks. ROA is influenced positively therefore there will be an expansion of banks. However, Mwongela didn't address asset quality influence on growth of MFIs'. This paper intends to prove whether the results would be the same for the growth of MFIs'.

Fredrick (2012) did an analysis of the effect of credit risk management on commercial banks' financial performance and also tried to determine the association between Kenya's commercial banks' financial performance and the credit risk management determinants by using CAMEL indicators. Research design that is causal was carried out in his study and secondary data facilitated it. This study established that an effect that is strong, of the asset quality as a component on the commercial banks' financial performance existed. The study concluded that the CAMEL model can be employed to be a substitute for credit risk management. If a relationship between asset quality and financial performance exist, then



it may be true between asset quality and growth of MFIs'. Therefore, there is a need for a study to prove the same.

#### **2.4.2 Effect of Capital Adequacy on Growth of MFIs**

Macharia (2016) determined whether relationship exist between profitability of listed Constructions and Allied firms at the NSE and capital structure . The study used a descriptive research design covering a duration of ten years from 2006-2015. The study found profitability of listed construction and allied companies at Nairobi Securities Exchange and capital structure to have a weak negative relationship. Thus the study recommends that construction sector companies should finance most of the assets using other sources of finance to increase their profitability. Commercial banks should be cautious as they lend long term loans to the construction sector. Loans contribute to the overall growth of banks through the earned interest rates. Macharia only focused on commercial banks; there remain a gap to conduct a study now for MFIs'. This will be of help to the upcoming and growing MFIs'.

Amin and Jamil (2015) investigated the effect of capital structure on firm performance in Bangladesh. This study used panel data for the period of 15 years from 2001 to 2015 and seven cement firms that were listed to be in operation in the nation. This study documented a significantly positive association between the short term debt to total assets ratio and firm performance measured in terms of ROA and ROE. When a firm performs due to short-term debts it lends, does it bring about growth? We need to answer this question through a study, our main focus being on MFIs'.

Dada (2014) assessed the dynamic association between the firm's value and leverage through the use of the panel data design. An observation was made, that short-term leverage constitutes the capital structure's substantial proportion. Moreover it was noted that the adjustment speed to the target capital structure of firms in Nigeria is relatively high when a comparison is done with the findings of western developed economies. Nigeria has faced some serious problems of terrorism for some time. As a result firms face sudden losses. Thus the findings of this study are not true for other countries. The fact that it is relatively high raises an alarm for us to do a study.

Fauziah and Iskandar (2015) analyzed and explained determinants of capital structure of the firms. The data analysis was conducted through the use of the Structural Equation Model (SEM) with Smart PLS 3.0. The results showed that the Firm Size had an impact that was not significant to the Dividend Payout though a significantly negative impact to the capital structure. As a result the effect of the capital structure affects the growth of the firm. Rates for dividend payout changes per year .So there is need to research on the impact capital would make on growth every year.

Babajide (2012) did an investigation on the impacts of microfinance on micro and small business growth in Nigeria. This study used panel data as well as multiple regression analysis for analyzing a survey of Nigeria's five hundred and two enterprises financed by MF banks which were selected randomly .They found evidence that is strong that access to microfinance didn't cause enhancement of growth of micro and small enterprises in that country. This paper's recommendation was to recapitalize microfinance banks to enhance their capacity to support small business expansion as well as growth. If the small businesses' grows, then more customers will come on board, that is, they will join MFIs'. In turn, MFIs' will grow. In other countries MFIs' are praised for bringing growth to small scale business. One, because their loan interest rate is low. This is opposite to the case in Nigeria. There is need to conduct a study to clear the air because the Nigerian study shows a strong evidence.

#### **2.4.3 Impact of Liquidity on Growth of MFIs'**

Lemara(2017) did an analysis on the liquidity and financial performance of Kenya's Deposit taking MF institutions for the duration of 2009-2013. This study used a descriptive research design. It was found that an association that is positive between liquidity and financial performance existed. This study's conclusion was that efforts in stimulating the liquidity of microfinance institutions would see the micro financial sector achieve financial performance which will increase and which will cause efficiency in the operations of the sector to increase. The recommendations were; improving operational efficiency by applying modern technology as well as operational strategies that are innovative , adopting strategies for facilitating increase in MFIs' liquidity and emphasizing on asset growth as a stimulator of competitiveness and financial performance. The aim of our study is related

with the literature by Lemara since financial performance of deposit affects growth of a company. You will agree with me that technology is rapidly changing with time. Operations in MFIs' are tied to technology. Clearly, the study by Lemara was done in the year 2009-2013, four years are gone. Thus we cannot depend on the same study. There is a call, to conduct a study for validity purpose.

Mwangi (2014) found out the impact of liquidity risk management on Kenya's commercial banks' financial performance. This study adopted a descriptive study design. Results of the study show that a unit increase in liquid assets to total assets ratio decreases ROA by 1%. A unit increase in liquid assets to total deposits ratio decreases ROA by 2.2%. A unit increase in borrowings from banks decreases return on assets by 14.2%. Finally the control variable which was asset quality shows that a unit increase in non-performing loans as a proportion of total loans would lead to a 12.4% decrease in return on assets. The study concluded that liquidity risk management has a significantly negative association with commercial banks' financial performance. It is clear that whether the returns are low or higher the growth of the company will be affected. Is it true for MFIs? I don't think so, because MFIs handle less cash compared to commercial banks. This assumption needs approval. Therefore, this paper intends to address the assumption.

Okaro and Nwakoby (2016) assessed the impacts of liquidity management on performance of Nigeria's deposit money banks. The presentation of data was in tables and was based on specified models. The OLS result indicated that a significantly negative association existed between liquidity ratio and profitability of deposit money banks and a significantly positive association existed between cash to deposit ratio and deposit money banks' profitability. These findings therefore recommended that instead of keeping excessive liquidity to provide unexpected deposit withdrawals from the customers, the deposit money banks should find it reasonable adopting other measures to meeting such requirements. Whenever a profit is realized the result is; jubilation, which in turn powers the output of employees leading to the company's growth. The study didn't factor in MFIs'. The level of liquidity for MFIs and macro-banks differ. Thus it is worthy to conduct a study to get the difference.

Bagh, Razzaq, Azad, Liaqat and Khan (2017) scrutinized the effect of liquidity management on the banks' profitability in Pakistan during 2006 to 2016. Secondary financial data obtained from audited annual financial reports underwent analysis through the use of descriptive and inferential statistics. The result demonstrated that ADR, CDR and DAR have an effect that positive and significant on ROA, whereas a significant and negative effect on ROA.CR, ADR, CDR and DAR had an effect that was significant and positive on ROE. On the basis of primary findings, all financial markets need to have liquidity management mechanisms, practices, procedures and policies that are approved in a comprehensive manner. If banks are to grow then there must be profit, which is dependent on liquidity. The study above suggested approval of liquidity procedures, practices and so on. MFIs' may not be in a position to meet these requirements. At the same time they need to grow, thus a study of the influence of liquidity on growth will help MFIs'.

#### **2.4.4 Impact of Operational Costs Efficiency on Growth of MFIs'**

Haq, Skully & Pathan (2010) did an examination of the cost efficiency of thirty nine MFIs across Africa, Asia and the Latin America through the use of non-parametric data envelopment analysis. The results they got indicated non-governmental MFIs in particular; under production approach, to be the most efficient and this result has consistency with their fulfillment of dual objectives: to alleviate poverty and to achieve financial sustainability in a simultaneous manner. Although, bank-MFIs also outperform in the efficiency measure under the approach of intermediation. The reflection of this result is that banks are the financial intermediaries and can access the local capital market. If the efficiency is not good then the expansion of the microfinance institutions is affected. One of the achievements MFI's has made is to alienate poverty but their operational costs are poor. A solution on how to balance on the operational costs through a study will be bridge the gap, this will bring about growth of Micro Finance Institutions.

Gutierrez, Serrano & Molinero (2007) in their paper went beyond simple financial ratios using a data envelopment analysis approach for measuring the microfinance institutions' efficiency. Their findings showed that we can explain microfinance institutions' efficiency by means of four key efficiency components. It was revealed that country impacts on efficiency exist; and impacts which are dependent on non-governmental organization

(NGO) or non-NGO status of the Microfinance institutions. It is true that the state of a country affects costs efficiency of any firm. Its' growth is tied to the firms efficiency. In Kenya in the year 2007 there were crises. It is the same year the study above was conducted. Although, the results are proved, most likely if that study would be conducted in Kenya in 2007 the results would be different. We can prove this assumption through a study.

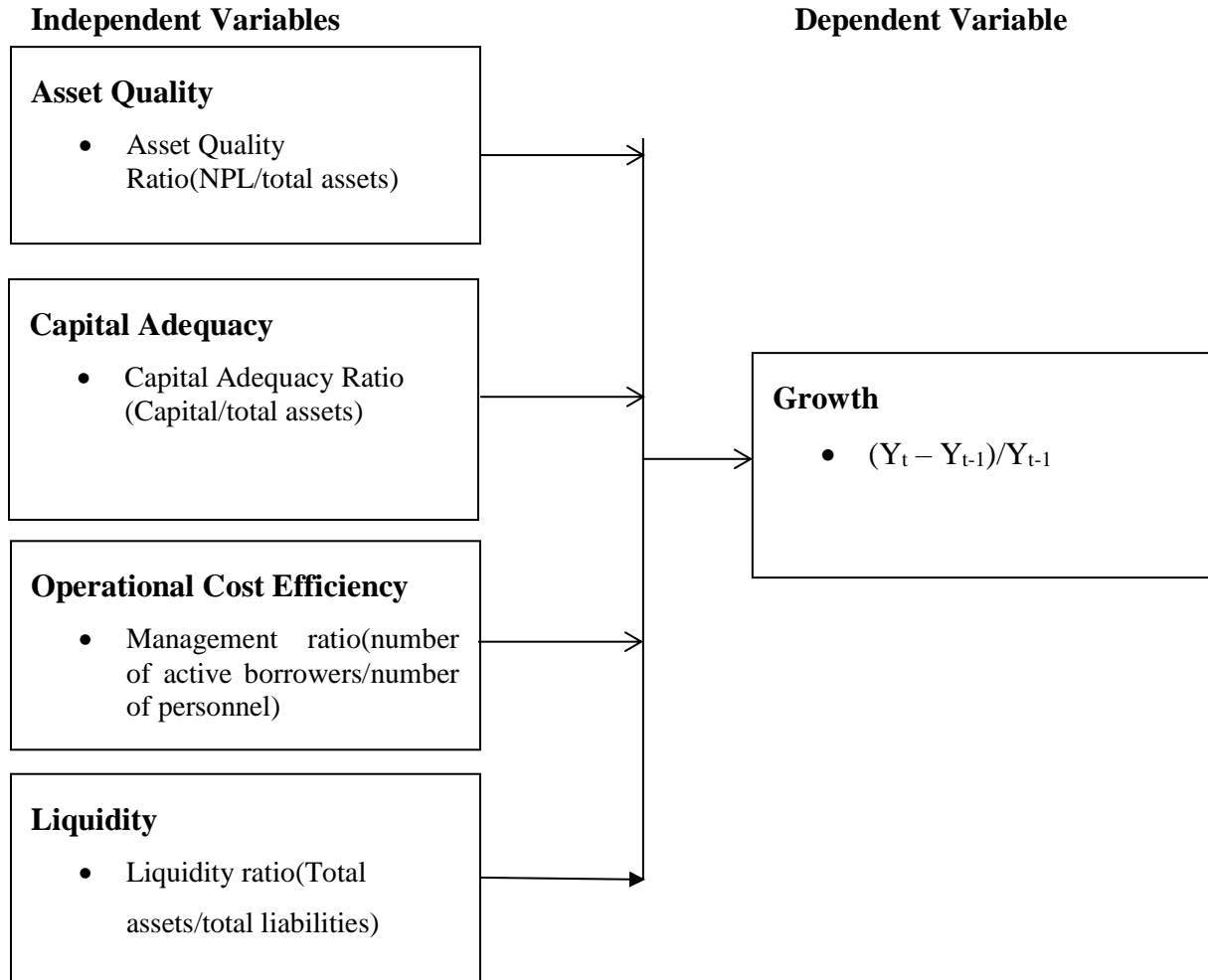
Servin, Lensink and Van den Berg (2012) through the use of stochastic frontier analysis examined the technical efficiency of different types of MFIs in Latin America. The results showed that cooperatives and organizations that are non-governmental have much lower intra firm as well as inter firm technical efficiencies as compared to non-bank financial intermediaries and banks, which shows the importance of ownership type for technical efficiency. Stochastic frontier analysis is not the only way to measure analysis. So we can also apply data envelopment analysis and compare the results. This will bring an assurance of the best measures for efficiency that will bring about growth.

Wijesiri, Viganò and Meoli (2015) undertook an examination of the technical efficiency and its determinants of thirty six MFIs in Sri Lanka through the use of a two-stage double bootstrap approach. The findings from stage one show that, most microfinance institutions in Sri Lanka never escaped criticism of financial as well as social inefficiency. Stage two regression revealed that; one of the crucial determinants of social efficiency is the type of institution. The bad picture portrayed in Sri Lanka affects the outcome of many MFIs' even in other countries. This picture can be edited through a study in Kenya. There is a possibility that the results would be different for Kenya because the curriculum of education offered in institutions differs for the two countries; which is one of the determinants of efficiency.

## **2.5 Conceptual Framework**

It is an analytical tool that visualizes the context of the study in a simple way that can be understood and remembered (Sinclair, 2007). This tool shows the independent variables and their connection to the dependent variable. In this study conceptual model below posits that growth is influenced by asset quality, capital adequacy, liquidity and operational cost effective.

**Figure 2.1 Conceptual Model**



**Source: Author (2018)**

## **2.6 Summary of the Literature Review**

Some of the findings above sought to establish the effects of different factors on bank performance or profitability. An example of Mwangela (2015), he examined the association between financial performance of Kenya's commercial banks and asset quality. Mwangi (2014) found out the impact of liquidity risk management on Kenya's commercial banks' financial performance. Macharia (2016) determined whether a relationship exist between profitability of listed Constructions and Allied companies at Nairobi Securities Exchange and capital structure.

Some of the studies narrowed their focus on MFIs'. Haq, Pathan and Skully (2010) did an examination of the cost efficiency of thirty nine MFIs across Africa, Asia and the Latin

America. Gutierrez et al. measured the efficiency of MFIs. Servin et al., they examined the technical efficiency of different types of MFIs in Latin America.

However none of the studies focused on the effects of the various selected internal factors on growth of MFIs'. This paper intends to show how asset quality, operational cost efficiency, capital adequacy and liquidity influence the general growth of MFIs'. It goes beyond its performance and profitability.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research strategy adopted for the effects of selected internal factors on growth of Micro Finance Institutions in Kenya is presented in a systematic discussion in this chapter. Chapter presented research methodology under the following subsections; population studied, the research design, data gathering, data analysis procedures.

### **3.2 Research Design**

The structure of investigation and the plan so conceived as to obtain research questions answers is known as research design. Study used descriptive research design which helped to explain the characteristic behavior of one variable because of another variable. Kothari (2005) indicates that a descriptive survey explains the relationship between variables. Descriptive research design was applied by the researcher to explain the effects of selected internal factors on growth of Micro Finance Institutions in Kenya

### **3.3 Study Population**

The study population involved secondary data for the last ten years of the listed Microfinance-Institution. The licensed microfinance institution are 13 and are; Choice Microfinance Bank, Faulu, SMEP, REMU, Rafiki, Kenya Women Microfinance bank limited, Uwezo, Sumac, Daraja, Century, U&I, Caritas and Maisha Microfinance Bank Ltd. All the companies listed by the Directory-of-Licensed-Microfinance-Banks were employed for this research's purpose. This study adopted census approach and thus all the listed firms formed the study sample frame.

### **3.4 Data Collection**

Secondary data was utilized for this study. Yearly reports of the Microfinance Institution was used to obtain secondary data. Particularly, the data on asset quality (measured using Asset Quality Ratio-NPL/total assets), capital adequacy (measured using Capital Adequacy Ratio-Capital/total assets), operational cost efficiency (measured using Management ratio-number of active borrowers/number of personnel), liquidity (measured using Liquidity ratio-Total assets/total liabilities) and growth of Micro Financial Institution (measured using  $(\text{Revenue}_t - \text{revenue}_{t-1}) / \text{revenue}_{t-1}$ ) were obtained from the financial ratios report. These data covered the period from 2008 to 2017.

### **3.5 Data Analysis**

The collected data was analyzed using STATA software. The findings were presented using tables. The research used a multiple regression model to assess the association between selected internal factors and growth of Micro Finance Institutions. Below is the regression model that was used in this study.



### 3.5.1 Analytical Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y = Growth of MFI's to be measured using  $(\text{Revenue}_t - \text{revenue}_{t-1}) / \text{revenue}_{t-1}$

X<sub>1</sub> = Assets quality to be measured using Asset Quality Ratio (NPL/total assets),

X<sub>2</sub> = Capital Adequacy to be measured using capital adequacy Ratio (Capital/total assets)

X<sub>3</sub> = Operational cost efficiency to be measured using management ratio (number of active borrowers/number of personnel)

X<sub>4</sub> = Liquidity to be measured using liquidity ratio (Total assets/total liabilities)

€ = Error term

The following diagnostic tests were carried out; Normality, multicollinearity and heteroscedasticity tests. This was done to guarantee that information suits the fundamental suppositions of established straight relapse demonstrate. Descriptive statistics were used to test normality. Formulticollinearity, (VIF) was utilized and for heteroscedasticity (GLS) was utilized.

### 3.5.2 Test of Significance

Confirmation of hypothesis for the study utilized F-statistics to determine scope that selected internal factors contribute to growth of Micro Finance Institutions. The model of coefficients of the explanatory constructs and the P-values was used. The tests were performed at 95% confidence level and at 5% significance level.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND INTERPRETATION

#### 4.1 Introduction

This section presents an analysis of the data collected as per the study objectives. The chapter presents both the descriptive and inferential statistics as per the stated objective which was to determine the effects of selected internal factors on growth of Micro Finance Institutions in Kenya.

## 4.2 Descriptive Statistics

**Table 4.1: Descriptive Statistics**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std.Dev</b>	<b>Min</b>	<b>Max</b>
Growth	130	0.06467	0.13153	-0.327	0.365
Asset Quality	130	0.2699	0.45778	0.0001	2.7216
Capital Adequacy	130	0.35445	0.66464	0.01	5.3738
Operational Cost Efficiency	130	0.128	0.21737	0.0017	1.7088
Liquidity Ratio	130	0.82531	0.69294	0.0041	3.832

The average growth for the 13 microfinance institutions over a period of 10 years was 0.06467. The maximum growth was 0.365 and the minimum was -0.327. The growth was spread within a 0.13153 standard deviation and this implies that there was a narrow spread of growth from the average growth.

The average asset quality for the 13 microfinance institutions over a period of 10 years was 0.2699. The maximum asset quality was 2.7216 and the minimum was 0.0001. The asset quality was spread within a 0.45778 standard deviation and this implies that there was a narrow spread of asset quality from the mean of asset quality.

The average capital adequacy for the 13 microfinance institutions over a period of 10 years was 0.35445. The maximum capital adequacy was 5.3738 and the minimum was 0.01. The capital adequacy was spread within a standard deviation of 0.66464 and this implies that there was a narrow spread of capital adequacy from the mean of capital adequacy.

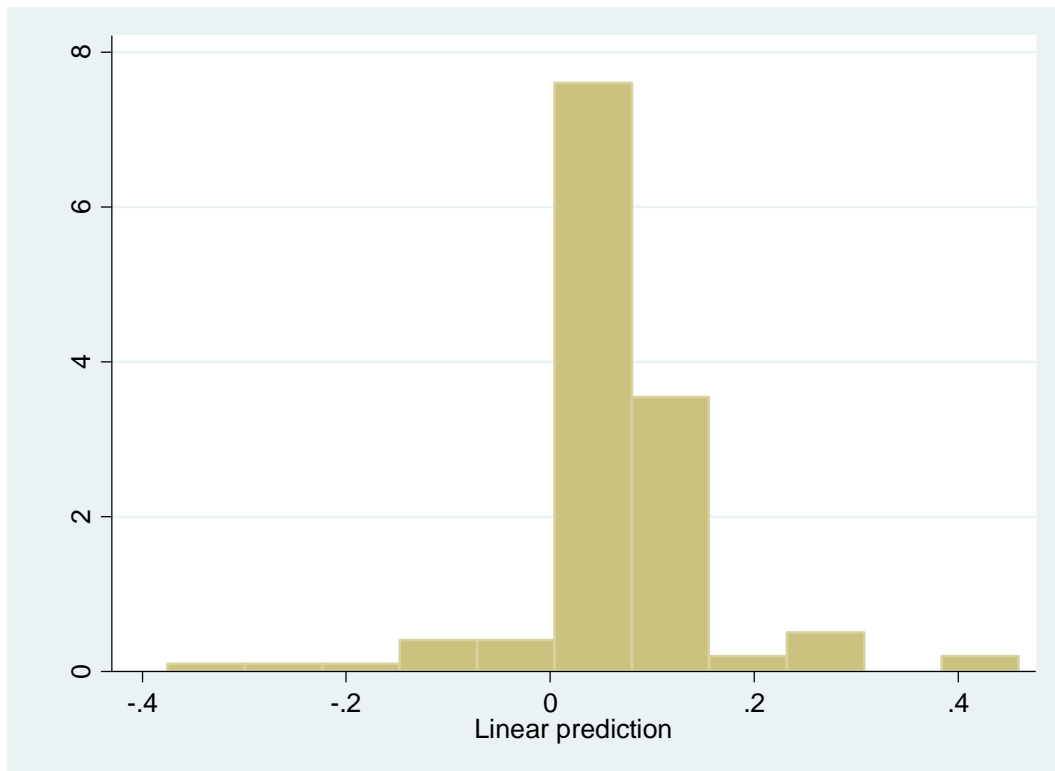
The average operational cost efficiency for the 13 microfinance institutions over a period of 10 years was 0.0017. The maximum operational cost efficiency was 1.7088 and the minimum was 0.01. The operational cost efficiency was spread within a standard deviation of 0.128 and this implies that there was a narrow spread of operational cost efficiency from the mean of operational cost efficiency.

The average liquidity ratio for the 13 microfinance institutions over a period of 10 years was 0.82531. The maximum operational cost efficiency was 3.832 and the minimum was 0.0041. The liquidity ratio was spread within a standard deviation of 0.69294 and this implies that there was a narrow spread of liquidity ratio from the mean of liquidity ratio.

## 4.3 Diagnostic Tests

### 4.3.1 Normality

The test for normality was examined using the graphical method approach as shown in the Figure 4.1 below. The results in the figure indicate that the residuals are normally distributed



**Figure 4.1: Normality Test**

### 4.3.2 Multicollinearity

This study assessed multicollinearity using the variance inflation factors (VIF). Field (2009) argues that VIF values in excess of 10 depict existence multicollinearity

**Table 4.2: Multicollinearity**

<b>Variable</b>	<b>VIF</b>	<b>1/VIF</b>
Asset Quality	1.49	0.66981
Capital Adequacy	1.39	0.72125
Operational Cost Efficiency	1.3	0.76712
Liquidity Ratio	1.21	0.82969
Mean VIF	<b>1.35</b>	

The output in Table 4.2 depict variance inflation factors outcome and were noted to be 1.35 which is less than 10 and thus nno multicillinearity as per Field (2009).

### **4.3.3 Heteroscedasticity test**

The error process could be Homoscedastic within given cross-sectional units, however, its variance differs across units (Heteroscedasticity). The hetttest command computes Breuch Pagan for group wise Heteroscedasticity in the residuals. According to the hypothesis ;  $\sigma_i^2 = \sigma^2$  for  $i = 1 \dots Ng$ , where Ng is the number of cross-sectional units.

**Table 4.3: Heteroscedasticity Results**

<b>Modified Wald test for group wise heteroscedasticity in fixed effect regression model</b>
H0: $\sigma(i)^2 = \sigma^2$ for all i
chi2 (3) = 212.2
Prob>chi2 = 0.077

Theoutput in Table 4.3, the null hypothesis of Homoscedastic error terms is not rejected as opined by a p-value of 077.

### **4.4 Analytical Model**

This section presented the correlation and regression analysis results. The correlation analysis which showed the direction of association of the variables and their level of significance was presented first.

#### **4.4.1 Correlation Analysis**

Correlation analysis was conducted to reveal the direction of association of the variables. The correlation analysis results are presented in table 4.4.

**Table 4.4: Correlation Analysis**

	<b>Growth</b>	<b>Asset Quality</b>	<b>Capital Adequacy</b>	<b>Operational Cost Efficiency</b>	<b>Liquidity Ratio</b>
Growth	1.000				
Asset Quality	0.314 0.000	1.000			
Capital Adequacy	0.339 0.000	0.317 0.000	1.000		
Operational Cost Efficiency	0.307 0.000	0.341 0.000	0.307 0.000	1.000	
Liquidity Ratio	0.284 0.001	0.420 0.000	0.495 0.000	0.3068 0.000	1.0000

The study found that there was a negative and significant association between asset quality and growth of MFIs ( $p=0.000$ ,  $r=0.314$ ). These findings agreed with that of Gonzalez (2007) who found an association that is significant between capital adequacy and growth. In addition, there was a positive and significant association between asset quality and growth of MFIs ( $p=0.000$ ,  $r=0.339$ ). These findings agreed with that of Amin and Jamil (2015) who documented a significantly positive correlation between the short term debt to total assets ratio and firm performance measured in terms of ROA and ROE. The study also found that there was a positive and significant correlation between operational cost efficiency and growth of MFIs ( $p=0.000$ ,  $r=0.307$ ). These findings agreed with that of Haq, Skully and Pathan (2010) who found that operational cost efficiency have a positive and significant effect on growth of MFIs’.

The study also found that there was a positive and significant association between liquidity ratio and growth of MFIs ( $p=0.001$ ,  $r=0.284$ ). These findings agreed with that of Lemara (2017) who found that an association that is positive between liquidity and financial performance existed.

#### 4.4.2 Regression Analysis

**Table 4.5: Regression results**

	Coef.	Std.Err	t	P> t	[95% Conf.Interval ]	
Asset Quality	-0.189	0.02312	-8.2	0.000	-0.2355	-0.1439
Capital Adequacy	0.048	0.01451	3.31	0.001	0.01929	0.07678
Operational Cost Efficiency	0.242	0.04431	5.47	0.000	0.1544	0.32996
Liquidity Ratio	0.074	0.01655	4.46	0.000	0.04108	0.10666
_cons	0.009	0.01287	0.53	0.594	-0.0186	0.03236
R Squared=50.89						
F(4,113)=29.27						
Prob>F=0000						

The results revealed that asset quality and growth of MFIs have a negative and significant relationship ( $\beta=-0.189$   $p=0.000$ ). These findings agreed with that of Gonzalez (2007) who found an association that is significant between asset quality and growth. In addition capital adequacy and growth of MFIs have a positive and significant relationship ( $\beta=0.048$ ,  $p=0.001$ ). These findings agreed with that of Amin and Jamil (2015) who documented a significantly positive association between the short term debt to total assets ratio and firm performance measured in terms of ROA and ROE. In addition operational cost efficiency and growth of MFIs have a positive and significant relationship ( $\beta=0.242$ ,  $p=0.000$ ). These

findings agreed with that of Haq, Skully and Pathan (2010) who found that operational cost efficiency have a positive and significant effect on growth of MFIs'.

The study also revealed that liquidity ratio and growth of MFIs have a positive and significant relationship ( $\beta=0.074$ ,  $p=0.000$ ). These findings agreed with that of Lemara (2017) who found that an association that is positive between liquidity and financial performance existed.

The results from the table 4.5 revealed that R squared was 50.89%. This implied that asset quality, capital adequacy, operational cost efficiency and liquidity ratio explain 50.89% of the variations in the dependent variable which is growth of MFIs. This also implies that 49.11% of the variation in the dependent variable is attributed to other variables not considered in the study.

The F statistics output in table 4.5 indicate that the overall model was statistically significant. This implies that independent variables are good predictors of growth of MFIs. This was demonstrated by F statistics 29.27 and the reported P value (0.000) which was less than conventional value of 0.05 level of significance.

#### **4.5 Interpretation of Findings**

The findings revealed that earning management negatively and significantly influence the growth of MFIs'. This means that a unit decrease in asset quality increases financial performance by 0.189 units. These findings agreed with that of Gonzalez (2007) who found an association that is significant between asset quality and growth. The findings were also consistent with that of Fredrick (2012) who found that asset quality and growth of MFIs' have a significant association.

The findings revealed that capital adequacy positively and significantly influence the growth of MFIs'. This means that a unit increase in capital adequacy increases growth of MFIs' by 0.048 units. These findings agreed with that of Amin and Jamil (2015) who documented a significantly positive association between the short term debt to total assets ratio and firm performance measured in terms of ROA and ROE.

The findings revealed that operational cost efficiency positively and significantly influence the growth of MFIs'. This means that a unit increase in operational cost efficiency increases

growth of MFIs' by 0.242 units. These findings agreed with that of Haq, Skully and Pathan (2010) who found that operational cost efficiency have a positive and significant effect on growth of MFIs'.

The findings revealed that liquidity ratio positively and significantly influence the growth of MFIs'. This means that a unit increase in liquidity ratio increases growth of MFIs' by 0.074 units. These findings agreed with that of Lemara (2017) who found that an association that is positive between liquidity and financial performance existed. These findings agreed with that of Bagh, Razzaq, Azad, Liaqat and Khan (2017) scrutinized the effect of liquidity management on the banks' profitability in Pakistan during 2006 to 2016. Secondary financial data obtained from audited annual financial reports underwent analysis through the use of descriptive and inferential statistics. The result demonstrated that liquidity ratio have an effect that positive and significant on growth of MFIs.



## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMENDATIONS

#### 5.1 Introduction

This chapter addressed the summary of the findings, the conclusions and the recommendations. This was done in line with the objectives of the study.

#### 5.2 Summary of Findings

To determine the effects of selected internal factors on growth of Micro Finance Institutions in Kenya. The study used growth of MFIs as the dependent variable while selected internal factors (asset quality, capital adequacy, liquidity and operational cost efficiency) were used as the independent variables. The study targeted all the 13 MFIs listed by the Directory-of-Licensed-Microfinance-Banks. This study adopted census approach and thus all the listed firms formed the study sample frame.

The descriptive statistics indicated that the mean of growth of MFIs over a period of 10 years was 0.06467. The mean of asset quality was 0.2699 while the mean of capital adequacy was 0.35445. In addition, the mean of operational cost efficiency was 0.0017 while the mean of liquidity ratio was 0.82531.

From the correlation results, correlation between capital adequacy, liquidity and operational cost efficiency and growth of MFI was positive and significant. However, correlation between asset quality and growth of MFI was negative and significant.

From regression results asset quality, capital adequacy, liquidity and operational cost efficiency explain 50.89% of the variations in the dependent variable which is growth of MFIs. In addition, there was a positive and significant relationship between capital adequacy, liquidity and operational cost efficiency. However, asset quality had a negative and significant effect on financial performance.

#### 5.3 Conclusions

The study findings revealed that asset quality have a negative and significant effect on growth of MFIs. The study concluded that asset quality have a negative but significant impact on growth of MFIs.

The study findings revealed that capital adequacy have a positive and significant effect on growth of MFIs. The study concluded that capital adequacy have a positive and significant impact on growth of MFIs.

The study findings revealed that liquidity have a positive and significant effect on growth of MFIs. The study concluded that liquidity have a positive and significant impact on growth of MFIs.

The study findings revealed that operational cost efficiency have a positive and significant effect on growth of MFIs. The study concluded that operational cost efficiency has a positive and significant impact on growth of MFIs.

#### **5.4 Recommendations**

The study concluded that asset quality have a negative but significant impact on growth of MFIs. The study recommend that the management of MFIs should improving their investment assets levels and improve their assets quality by reducing the rate of nonperforming loans through credit risk identification, measurement, monitoring and controlling. This will improve the growth of the MFIs.

The study concluded that capital adequacy have a positive and significant impact on growth of MFIs. The study recommends that the management of the MFIs should ensure there is a wide capital base in the MFIs to strengthen confidence of depositors

The study concluded that liquidity have a positive and significant impact on growth of MFIs. The study recommends that to facilitate favorable growth of these institutions, strategies to facilitate increased liquidity of MFIs should be adopted by the institutions for their efficiency in financial operations.

The study concluded that operational cost efficiency has a positive and significant impact on growth of MFIs. The study recommends that improvements in operational efficiency should be facilitated through application of modern technology and innovative operational strategies to effectively bring about growth in the MFIs.

#### **5.5 Limitations of Study**

There exist inherent limitations as far as the accuracy of the data is concerned. The data was secondary in nature and the researcher is not aware of how it was collected and the

various manipulations and assumptions that were used in order to prepare and present the data.

The analytical methodology was also very scientific. The study failed to extract qualitative information that would have explained the soft and hidden issues that affect the relationship between selected internal factors and growth of MFIs. An open ended questionnaire, an interview or a focus group discussion would have yielded qualitative information and hence collaborate this results.

The study only focused on 10 years (year 2008 to year 2017). Perhaps using a longer time series would have yielded different trends and results.

The study also did not also put into consideration other internal and external factors that could have affected the growth of MFIS over the tie of study.

### **5.6 Areas for Further Study**

The study suggests that further studies should include a qualitative analysis of the relationship between selected internal factors and growth of MFIs. Such a study would involve interview of key informants in the MFIs and would provide hidden insights into the intricate relationship between selected internal factors and growth of MFIs

Further areas of study should be focus on a longer time span, probably 20 to 30 years. This would clarify whether the observed relationship changes over the years. Such a study would call for advanced econometric and statistical analysis such as time series and panel data analysis.

Since the R squared was not 100% it seems there are other internal factors variables that were not addressed by the study. Other studies should therefore focus on other internal factors variables that affect growth of finance institution

In addition, the study focused on micro finance institutions in Kenya. A similar study can be conducted but focus on microfinance institutions in other countries in East Africa for purposes of making comparisons.

In addition, a similar study on selected factors and their effect on growth of Micro finance Institutions would be conducted but focus on commercial banks in KENYA.

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## APPENDICES

### Appendix I: Secondary Data Collection Template

	$(\text{Revenue}_t - \text{revenue}_{t-1}) / \text{revenue}_{t-1}$	Asset Quality Ratio	Capital Adequacy Ratio	Management Ratio	Liquidity Ratio
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2008					
2009					
2010					
2011					
2012					
2013					
2014					
2015					
2016					
2017					

**Appendix II: List of Micro Finance Institutions**

	<b>List of Micro Finance Institutions (Listed microfinance banks)</b>
1	Choice Microfinance Bank
2	Faulu
3	Kenya Women Microfinance bank limited
4	SMEP
5	REMU
6	Rafiki

7	Uwezo
8	Century
9	Sumac
10	U&I
11	Daraja
12	Caritas
13	Maisha Microfinance Bank Ltd