EFFECT OF REGULATION ON THE FINANCIAL PERFORMANCE OF MICROFINANCE BANKS IN KENYA: A SURVEY OF MICROFINANCE BANKS IN NAIROBI

BY

CATHERINE WANJIRU

MASTER OF BUSINESS ADMINISTRATION (CORPORATE MANAGEMENT) KCA UNIVERSITY

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DECLARATION

This research project is my original work and has not been presented to any other institution or university.

Signed _____ Date _____

Catherine Wanjiru

13/03460

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

Sign_____ Date _____

Mr. Michael Njogo

School of Business and Public Management,

KCA UNIVERSITY

ABSTRACT

This research paper explored the effects of regulation on financial performance of microfinance banks in Kenya. The study was guided by these research questions: what is the effect of capital adequacy regulation on the financial performance of Microfinance Banks in Kenya? To what extent has liquidity management regulation affected the financial performance of Microfinance Banks in Kenya? What is the effect of Asset quality on the financial performance of Microfinance Banks in Kenya? The research design e used in this study was descriptive which enabled the researcher to unearth the effect of financial regulation on financial performance of microfinance banks in Kenya. The target population in this study was 13 microfinance banks in Kenya. The researcher, with his team collect secondary data collected from the financial statements of the microfinance banks in Kenya, for the period 2011-2015. The data collected was analyzed using Statistical Package for Social Sciences (SPSS) program and presented in tables to enable the users of the research findings to understand the findings in an efficient and simple way. The study found out that capital adequacy had a positive effect on ROA, liquidity had a negative effect on ROA, asset quality had a negative effect on ROA and capital adequacy had a negative effect on ROE, liquidity had a negative effect on ROE and asset quality had a positive effect on ROE. The study concludes that there was a statistically significant relationship between the MFIs' capital adequacy and their financial performance, MFIs in Kenya is highly dependent on the level of the institutions' liquidity and here is a significant influence of asset quality of the MFIs and their financial performance. The study recommends that more investments should therefore be done through establishing more MFIs networks across the country which is associated positively with their financial performance, strategies to facilitate increased liquidity of MFIs should be adopted by the institutions for their efficiency in financial operations and MFIs should emphasize on asset quality as a stimulator of their financial performance and competitiveness.

Key words: Capital adequacy, Liquidity Management, Asset quality and Performance

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DEDICATION

I happily dedicate this research project to my husband and son for their endless love, support and

encouragement throughout my study period. Thank you for being there for me all the time. Were

it not for you, there were all indications that I would not have made it this far. Thank you.

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ACRONYMS AND ABBREVIATIONS

AQ   Asset Quality

ATM   Automated Teller Machine

CA   Capital Adequacy

CAR   Capital Adequacy Ratio

CAMEL   Capital adequacy, Asset quality, Management and Liquidity

CBK   Central Bank of Kenya

CMA   Capital Market Authority

DTM   Deposit Taking Microfinance

EBIT   Earnings before Interest and Tax

KUSCCO   Kenya Union of Savings and Credit Cooperatives

L   Liquidity

MFI   Micro Finance Institutions

NGO   Non Governmental Organizations

ROA   Return on Assets

ROE   Return on Equity

ROI   Return on Investment

SACCO   Savings and Credit Cooperative Societies

CHAPTER ONE

INTRODUCTION

This chapter gives the back ground of the study in relation to how regulation affects the financial performance of microfinance banks in Kenya as well as the statement of the problem. The chapter also outlines the general and specific objectives of the study and the research questions. The significance and scope of the study is also stated in the chapter.

1.1 Background of the Study

Microfinance has generally been defined as the provision of financial services to the poor people who are otherwise excluded from the formal banking sector (Morduch, 1999). Microfinance was envisioned by Muhammad Yunus in Bangladesh in 1976 by designing a credit delivery system that provided banking services to the poor in rural areas while removing the need for collateral and creating a banking system based on mutual trust, accountability, participation and creativity.

The work of Muhammad Yunus formed the basis of the vast network of Microfinance institutions located all over the world with diverse structures and mission statements. His work gained recognition worldwide having won the 2006 Nobel Peace Prize and in 2005 the United Nations launched the International year of microcredit in an effort to building support for the accessibility of financial services to poor and low-income people.

The recognition aimed at raising public awareness about microcredit and microfinance, and promoting innovative partnerships among governments, donors, international organizations, and non-governmental organizations, the private sector, academia and microfinance clients (Ahlin & Jiang, 2008)

Just like in almost all the developing countries, lack of access to credit is a major obstacle to growth in Kenya and other countries in Africa. This is evident in the fact that a large majority of households do not have adequate collateral to secure a loan. In this case, these households rely on both the informal-sector and moneylenders by borrowing money at usurious interest rates (Christen, Lyman & Rosenberg, 2003). However, there are cases in which they are simply denied access to credit and therefore investment. This is where Microfinance Banks came in to expand the frontier of financial intermediation by providing credit to those who were excluded from formal financial markets (FSD, 2009).

Microfinance institutions now reach well over 100 million clients and achieve impressive repayment rates on the loans granted (Cull, Demirgüç-Kunt, & Morduch, 2009). However, it is necessary to mention that the rapid growth of microfinance has brought increasing calls for regulation, but complying with prudential regulations and the associated supervision can be especially costly for microfinance institutions (Mrabet & Zouari, 2008). The best empirical estimates of the costs of such regulation come not from microfinance or other financial institutions operating in developing countries, but from banks in industrialized countries (Cull, Demirgüç-Kunt, & Morduch, 2009).

According to Banerjee, Cole and Duflo (2009), microfinance banks are high on the public policy agenda. They have achieved tremendous success in improving the livelihoods of the poor, through the provision of financial services. Such initiatives are widely sponsored by a variety of organizations that include the World Bank, United Nations, national governments and many charitable Non-Governmental Organizations (NGOs). Their aim is to help the poor cope with risk

and take advantage of small income generating opportunities, by employing profit-making banking practices amongst low income communities (Ahlin & Jiang, 2008).

By alleviating financing constraints, microfinance banks are able to promote small scale investments from otherwise unrealized market activities while yielding a return on their investment. Levels of success of these microfinance banks, however, vary across different organizations depending on some factors related to the regulation and supervision of these institutions (Christen, Lyman & Rosenberg, 2009). Given this fact, some microfinance banks may fail and cease to exist while others end up growing to reach millions of borrowers.

1.1.1 Concept of Firm Regulation

Barth, Gerard and Levine (2008) did a study on Rethinking Bank Regulation: Till Angels Govern, stated that due to the different variables that firms face, there is need for rules, laws and regulations to govern their every action. This will aide in promoting a seemingly fair playing field for all firms in a particular economic field. The financial industry and specifically the banking-microfinance banks have to be regulated in an effort to ensure that they work within a laid down structure. There is need to protect both the customers and in this case the poor who are banking with the Microfinance banks and the microfinance bank itself (Barth, Gerard & Levine, 2008).

The rapid growth and increasing profitability of microfinance throughout the world have sparked calls for increased regulation. It is evident that the aspect of regulating and supervising microfinance banks or the lack of it affects the performance of these institutions in a significant way (EIU, 2010). While it is the absence of formal regulation that has long given microfinance the necessary flexibility to develop as a successful financial inclusion tool, this situation has changed gradually over the recent decades (Llewellyn (2009).

In discussing tradeoffs in regulation of microfinance, Christen, Lyman and Rosenberg (2003) draw an important distinction between prudential and non-prudential regulation. According to their definition, regulation is prudential when it is aimed specifically at protecting the financial system as a whole as well as protecting the safety of small deposits in individual institutions. The assets of microfinance institutions remain substantially less than those of formal providers of financial services, most notably banks, and thus they do not yet pose a risk to the stability of the overall financial system in most countries (Cull, Demirgüç-Kunt, & Morduch, 2009).

However, an increasing share of microfinance banks take deposits from the public, and many of the depositors are relatively poor. Protecting the safety of those deposits provides a rationale for improved regulation and supervision of microfinance institutions, and thus Christen, Lyman, and Rosenberg argue that prudential regulations should generally be triggered when an MFI accepts retail deposits from the general public (Christen, Lyman & Rosenberg 2008).

Although the Kenyan microfinance sector is one of the most vibrant in Sub-Saharan Africa with a diversity of institutional forms and a good infrastructure to serve the poor, microfinance activities were not regulated until 2006. The absence of regulation allowed innovations to take place. Institutions were set up easily without any barrier like minimum capital requirements.

In this environment, the microfinance industry developed and managed to attain reasonably high outreach (FSD, 2009). This study seeks to investigate the impact of prudential regulation and supervision on the performance of microfinance banks in Kenya.

Increased emphasis on risk management reflects a fundamental shift among bank managers and regulators to better anticipate risks, rather than just react to them. This approach emphasizes the importance of self-supervision and a proactive approach by board members and managing

directors to manage their financial institutions. Historically, banks have waited for external reviews by regulators to point out problems and risks, and then acted on those recommendations. In today's fast changing financial environment, regulators are often left analyzing the wreckage only after a bank has had a financial crisis (Phillips, 1996). According to Christen, Lyman and Rosenberg (2003), compliance with prudential regulations could cost a microfinance bank five percent of assets in the first year and 1 percent or more thereafter.

The existing microfinance regulation in Kenya, (Microfinance Act 2006), while putting regulation and supervision of Deposit Taking Microfinance Institutions (DTIs) under Central Bank of Kenya (CBK), has, through Section 3(2) of the Act, empowered the Minister for Finance to make regulations specifying the Non-deposit taking microfinance business and prescribe measures for the conduct of the specified business (MF Act, 2006).

Considering their contribution to the economic growth and stability of the country, Microfinance banks should therefore be supported in this regard, through the provision of proper and up to date regulatory framework, which will further allow them to meet and exceed their objectives in their financial operations.

The Microfinance Act of 2006 and the supportive Deposit Taking Microfinance Regulations of 2008 have together paved the way for financial institutional transformation in Kenya. With the support of the Financial Sector Deepening (FSD) Kenya, Faulu and Kenya Women Finance Trust (KWFT) engaged in the process that led to their licensing as the pioneer Deposit-Taking Microfinance Institutions (DTMs) in Kenya (FSD 2007-2008)

Both transformations were generally successful and have helped the two institutions to maintain their strategic positioning in the market. However, in both cases, the process required more resources and took much longer than expected. In addition, the transformations rose greater than

anticipated organizational challenges. By start of 2009 when Kenya Women Finance Trust (KWFT) embarked on the transformation into a deposit-taking institution in earnest, it was the largest non-banking microfinance institution in Kenya, then serving 250,000 women only clients (Omino 2005)

According to Llewellyn (2009), there are several ways in which the industry might gain from financial regulation. It might enhance competition and the overall efficiency of the industry; increase consumer welfare and encourage a better management of financial risks by the supervisees. However, regulation and supervision are not imposed without costs, which are faced by the supervisees, the supervisor and the market itself. The latter could include a possible inhibition of competition, the stifling of innovation and forced choice of consumers ((Christen, Lyman & Rosenberg 2008).

1.1.2 Concept of Microfinance Banks

The Kenyan microfinance sector is one of the most vibrant in Sub-Saharan Africa. It includes a diversity of institutional forms and a fairly large branch network to serve the poor. However, microfinance activities have been regulated in Kenya only since 2006. The absence of regulation has allowed innovations to take place: institutions were set up easily without any barriers, such as minimum capital requirements. The microfinance industry has thrived in this environment (Nyaga, 2008).

The Microfinance Act, 2006 and the Microfinance (Deposit Taking Institutions) Regulations 2008 issued there under sets out the legal, regulatory and supervisory framework for the microfinance industry in Kenya. The Microfinance Act became operational with effect from 2nd May 2008. A number of existing micro-finance institutions applied for licenses to allow them to take deposits

from members and the general public. The main objective of the Microfinance Act is to regulate the establishment, business and operations of microfinance institutions in Kenya through licensing and supervision. In a report by CBK (2014), there are currently nine MFBs operating in Kenya. Microfinance Banks offer credit services to customers to develop and grow their businesses with the objective of making profits.

The scope of adjustments required of former credit-only MFIs is wide: institutions have to move from a completely unregulated position to full prudential regulation. The DTM regulations by CBK (2008) have defined the following prudential ratios: (1) capital adequacy ratios including a core capital of 10% of total risk adjusted assets plus risk adjusted off balance sheet items, core capital of 8% of total deposit liabilities, total capital of 12% of total risk adjusted assets plus risk adjusted off balance sheet items; (2) a minimum liquidity ratio of 20%; (3) a limit on insider loans which should not exceed 2% of core capital and should be contained on aggregate within a ceiling of 20% of core capital. The management and formulation of policies in liquidity becomes relevant because these firms should ensure that they maintain proper levels of liquidity in order to be able to meet their short term financial obligations that are essential for the normal running of their business to avoid facing tough sanctions by the regulator for non-compliance.

1.1.3 History of Microfinance Banks in Kenya

The earliest forms of microfinance and microcredit in Kenya were church based and group lending programs that arose in 1980s. These informal lending served the primary function of providing credit to the members of either congregation or group, they were very small and their operations limited to geographic locations with limited reach and financial resources (Ali, 2015).

In the 1990s NGOs began to extend credit services to the informal organizations due to rising demand among the members. The NGOs then developed functioning systems to facilitate the administration of the credit delivery. Upon funding the organizations were not necessarily considered as outright business ventures in spite of the success that most of the schemes achieved. According to Ali (2015) as the successes of the microcredit institutions grew, they received considerable funding and began to turn into full commercial entities. This development was also supported by the increased competence in administration, credit assessment, and the organization of individuals into groups to facilitate the collective guarantee of loans by individual members. Thus, as the microfinance industry in Kenya grew, the institutions assumed various formal structures and were registered under different statutes. In the 1990s, many microfinance institutions moved away from serving closed groups into more formalized institutions. This institutionalization required that the microfinance and micro-credit institutions should also move away from being subsidized institutions into more of commercial entities.

Kenya's microfinance industry has come a long way since the 1980s, and particularly since the landmark Microfinance Intermediaries Act of 2006. The country now has several deposit-taking microfinance intermediaries operating under a regulatory framework assessed by the Economist Intelligence Unit (EIU) as the best in Africa (EIU 2010). Overall, the EIU rates Kenya as having the second best business environment for MFIs in all of Africa (and one of the top ten in the world).

1.2 Statement of the Problem

Regulation is on one of the key ways in which financial institutions can protect themselves and their clients. The poor clients who bank with microfinance banks need to feel safe and protected from manipulation; this can be effectively done through a structured set of rules, laws and regulation. The regulators must be fair and just to both parties.

Several studies have been done on the subject of regulation and how it affects the performance of financial institutions. Globally; Mersland and Strøm (2009) in the study on performance and governance in microfinance institutions; the study observed that understanding how regulation and supervision affects performance of microfinance banks matters. There are a number of techniques and sensitivities associated with deposit taking that would justify external regulation and supervision of microfinance banks. These include convenience to depositors in terms of location and premises and provision of qualitative and physical security of deposits including insurance of deposits. Others include adequate liquidity, as depositors should be able to withdraw without subjecting the microfinance banks to solvency risks: attainment of acceptable rates of returns since microfinance banks expect good returns (Mersland & Strøm, 2009).

Ben Bouheni, (2014) studied banking regulation and supervision: can it enhance stability in Europe? The study mentions that the relationship between supervision and performance of banking remains a key issue that concerns corporate governance. The study explored the relationship between the two by looking at the ten largest European banks of France, Germany, UK and Greece over the period 2005-2011. The findings reveal that banking supervision has an impact on performance.

Zhang and Wong (2014) in the study on sustainable microfinance in Asia: Landscapes, challenges and strategies. The study observed that whereas microfinance in Asia had been in the past recognized as a tool to alleviating poverty, the task is far from being completed and a larger percentage of the global population is still living below poverty line. The authors further noted the need in improving microfinance system in Asia to meet the immediate financial needs on an ongoing basis and expand the services over the long term. Their study concluded that whereas microfinance as a tool to alleviate poverty is a worthy goal achieving it will require active

coordination and collaboration among policy makers to make it sustainable. These studies were done in developed countries and thus their findings may not be applicable in Kenyan banking sector.

Njeule (2013) did a study on the effects of Central Bank of Kenya Prudential Regulations on financial performance of Commercial Banks in Kenya. This covered a 12 year period from 2001-2012 and the study revealed that there was great positive variation on the financial performance of commercial banks due to changes in Capital Adequacy, Liquidity Management, Risk Classification of Assets and Provisioning, Foreign Exchange Risk Exposure and Corporate Governance. This is an indication that CBK prudential regulations had great positive effects on the financial performance of commercial banks.

Ali (2015) studied the regulatory and supervision framework of microfinance in Kenya. The study concluded that most literature in the area of regulating and supervising MFIs confirms that the microfinance sector must be regulated in order to have massive and sustainable delivery of financial services to the low income people.

These studies were in done Kenya but Njeule looked at CBK regulations on financial performance of commercial banks; its focus was in financial performance as opposed to performance at large thus creating a research gap which this study wished to fill by establishing the effect of regulation on the performance of microfinance banks in Kenya.

1.3 Research Objectives

i. To assess the effect of capital adequacy regulation on financial performance of Microfinance Banks in Kenya.

ii.   To establish the effect of liquidity management on financial performance of Microfinance Banks in Kenya.

iii.   To establish the effect of Asset quality on financial performance of Microfinance Banks in Kenya.

1.4 Research questions

i.   What is the effect of capital adequacy regulation on the financial performance of Microfinance Banks in Kenya?

ii.   To what extent has liquidity management regulation affected the financial performance of Microfinance Banks in Kenya?

iii.   What is the effect of Asset quality on the financial performance of Microfinance Banks in Kenya?

1.5 Significance of the study

The study would help Microfinance institutions to enhance better understanding on how regulation and supervision affects its financial performance, and thus help them make sound financial management decisions.

The government, through the central bank would also benefit from the research and use the research findings there in to formulate and implement policies that will promote good financial management in all the other microfinance institutions.

Other researchers would also find it useful in carrying out their studies in the area of finance. The findings to be produced by this research project may be used to make inferences and also as some secondary data in some subsequent researcher sin the future.

The students that are in higher learning would also benefit from the findings of this study by getting some more insight into the effects of financial regulation and policy making in the management of microfinance institutions in Kenya.

It would also help the policy makers in the entire banking industry in the formulation and implementation of the policies.

1.6 Scope of the Study

The study was carried out in the month of September 2016. Annual financial performance of microfinance banks were collected and analyze to establish the effect of regulation on the financial performance of microfinance banks in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on the effect of regulation on organizations financial performance. It comprise of theoretical and empirical review and research gaps. The literature was obtained from books, journals, academic papers and internet sources.

2.2 Theoretical Review

Theories form basis on which a study is undertaken. A few theories attempt to explain the financial performance of financial institutions. This study looked at the profitability, liquidity and capital adequacy theory.

2.2.1 Theory of Regulation

This theory was proposed by Arthur Cecil in 1920 who advocated that regulation is supplied in response to the demand of the public for the correction of inefficient or inequitable market practices. This theory holds that regulations interventions occur in the interest of the general public at large. They are implemented in response to the demand of the public for the correction of inefficient or inequitable market practices. Through its implementation the government ensures there exists health competition, stable economy and introduces social objectives in economic policies (Martins, 2009). The theory further argues that regulations correct market failures that can be as a result monopoly, externalities and lack of information. The down fall of a financial institution such as bank or microfinance will have a bigger impact on the social cost than the private cost to the institution itself. Therefore, financial institutions left to control themselves will accept more risk than is optimal from a systemic point of view, hence the need for government regulation on banking activity and the establishment of capital requirements (Feldstein, 1996).

External regulations by the government or through an agency on private sector behavior can be justified on four broad grounds which relate to market failure: First, the moral hazard argument. If a market participant believes that the state will underwrite his losses, then behavior will change. A good example is how deposit insurance encourages depositors and bankers to engage in risky behavior that forces the state to pay in the end, thus undermining market discipline and entailing regulation. Second is the widows and orphans argument. These regulations provide protection to poorly (asymmetrically) informed clients, based on the view that small depositors and investors cannot assess properly the riskiness of financial institutions they deal with. Third is the public policy argument. In free market economies, public policy arguments call for competition and free trade. An example would be anti-trust laws in some countries to prevent monopolization of certain markets. Fourth, the systemic risk issue, which allows the state to prevent the failure of one participant to destabilize the whole system. This justifies the regulation, for example, of the payment system and the banking sector (Ngaira, 2011).

Regulation whether preventive or protective requires an effective enforcement framework which is referred to as prudential supervision, Prudential supervision is the process of enforcing the regulatory framework according to Chaves and Gonzalez-Vega (1994). It is an external oversight of the financial institutions through examining and monitoring mechanism to verify compliance with the approved regulations. Through effective supervision, financial institutions are monitored and directed to ensure that they comply with the regulatory mechanism (Ali, 2015). This theory provides the rationale for adopting a sound system of regulation and supervision framework to minimize the effects of market failures as well as protect depositors.

2.2.2 Capture Theory

This theory was proposed by George Stigler (1971). The Theory argues that economic regulations are not about the public interest at all but is a process by which interest groups seek to promote their private interests. Regulation is supplied in response to the demands of interest groups struggling among themselves to maximize the incomes of their members (Posner, 1974). The Marxists in support of the theory argue that the capitalist control the financial institutions in our society and among the institution is the regulation and therefore capitalist must control regulations. The political scientists while supporting the capture theory argues that over time, regulatory agencies come to be dominated by the industries regulated. The theory singles out a particular interest group the regulated firm as prevailing in the struggle to influence legislation, and it predicts a regular sequence, in which the original purposes of a regulatory program are later thwarted through the efforts of the interest group.

Firms will lobby legislators for regulations when such regulations provide: direct monetary subsidies, if the regulations will provide constraints on substitute product or service, subsidies or complementary products, when the regulations provide grounds for price fixing and the incumbent firms will have the ability to control entry by potential new rivals (Martins, 2009). The regulators or politicians therefore will always prefer to set low rates, other things being constant, to reap political support from the customers of regulated firms. On the other hand, allowing the regulated firm to earn high profits. This phenomenon creates two conflicting groups of consumers who want low priced products and regulated firms who want high profits. The politicians/regulators face a trade-off. If they allow higher profits, they gain political support from firms they regulate but lose support from consumers. The reverse is also true.

The above two theories, assume that regulations directly enforce a cost on the consumer or taxpayer, as a result, the general public interest is to do away with regulations and allow greater competition. This is the main driving force behind current market deregulation policies prevalent in markets. A good example of the deregulation drive to "make markets work better" is the report of the Australian Financial System Inquiry (Wallis Report), whose findings seek to create a flexible regulatory structure that is more receptive to the forces for change operating on the financial system; clarify regulatory goals; increase the accountability of the agencies charged with meeting those goals; ensure that the regulation of similar financial products are more reliable and encourage competition by improving comparability; introduce greater competitive neutrality across the financial system; establish more contestable, efficient and fair financial markets resulting in reduced costs to consumers; provide more effective regulation for financial corporation's which will also facilitate competition and efficiency; and facilitate the international competitiveness of the Australian financial system.

2.2.3 Economic theory of regulation

The theory was also proposed by George Stigler in 1971 that compared the regulations with the law and demand and supply. The theory is more precise and offers an opportunity to test with a body of data. Moreover, it is committed to the strong assumption of economic theory generally that people seek to advance their self-interest and do so rationally (Posner, 1974). This theory is based on two intuitions. First, the government can use its coercive power to give valuable benefits to a particular individual or groups. These economic regulations and the expression so created as a result of these powers can be viewed as a product whose allocation is dictated by the law of demand and supply. The second intuition is that the theory of cartels can help in locating the

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demand and supply curves. The theory of cartels depicts both the benefits and the cost side of the regulations. Where a cartels value is greater, it will result to a less elastic demand for the industry products or services and where the costs are high new entry into the market will be slower (Martins, 2009). These cartels bring forth the cost element in the regulations. First is the cost associated with the seller who must arrive at an agreed price to charge and the output of each seller. This eventually determines the profit levels of each member of the cartel. The second cost is created through the enforcement process of the cartel agreement against nonparticipants or defectors. However, cartels are always in the verge of collapsing since most of their members are more than often tempted to sell their products or services at a slightly lower price than agreed (Posner, 1974). The theory can thus be relied upon to explain why there is high protective legislation in areas like agriculture, labor and professions, where private cartelization is hardly feasible (Postner, 1974).

Microfinance Institutions in Kenya are regulated by the Central Bank of Kenya under the Microfinance regulations of 2008. The regulations require MFIs to have corporate governance; performance and accounting standards; accountability and transparency; deposit protection; dissolution mechanisms and supervision by the Central Bank. The legislation further specifies limits on lending to ensure that MFIs retain their core business of extending services to the poor, low-income households and SMEs as their core market segments and minimize dealings with insiders.

2.2.4 Goodhart model

The model was proposed by Goodhart (2005). The Model looks at systemic risk associated with financial institutions and suggests that the difference in focus and function of investor protection and systemic stability is large enough to justify two separate regulatory bodies in each country to

share the regulatory responsibilities. The formulation of rules for the safety of the system should be the responsibility of the systemic stability arm. On the other hand, the monitoring and operation of the system should be divided between the two arms on the basis of their size. The model further points out the main reason for banking regulations is to prevent banking crises since the cost to the general society are invariably enormous and far exceed the private cost to the individual financial institution (Brunnermeirer, Crocket, Goodhart, Persaud & Shin, 2009). Increasingly, therefore, the public plays an oversight function in monitoring and surveillance to ensure the systematic risk is not incurred excessively by the public. The main tool which regulators use to do so is capital adequacy requirements. In banking sector for example regulations need not be there to prevent bank failure but must be observed as a measure of sufficient prudential standards to prevent bank crises (Greenspan, 1997).

Over the years another regulatory framework developed and took the form of institutional regulation. The framework segmented institutions within a given country with insurance companies, banks, mortgage companies and security houses being the concern of different regulatory bodies. This however became less practical since barriers between operating in different functional and geographical financial markets were eroded. Regulations should assist in setting standards that when followed will enable financial institution soundness and thus provide growth and sustainability leading to economic development.

2.3 Empirical Literature Review

Empirical Literature reviewed the information and theories available concerning this study. In pursuit of the same, the researcher looked at published journals and research work relating to the subject under study.

2.3.1 Capital Adequacy Requirement and Performance of Microfinance Banks

Capital Adequacy requirement is the amount of capital a financial institution like a bank has to hold as required by its financial regulator, in most cases the central bank. This is usually expressed as a capital adequacy ratio of equity that must be held as a percentage of risk-weighted assets. These requirements are put into place to ensure that these institutions do not take on excess leverage and become insolvent. Capital requirements govern the ratio of equity to debt, recorded on the liabilities and equity side of a firm's balance sheet (Odanga, Nyangweso & Nkobe, 2013). Maina and Ondongo (2013) carried out a study on the effect of capital structure on financial performance of firms listed at the NSE from year 2002 to 2011. They used financial statements obtained as secondary data to analyze their findings using Causal research design and Gretl statistical software to perform panel regression analysis. The outcomes indicated that debt and equity are the key causes of financial performance of firms listed at the NSE. The results of this study revealed an adverse but very significant relationship between capital structure and firm performance. They concluded that the more the firm builds its capital structure from debt, the higher the possibility that such a firm will perform poorly.

Onaolopo, Obajan and Soyebo (2012) studied qualitative analysis of the impact of capital adequacy on managerial effectiveness in a case study of selected insurance firms in Nigeria. They concluded that capital is a tool with enough potential to increase productivity effectiveness and efficiency of the entire firm; it improves communication and helps management to realize the firm's overall objectives. They further noted that capital is a vehicle that transforms the way insurance firms deliver services. To attract the potential opportunities offered by adequate capital in insurance industry they concluded that operators must realize the size of capital required as a

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basis of creating supportive and enabling support system which will nurture management culture performance and practice.

Odanga, Nyangweso and Nkobe (2013) studied liquidity, capital adequacy and operating efficiency of commercial banks in Kenya. They concluded that banks that are rich in capital resources are more stable operationally and are able to mitigate themselves from financial shocks in capital market. They further recommended that banks need to improve their liquid assets to deposits ratio and total capital ratio in an effort to improve operating efficiency to remain competitive in the market.

Stolz, Heid and Porath (2004), using dynamic panel data techniques on data from German savings banks over the period 1993-2000, find evidence that capital buffers influence decisions over both capital and risk-weighted assets. They find that banks with lower buffers attempt to rebuild them by simultaneously raising capital and lowering risk-weighted assets and that banks with larger buffers maintain them by increasing risk-weighted assets when capital increases. Stolz and Wedow (2005), however, using data for German cooperative banks as well as savings banks, find that poorly capitalized banks do not decrease risk-weighted assets by more in a downturn than their better capitalized rivals. Similarly, Rime (2001), in a study of Swiss banks during the period 1989-95, finds that banks with a lower capital buffer tend to try to increase their capital ratio, but that they adjust through the level of capital rather than through risk weighted assets.

Finally, in a study of banks in over 92 countries, Fonseca, Gonzalez and da Silva (2010) found that banks with larger capital buffers charge lower interest rates on their lending and pay lower interest rates on their borrowing. They find that this effect is larger in developing countries and during downturns. The Capital Adequacy Ratio (CAR)—the ratio of equity to risk-weighted assets—is a

primary focus of bank supervision. A higher CAR means less risk to depositors and the financial system. But a higher CAR also means less funding from deposits, which lowers profits and makes the intermediary less attractive for investors. New MFIs in general take longer than commercial banks to leverage their equity and build their loan portfolios, so a high CAR may not hamper their operations much in their initial years. Over the longer term, however, a higher CAR can reduce poor people's access to loans and other financial services. The regulator needs to balance safety and access when setting capital adequacy norms. (CGAP, 2012)

2.3.2 Liquidity Requirement and Performance of Microfinance Banks

A study carried out by Dong and Su (2010) established that a firm's profitability and liquidity are affected by working capital management. The study relied on data for the period ranging between 2006 and 2008 to evaluate the firms listed in the Vietnam Stock Exchange. They concluded that the relationship among the variables were strongly negative, implying that profit is adversely affected by an increase in cash conversion cycle. They further concluded that profitability rises as the debtor's collection period and inventory period reduce.

Ademola (2014) carried a study on working capital management and profitability of selected quoted food and beverages manufacturing firms in Nigeria. The study employed Tobin Q, ROI, EBIT and ROA as the dependent variables while cash conversion cycle, current asset to total asset ratio , debt to asset ratio, current liability to total asset ratio were the independent variables. Using correlation and multiple regression analysis techniques, their study concluded that a significant adverse relationship occurs between cash conversion cycle and market valuation and a firm's performance.

Sanghai (2013) studied the effect of liquidity on the financial performance of non-financial companies listed at the Nairobi stock exchange. His study concluded that current ratio has a

positive relationship on the firm' performance on the non- financial companies listed at the Nairobi stock exchange, he thus concluded that liquidity positively influence the financial performance of non- financial companies listed at Nairobi stock exchange. His study further showed that a rise in operating cash flow ratio had a positive effect on the financial performance of non- financial companies listed at Nairobi stock exchange, thus his study concluded that operating cash flow ratio positively affect the financial performance of non –financial companies listed at the Nairobi stock exchange. An increase in debt to equity positively influences the financial performance of non-financial companies listed at the Nairobi stock exchange, hence he concluded that debt to equity ratio positively affects the financial performance of non –financial firms listed in Nairobi stock exchange.

Zygmunt (2013) studied liquidity impact on profitability of polish information technology companies. He concluded that there exists statistically significance relationship between liquidity and profitability. In their study Tianwei and Paul (2006) examined the effect of liquidity on financial performance in agricultural firms, on the effect of liquidity on financial performance in agricultural firms, the study used descriptive research method where 50 firms were analyzed. The investors in these 50 firms were interested in mitigating their risk management. On the other hand, the management of these firms were concerned with understanding the financial consequences to alternative strategic decision. The policy makers assessed the levels of alternative policies for future performance of their firms. They analyzed data using a Z-score model, this model was useful to farm accounting data for the detection of farm operating and financial difficulties. They concluded that credit risk management significantly influenced financial performance of agricultural companies.

Njeri (2013) Studied effects of liquidity on financial performance of deposit taking micro finances institutions in Kenya. She noted that the financial performance of the micro finance institutions in Kenya extremely relies on the level of the institutions' liquidity. She further concluded that there is a positive relationship between liquidity and performances of micro finance institutions. Her study recommended strategies to inspire micro finance institutions to improve on financial performance since this would result to efficiency in the industry. The study further established there is a positive relationship between the asset growth of the micro finance institutions and their financial performance. She noted that accessing more loans from banks would increase the financial performance and growth. Therefore, she found out that there is a significant influence of asset growth in this industry and their financial performance. The study also concluded that operational efficiency in this industry positively and significantly influenced the profitability since firms are able to make voluminous transactions within a short period of time. This has a significant impact on customers who feel motivated to bank with the firm. At the long run the increase volume of transactions enhances financial growth and performance of these institutions. Thus, there is a statistically positive significant relationship between operational efficiency and the financial performance of MFIs.

2.3.3 Asset Quality Requirement and Performance of Microfinance Banks

The size of loan to members relative to total asset was positive and highly significant predictor of performance, confirming the a priori premise that loan is the most productive asset of any financial institution. The proportion of equity capital relative to asset is positive and significant, indicating that capital structure is important. High growth in assets and loan to members is related to high financial performance (Njoroge, 2008).

In the study Chisti (2012) examined the impact of asset quality on profitability of private banks in India. He used ROA and Profitability ratios to examine the relationship between asset and profitability. The study used multiple regression models to examine banks quality and operating performance. His results showed that unfavorable asset ratio is negatively associated with banking operating performance. The higher the quality of the loan processing before such loans are approved the lower the non- value- added activities required to process difficult loans, and thus the higher the banking operating performance. He further concluded that bank's asset quality will be worse and it will take more resources for a bank to conduct non-value added credits receiving activities which will contribute to poor performance.

Mihail (2009) performed a study on how asset liability management affects the profitability of banks. His objective was to analyze asset and liability management in in banks for a period 2004 to 2011. She used a panel of over 30 banking institutions spread all over Europe. He employed canonical correlation where she tested for linear dependency between the structure of assets and liabilities. This study concluded that in order to be effective in banks, the management of assets and liabilities must take into consideration the risk level, earnings, liquidity, profit, solvency, the level of loans and deposits.

Anjili (2014) carried out a study on effects of asset and liability management on the financial performance of commercial banks in Kenya. The study used CAMEL framework to determine the effects of asset liability management on the financial performance of commercial banks in Kenya. He analyzed data obtained from 43 banks between years 2004 to 2013 using multiple regression method. His study concluded that assets liability management is the most significant factor that

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influences performance of commercial banks. He further concluded that a slight decrease in efficiency can lead to very high reduction in profits.

Nzoka (2015) determined the effect of asset quality on the financial performance of commercial banks in Kenya between the years 2010 to 2014. The study adopted a descriptive design its methodology. The study established that assets quality cannot solely determine financial performance of commercial banks unless other factors such as capital adequacy, management efficiency, earnings performance and liquidity are considered. The findings from the study showed that for high assets quality levels to be achieved improved investments assets levels and the low rate of Nonperforming assets are realized through credit risk identification, measurement, monitoring and controlling.

Thuku (2015) determined the effect of asset liability management on financial performance of microfinance banks in Kenya. The study carried out a census survey of nine (9) microfinance banks that had been in operation for five years (2010-2014). The study used secondary sources of data since the nature of data to be collected is quantitative. he findings concluded that most microfinance banks were not able maintain optimal levels of assets and liability and thus were unable to meet their short-term financial obligations. The findings also revealed that asset quality increased rapidly over the years. Microfinance banks gave out huge loans and advances that contributed to increased non-performing loans, this impacted negatively on asset and liability management leading to poor financial performance of microfinance banks.

Imalingat (2015) determined the effect of information and communication technology investment of financial performance of microfinance banks in Kenya. The study did a descriptive survey of nine (9) microfinance banks that had been in operation for five years (2010-2014). The study concluded that the microfinance banks should continue investing in modern technologies like

ATMs and issuance of debit and credit cards. This is because these kinds of technologies play an integral role of increasing access to financial services to customers in an efficient and effective manner. This brings about increased cost reduction and thus improves financial performance.
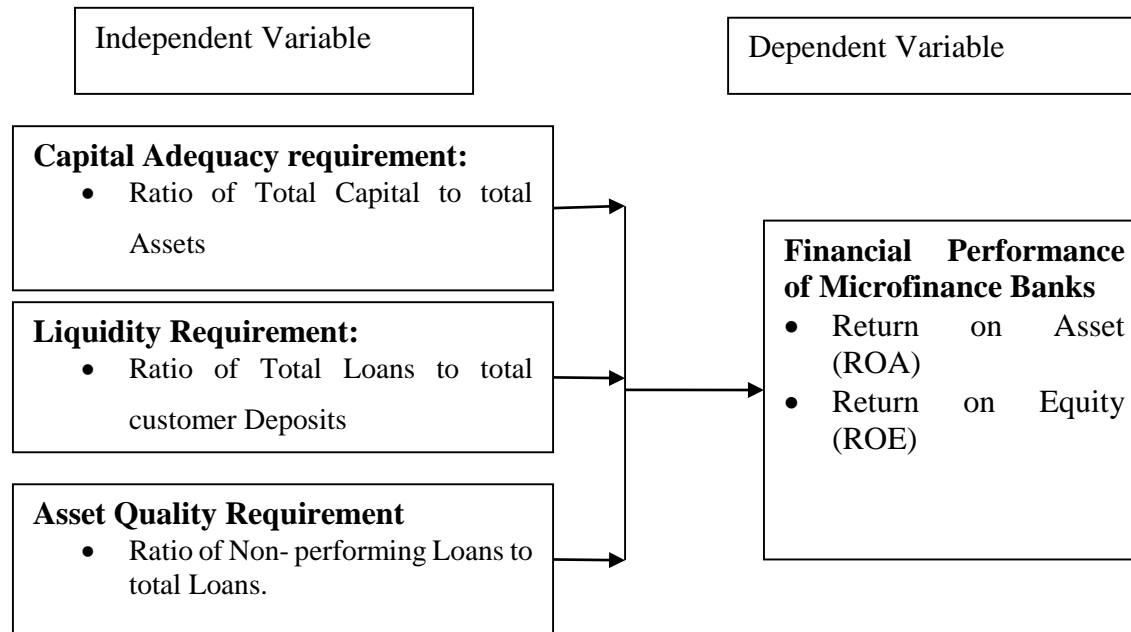
2.4 Research Gaps

A critical review of the literature reveals that little has been studied on the effects of regulation and supervision on performance of Microfinance Institutions. The past studies failed to address effects of micro-prudential regulation on microfinance institutions in light of the blossoming of various microfinance institutions in Kenya and transformation of credit only MFIs into DTMs,

2.5 Conceptual Framework

The conceptual framework highlights the relationship between dependent and independent variable in the study of effect of regulation on the performance of Microfinance Banks. Financial performance is the dependent variable. The researcher adopted liquidity ratios, capital adequacy and asset quality as independent variables. These variables formed the basis for framework around which the study was organized and presented, the variable defined and presented in view of answering the effect of regulation on MFIs financial performance in Kenya. The study investigated whether there are changes in the profitability of MFIs before and after transformation into deposit taking units in particular change in ROE and ROA. The relationship between dependent and independent variables is shown in figure one below.

Figure 1: Conceptual Framework

Independent Variable		Dependent Variable

Capital Adequacy requirement:
- Ratio of Total Capital to total Assets

Liquidity Requirement:
- Ratio of Total Loans to total customer Deposits

Asset Quality Requirement
- Ratio of Non- performing Loans to total Loans.

Financial Performance of Microfinance Banks
- Return on Asset (ROA)
- Return on Equity (ROE)

Source: Author (2016)

2.6 Hypothesis

H_{O1}: Capital adequacy regulation has no impact on financial performance of Microfinance Banks in Kenya

H_{O2}: Liquidity management has a negative impact on financial performance of Microfinance Banks in Kenya

H_{O3}: Asset quality has no effect on financial performance of Microfinance Banks in Kenya

2.7 Operationalization of Variables

Table 1: Operationalization of Variables

Variables	Notation	Operational definition	Measurement
Return on asset	ROA	The ratio measures the ability of the management to realize revenue through utilization of the company assets at their disposal. In other words, it demonstrations how efficiently the firm's resources are utilized to generate income. It therefore indicates the efficiency levels of the managers of a firm in generating net income from all the resources of the company (Khrawish, 2011).	Total Income to its total Asset.
Return on equity	ROE	ROE as a financial ratio refers to how much profit a firm earned compared to the total amount of shareholder equity invested. This is what the investors look in return for their investment. The higher the ROE the more profitable the firm is.	Net Income after taxes divided by total Equity Capital.
Capital adequacy	CA	Capital adequacy ratio demonstrates the internal strength of a firm to withstand losses during crisis. It has a direct effect on the effectiveness of banks by influencing its expansion to risky but profitable undertakings (Sangmi & Nazir, 2010).	Total Capital to total Assets.
Liquidity	L	Liquidity is the ability of a firm to achieve its obligations to its depositors. According to Dang (2011) adequate level of liquidity is highly correlated to firm's profitability	Total Loans to total customer Deposits.
Asset quality	AQ	The profitability of a financial institution is governed by the quality of loan portfolio. The quality of a loan portfolio has a direct effect on a firm's profitability. A Low nonperforming loan to total loans is an indication of a good portfolio. The lower the ratio the better the firm in its financial performance (Sangmi & Nazir, 2010).	Non-performing Loans to total Loans.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods that were adopted by the study in obtaining information on the effect of regulation on financial performance of microfinance banks in Kenya**.** It focused on a case study of all microfinance banks in Kenya as at December 2015. The chapter is thus structured into research design, target population, data collection and data analysis techniques.

3.2 Research Design

The research design that was used is descriptive research design aimed at establishing the effect of regulation on financial performance of microfinance banks. According to Mugenda and Mugenda (2003) descriptive research design is the process of collecting data in order to answer questions concerning the current status of the subject in the study. The purpose of the descriptive approach is the description of the state of affairs as it exists at the present. The researcher can only report what has happened or what is happening (Kothari, 2004).

The descriptive design helped in answering the research questions by providing the current state of affairs of the Microfinance Banks under study.

3.3 Target Population

The target population is the population to which the researcher wants to generalize the results of study (Mugenda & Mugenda, 2003). The target population of this study consisted of all the 13 microfinance banks in Kenya as licensed and regulated by the Central Bank of Kenya (CBK, 2015).

The target population is best suited for this study since it consists of all the microfinance banks regulated and licensed by Central Bank of Kenya as at December 2015.

3.4 Sample size and Sampling Procedure

A sample is the selected elements being people, participants or objects chosen for participation in a study. Sampling procedure involved selecting the sample and determining how many units of the sample need to be sampled. The research sampled the five microfinance bank from the list of licensed and regulated banks by the CBK. The five selected are: Faulu Microfinance Bank; Kenya Women Finance Trust (KWFT), SMEP Microfinance Bank, REMU Microfinance Bank and UWEZO Microfinance Bank. These Microfinance Banks were chosen since they have been licensed and have been in operation for the last five years and the annual financial performance can be found for data collection and analysis. The period under study was from the year 2010 to 2015. This aided in determining the effect of regulation on financial performance of the microfinance bank.

3.5 Data Collection Instruments and Procedures

The main data was secondary data. The research obtained Audited Financial records from the Finance Directors or Chief Finance officers of the sampled Microfinance Banks for a period of five years before and after acquisition of a license. This enabled comparative analysis of financial performance of the five microfinance banks before and after their transformation. A designed data collection schedule used to collect relevant data from audited financial reports.

3.6 Data Analysis and Presentation

The data was analyze using descriptive statistics (e.g. mean score and standard deviation) and inferential statistics; correlation and linear regression model with the help of Statistical Package for Social Sciences (SPSS) program. The study adopted the following Panel data regression model:

$Y_{i,t} = \alpha + \beta_1 X_{1i,t} + \beta_2 X_{2i,t} + \beta_3 X_{3i,t} + \beta_3 X_{3i,,} + \acute{\varepsilon}_{i,t}$

Where Y= Performance of MFIs measured by both ROA and ROE

X_1= Capital Adequacy (Core capital/total assets)

X_2= Liquidity Ratio (Total Loans/Total customer deposits)

X_3= Asset Quality (Non-Performing Loans/Total Loans)

$\acute{\varepsilon}_{i,t}$ = error term

α =Constant term

$\beta_1, \beta_2, \beta_3, \beta_4$= coefficient

Results were presented using tables.

Panel data is a dataset in which the behavior of units is observed across time (Reyna, 2007). Panel data allows one to observe a repeated measurement of the same variables on the same unit, investigating how an event changes the outcome (Bruderl, 2015). Panel data was chosen for this research because of a number of reasons: First, panel data analysis utilizes both time series and cross sectional data and hence it is expected to give unbiased estimators. Second, this form of analysis is suitable for studying data which vary over time and cross sectional, such as the kind envisaged in the study. Thirdly, panel data set includes more data information, more degrees of freedom, reduced co linearity among variables, and therefore providing a more efficient estimation than pure cross sectional or time series estimations. Finally, the panel data methodology gives

researchers greater flexibility in controlling for the effects of individual-specific variables and time-specific variables (Baltagi, 2013).

3.7 Ethical Consideration

3.7.1 Ethics issues

Proposal was developed and approval sought from supervisors, department of KCA University) and National Commission for science technology innovation before conducting study. Informed Consent was sought from the employees who meet the inclusion criteria before being included in the study.

3.7.2 Confidentiality

To ensure confidentiality the study used numbers instead of names. All local databases will be secured with password protected access systems. Access to data will be limited to the researcher and supervisors only. Forms and lists that link participants Identity numbers to other identifying information was put in a separate locked file in an area with limited access.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATIONS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis, presentation and discussion. The study sought to establish the effect of regulation on the performance of microfinance banks in Kenya. The data was collected using secondary collection data form as the data collection instrument. The presentation and interpretation of the data was done through the use of frequency tables.

4.2 Descriptive Statistics

The study analyzed the effect of regulation in a period of five years in relation to the performance of microfinance banks in Kenya as measured by Return on Assets (ROA) and Return on Equity (ROE). Table 4.1 gives the summary statistics of the main variables that have been included in the model including: minimum, maximum, mean, standard deviation and variance.

Table 2: Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
ROA	30	-1.40	5.30	1.1228	1.54533
ROE	30	.00	21.85	6.3577	6.05617
Capital Adequacy	30	.00	2.43	.4810	.62829
Liquidity	30	.00	236.51	21.8057	63.52084
Asset Quality	30	.00	1089089000	159951080.85	294578957.72

The results showed that ROA had a mean of 1.1228 with a minimum of -1.40, a maximum of 5.30 and standard deviation of 1.54533. On average the findings indicate that ROA among microfinance institutions in Kenya is 1.1228. This implies that the institutions are optimally utilizing their assets to generate profit. Comparatively, ROE had a mean f 6.3577, minimum of .00, maximum of 21.85

and standard deviation of 6.05617. The findings indicate that on average the MFIs utilize the owner's equity to generate net profit.

Capital adequacy had a mean of .4810, minimum of .00, maximum of 2.43 and standard deviation of 0.62829. The findings indicate the Microfinance institutions have adequate capital to protect their depositors and ensure efficiency and stability of the micro finance institutions. Liquidity had a mean of 21.8057, minimum of .00, maximum of 236.51 and standard deviation of 63.52084. The findings indicate that the overall liquidity for the micro finance institutions was 21.8057 this indicated that the total number if deposits exceeded than the total loans. Asset quality had a mean of 159951080.85, minimum of .00, maximum of 1089089000 and standard deviation of 294578957.72. This findings show that some MFIs were not able to hold their financial performance as a result of varied liquidity.

4.3 Normal Q-Q plot

The study sought to assess if the set of data possibly came from some theoretical distribution-normal distribution for the variables capital adequacy, liquidity and asset quality. The findings are shown on in the subsequent section.

Figure 2: Normal Q-Q plot Capital Adequacy

Normal Q-Q Plot of CAPITALADEQUECY
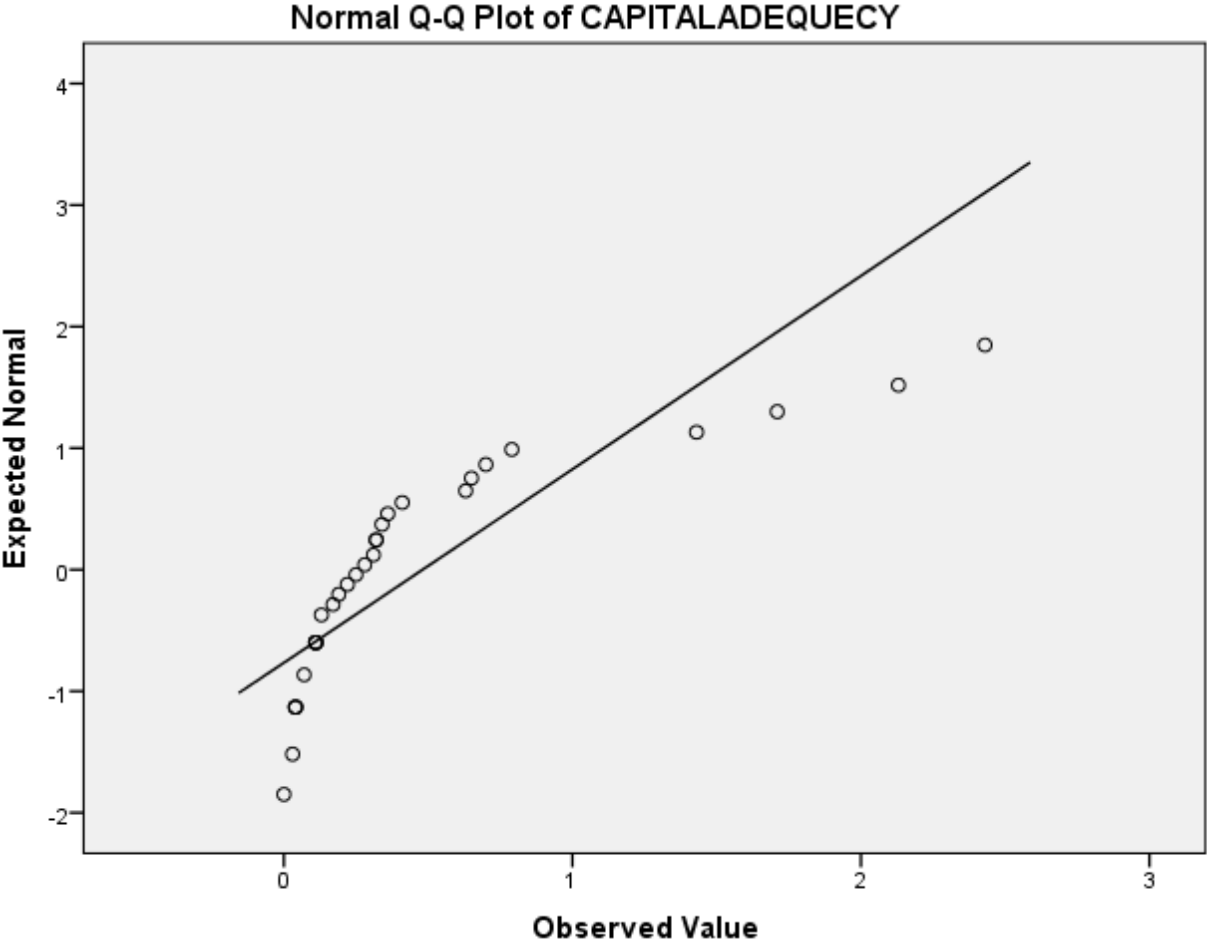
From the findings on Figure 4.1 shows a curved pattern in the plot and shape of a bow. This indicates skewing. Since the circles are consistently below and above the line the skewing is to the right.

Figure 3: Normal Q-Q Plot of Liquidity

Normal Q-Q Plot of LIQUIDITY
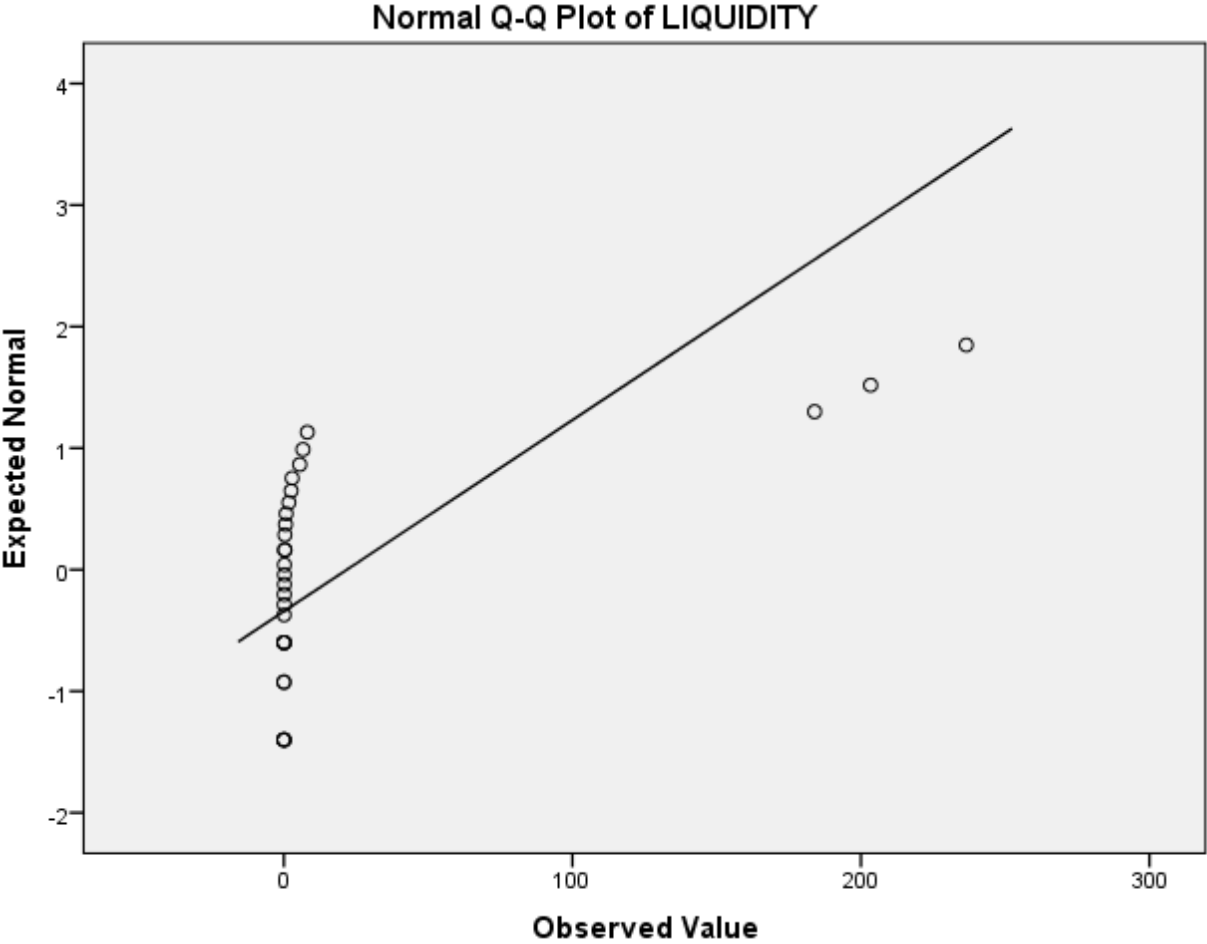
From the finding in Figure 4.2, the circles are above the line, then below it. These data is skewed, and because the pattern is below the line--then above--then below, the skewing is to the left.

Figure 4: Normal Q-Q Plot of asset Quality

Normal Q-Q Plot of ASSETQUALITY
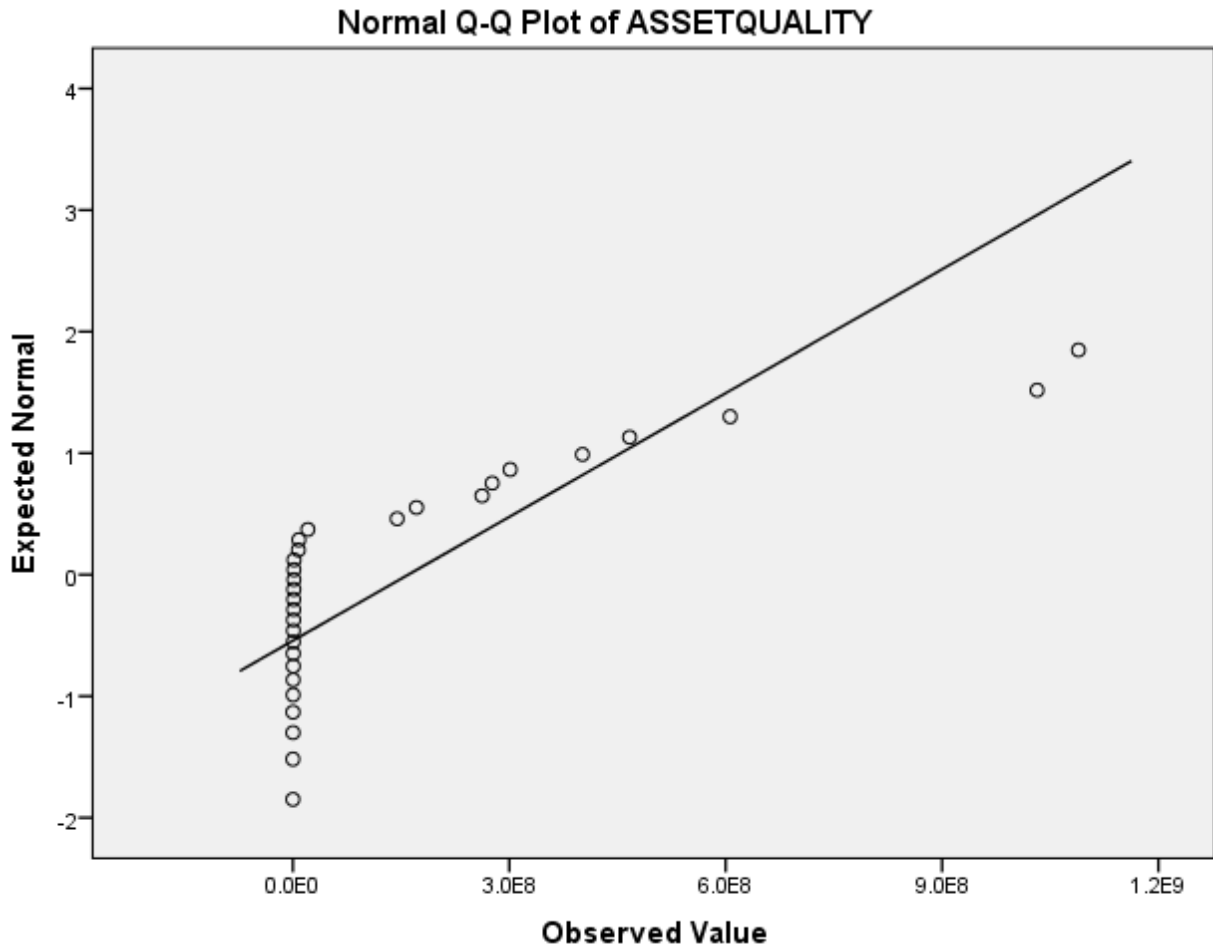
As shown on Figure 4.3 the circles cross the line two times this indicates that the hump is not the right shape for these data to be normal. The fact that the pattern is below the line-above-below indicates that the hump is in fact too wide for normality.

These stages of conducting normality explored included visualizing shape, detection of centrality and verifying normality of distribution of research data. All the graphs passed the normal tests. Therefore, the study concludes that to a large extent, data was fairly normal.

4.4 Multiple Regression Analysis

The study carried out a multiple regression analysis to establish the effect of regulation on the performance of microfinance banks in Kenya. The findings are shown in the subsequent sections.

4.4.1 Performance of MFIs by ROA

The study sought to evaluate the effect of capital adequacy, liquidity requirement and asset quality requirement on performance, the beta coefficient was regressed against financial performance namely ROA. The findings are presented in the subsequent sections.

Table 3: Model Summary for ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.444[a]	.197	.105	1.46228

From the findings in Table 4.2, R was 0.444 meaning that there was a positive relationship between all the three factors (capital adequacy, liquidity requirement and asset quality requirement). R^2 was 0.197 implying that only 19.7% of the dependent variable could be explained by the independent variables while only 60.8% of the variations were due to other factors. This implies that the regression model has very good explanatory and predictor grounds.

Table 4: Coefficients for ROA

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.774	.406		4.370	.000
Capital Adequacy	-.979	.448	-.398	-2.185	.038
Liquidity	-.006	.004	-.260	-1.445	.160
Asset Quality	-2.632	.000	-.050	-.272	.788

The regression equation becomes

Y=1.774 -0.979X$_1$

Where: Y= ROA, X$_1$= Capital adequacy

At 5% level of significance the regression equation above has established that taking all factors into account constant at zero, ROA will have an autonomous value of 1.774. The findings presented also show that taking all other independent variables at zero, a unit increase in leverage would lead to a decrease in the ROA by 0.979. The p-values was 0.38. Hence in overall, capital adequacy was statistically significant while liquidity requirement and asset quality requirement were not statistically significant since their p-values were greater than 0.05.

4.4.2 Performance of MFIs by ROE

The study sought to establish the effect of capital adequacy, liquidity requirement and asset quality requirement on performance, the factors was regressed against financial performance namely ROE. The findings are shown in the subsequent sections.

Table 5: Model Summary for ROE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.626[a]	.392	.321	4.98856

From the findings in Table 4.4, R was 0.626 meaning that there was a positive relationship between all the three factors (capital adequacy, liquidity requirement and asset quality requirement). R^2 was 0.392 implying that only 39.2% of the dependent variable could be explained by the independent variables while only 60.8% of the variations were due to other factors. This implies that the regression model has very good explanatory and predictor grounds.

Table 6: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.637	1.385		4.793	.000
Capital adequacy	-2.645	1.529	-.274	-1.730	.096
Liquidity	-.028	.015	-.295	-1.886	.070
Asset quality	1.005	.000	.489	3.045	.005

The established regression equation becomes;

Y = 6.637+ 1.005X₃

Where: Y= ROE, X_3= Asset quality

From the findings of the regression analysis if all factors (capital adequacy, liquidity requirement and asset quality requirement) were held constant, ROE would be at 6.637. An increase in asset quality would lead to an increase in ROE by 1.005. The p-value was 0.005. Hence in overall, asset quality was statistically significant while liquidity requirement and capital adequacy were not statistically significant since their p-values were greater than 0.05.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMEDATIONS

5.1 Introduction

This chapter presents summary of the findings, conclusion and recommendations of the study based on the objective of the study which was to establish the effect of regulation on the performance of microfinance banks in Kenya.

5.2 Summary

This section presents a summary of the findings as per the research objectives and the research questions.

5.2.1 Effect of Capital Adequacy Regulation on Financial Performance

The study found out that capital adequacy had a positive effect on ROA with a coefficient of -.979 and a significance level of 0.038. Since 0.038 is less than 0.05, capital adequacy had significant effect on performance of MFIs measured by ROA. Thus we accept H_0 that capital adequacy regulation has a positive impact on financial performance of Microfinance Banks in Kenya. Thus increasing capital adequacy of the MFIs would result to decrease in effectiveness of financial performance of MFIs. This finding is consistent with the finding of Maina and Ondongo (2013) who carried out a study on the effect of capital structure on financial performance of firms listed at the NSE from year 2002 to 2011. The results of this study revealed an adverse but very significant relationship between capital structure and firm performance.

The study also found out that capital adequacy had a negative effect on ROE with a coefficient of -2.645 and a significance level of 0.096. Because 0.096 is greater than 0.05, capital adequacy had

insignificant effect on ROE. Thus we reject H_0 that capital adequacy regulation has a positive impact on financial performance of Microfinance Banks in Kenya.

5.2.2 Effect of Liquidity Management on Financial Performance

The study revealed that liquidity had a negative effect on ROA with a coefficient of 0.006 and a significance level of 0.160. Since 0.160 is greater than 0.05 the effect of liquidity on ROA was not significant thus we accept the hypothesis that liquidity management has an impact on financial performance of Microfinance Banks in Kenya.

The study also found out that liquidity had a negative effect on ROE with a coefficient of 0.028 and a significance level of 0.070.

The regression test results indicated that the liquidity of MFIs and their financial performance has a negative relationship where an increase in liquidity would result to 0.006 times decrease in ROA and .028 decreases in ROE of the MFIs. This illustrates that; efforts of creating a unit change in liquidity would see the MFIs experiencing insignificant growth financially. This finding concurs with the studies of Dong and Su (2010) who established that a firm's profitability and liquidity are affected by working capital management. They concluded that the relationship among the variables were strongly negative, implying that profit is adversely affected by an increase in cash conversion cycle.

5.2.3 Effect of Asset Quality on Financial Performance

The study established that asset quality had a negative effect on ROA with a coefficient of 2.632 and a significance level of 0.788. Since 0.788 was greater than 0.05 the effect of asset quality on ROA was not significant at 5% level of significance thus we fail to reject the hypothesis that asset quality has no effect on financial performance of Microfinance Banks in Kenya. The study also

found out that asset quality had a positive effect on ROE with a coefficient of 1.005 and a significance level of 0.005.

The regression coefficient indicated that, an increase in the quality of the assets would lead to significant growth in the ROE of MFIs. Therefore, increasing quality of assets brings in improved performances in finance. This finding is consistent with that of Anjili (2014) who carried out a study on effects of asset and liability management on the financial performance of commercial banks in Kenya. The study concluded that assets liability management is the most significant factor that influences performance of commercial banks.

5.3 Conclusion

The study concludes that there was a statistically significant relationship between the MFIs' capital adequacy and their financial performance. The market capitalization of the firms is directly related with the financial performance. This is because more returns are expected to be obtained where high market capitalization has been made holding other factors constant. Therefore, the working capital as well as other inputs invested by MFIs determines their efficiency in financial performance

The study concludes that the financial performance of the MFIs in Kenya is highly dependent on the level of the institutions' liquidity. There is also a positive association between liquidity and financial performance of MFIs. This explains that, efforts to stimulate the MFIs' liquidity would see the micro financial sector realize increased financial performance. Consequently, this would result to increased efficiency in the sector's operations.

The study further concludes that the association between the asset quality of the MFIs and their financial performance is positive and significant. Increasing the loans offered by the MFIs would

increase the financial performance as this facilitates asset growth. Therefore there is a significant influence of asset quality of the MFIs and their financial performance.

5.4 Recommendation

The findings revealed that market capitalization is directly related to the financial performance. More investments should therefore be done through establishing more MFIs networks across the country which is associated positively with their financial performance.

From the findings illustrated, financial performance MFIs in Kenya is highly dependent on the level of the institutions' liquidity. To facilitate favorable financial performance of these institutions, strategies to facilitate increased liquidity of MFIs should be adopted by the institutions for their efficiency in financial operations.

The study revealed, increasing the loans offered by the bank would increase the financial performance as this facilitates asset growth. Therefore MFIs should emphasize on asset quality as a stimulator of their financial performance and competitiveness.

5.5 Recommendations for Further study

The study recommends that further research should also be undertaken which would include firms in various sectors of the economy and compare the different experiences created to these institutions due to the influence of the studied factors. This would aid in making general recommendations that would be employed by relevant authorities to ensure efficiency in financial performance of firms.

The study further recommends that future studies should also consider employing primary sources of data to collect data for their studies. This would be time saving and would also facilitate detailed information collected from original sources which would as well give reliable and accurate results that explain the details of the subject.

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APPENDICES

APPENDIX 1: DATA COLLECTION SHEET

	Financial Performance		**Capital Adequacy**	**Liquidity requirement**	**Asset quality**	**Regulations**
	Return on Asset (ROA)	Return on Equity ROE	Total Capital	Total Loans Total Deposits	Non-performing Loans	CBK regulations
2010						
2011						
2012						
2013						
2014						

APPENDIX II: LIST OF LICENSED MICROFINANCE BANKS IN KENYA

No.	Microfinance Bank	Year Licensed
1.	Faulu Microfinance Bank Ltd	2009
2.	Choice Microfinance Bank Limited	2015
3.	Kenya Women Microfinance Bank Ltd	2010
4.	SMEP Microfinance Bank Ltd	2010
5.	Remu Microfinance Bank Ltd	2010
6.	Rafiki Microfinance Bank Ltd	2011
7.	Uwezo Microfinance Bank Ltd	2010
8.	Century Microfinance Bank Ltd	2012
9.	Sumac Microfinance Bank Ltd	2012
10.	U&I Microfinance Bank Ltd	2013
11.	Daraja Microfinance Bank Ltd	2015
12.	Caritas Microfinance Bank Ltd	2015
13.	Maisha Microfinance Bank Limited	2016

Central Bank of Kenya (2015)