THE EFFECTS OF MICROFINANCE ACT 2006 ON THE FINANCIAL PERFORMANCE OF DEPOSIT TAKING MICROFINANCE INSTITUTIONS IN KENYA.

BY

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REG NO: D61/76218/2012

A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTERS OF BUSINESS ADMINISTRATION DEGREE, SCHOOL OF BUSINESS, OF THE UNIVERSITY OF NAIROBI.

OCTOBER 2013

DECLARATION

This management research project is my original work and has not been presented for a degree in this university or any other institution.

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The research project has been submitted for examination with my approval as the University supervisor.

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ACKNOWLEDGEMENTS

First, I thank the Almighty God for the endless mercies and guidance for the opportunity to undertake this course and for the precious gift of life.

I further wish to express my deepest gratitude to my supervisor Dr. Lishenga for shaping the project idea into a meaningful form, and for his consistent and insightful reviews. Without his encouragement and patience, it would have been difficult to complete this project.

I am most grateful to my family for the invaluable support and understanding you accorded me while studying for the MBA programme.

Finally, I am indebted to all those who helped me achieve this dream in one way or another especially my classmates and my friends, for their invaluable assistance in proof reading and critic of the paper throughout the stages.

To all of you wherever you are I say a big Thank You!

DEDICATION

I dedicate this work to my late father Mr. Andrea Otieno Obota for the role played in laying my foundation, my brother Dr. Sylvester Adalla for the guidance and unconditional financial support besides keeping the desire to excel burn inside me.

A special dedication to my loving wife Mrs. Jacqueline Awino for her constant encouragement and patience during the period I was constrained of time.

ABSTRACT

This paper analyses the effects of regulatory and supervisory framework on the financial performance of microfinance institutions in Kenya. It starts by considering literature on both regulation and financial performance. The paper describes the Microfinance Act 2006 that came to effect in 2008 thus creating three tiers of microfinance institutions: prudentially regulated deposit-taking institutions credit only and unregulated informal groups. Those undertaking deposit-taking business were required by this regulation to transform their operations to comply with the requirements.

The main objective was to establish the effects of regulatory and supervisory framework on the financial performance of deposit taking microfinance institutions in Kenya. A descriptive survey was used with a population of all the nine DTMs licensed by Central Bank of Kenya sampled for the study. Data was analysed using ratio analysis and t – distribution analysis.

Since the study was a survey and the number in the population was not so large, all the 9 DTMs operating in Kenya were selected for the study. This study was facilitated by the use of secondary data. The financial reports from the deposit taking microfinance institutions was analysed using ratio analysis and t-distribution to establish the effects of the Microfinance Act 2006 on the financial performance of deposit taking microfinance institutions.

The study specific objective was to find out whether there was any effect of the Micro finance Act 2006 on the financial performance of deposit taking micro finance

institutions in Kenya. The analysis was done through descriptive design using the T-test and mean.

According to the comparison of the performance of the DTM institutions before and after transformation the results in the study reveal no significant difference in their performance using the PEARL ratios. The ratio analysis did not meet the set benchmarks for financial performance according to the WOCCU set goals. The researcher found out that the Microfinance Act 2006 did not have any effect on the financial performance of the transformed DTMs in Kenya.

Comparing the performance of the micro finance institutions that transformed and those that didn't, it's evident that there was a significant difference in their performance. The transformed DTMs had higher mean in the following ratios; Return on Equity, Portfolio at Risk, Debt/ Equity ratio, operating expenses and portfolio yield. This means that the performance of the transformed DTMs was better compared to that of those MFIs that did not transform.

Key words; Deposit taking, Microfinance, Microfinance Regulation, Microfinance Act 2006, financial performance.

LIST OF ABBREVIATIONS

AMFI   Association of Microfinance Institutions

BEP   Basic Earning Power

CMA   Capital Markets Authority

CBK   Central Bank of Kenya

CGAP   Consultative Group to Assist the Poor

DTM   Deposit Taking Microfinance Institutions

KES   Kenya Shillings

NPIBA   Net Profit and Interest to Business Assets

PAR   Portfolio at Risk

ROA   Return on Assets

ROE   Return on Equity

WOCCU   World Council of Credit Union

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Microfinance is the provision of financial services to low-income clients or solidarity lending groups including consumers and the self-employed, who traditionally lack access to banking and related services. The services go beyond micro credit and also include savings and transfer of services (Christen et al 2003).

Regulation is defined by Rosenberg et al. (2003) as "the set of binding rules governing the conduct of legal entities and individuals, whether they are adopted by a legislative body (laws) or an executive body (regulations)" In addition, the government might not be the only possible regulatory institution, denoting with the term also the self-regulation of groups of institutions via associations or networks as well (Chavez et al., 1993). Supervision, in contrast, refers to the external oversight aimed at determining and enforcing compliance with regulation. It is implemented through examination practices and monitoring mechanisms which determine the real risks faced by the financial intermediary. Indeed, regulation and supervision are complementary. A clear message emerges for situations where regulators are not able to supervise all regulated financial institutions: It is better not to regulate what you can not effectively supervise (Valenzuela et al., 1999).

Regarding regulation, Medgher (2002) asserts the fact that the Microfinance expansion needs a strong structure of rules able to deal with efficiency in the mobilization of funds, ensure suitable risk management and customer protection as a first objective. In terms of funds mobilization, deposit taking activity seems to be the main reason for Microfinance regulation. This source of funding appears to be cheaper than commercial loans and provides decision-making freedom, attracting a huge number of institutions. It also allows economies of scope between landing and deposits mobilization (Vogel et al., 2000). However, taking deposits from the general public embodies additional risk in the microfinance activity. The risk faced by small and uninformed depositors which might lose their savings because of bad management decisions. The soundness of the overall national payment system, in the case of small asset microfinance institutions, in most of the cases is not directly affected as may be from the failure of an important commercial bank (Rosenberg et al., 2003). Although, a size of deposits or assets sufficient to trigger regulation can be evaluated considering the overall size of the market and the institutional landscape in a country specific (Valenzuela et al., 1999).

The case for bank regulation rests on the argument that unregulated private actions create outcomes whereby social marginal costs are greater than private marginal costs. The social marginal costs occur because a bank failure has effects throughout the economy as banks are used to make payments and as a store for savings. In contrast, the private marginal costs are borne by the shareholders and the employees of the firm, and these are likely to be smaller than the social costs. Nevertheless, bank regulation involves real resource costs of a direct nature plus the compliance costs borne by the regulated banks.

Further, a hidden cost of excessive regulation is a potential loss of innovation dynamism. Matthews and Thompson (2008).

Our understanding of the role or roles played by these intermediaries in the financial sector is found in the many and varied models in the area known as intermediation theory. These theories of intermediation have built on the models of resource allocation based on perfect and complete markets by suggesting that it is frictions such as transaction costs and asymmetric information that are important in understanding intermediation. Gurley and Shaw (1960) and many subsequent authors have stressed the role of transaction costs. For example, fixed costs of asset evaluation mean that intermediaries have an advantage over individuals because they allow such costs to be shared. Similarly, trading costs mean that intermediaries can more easily be diversified than individuals.

1.1.1 Microfinance Act 2006

The Microfinance Act 2006 is an Act of parliament that makes provision for licencing, regulation and supervision of micro finance business and for connected purposes. It provides a regulatory framework for micro finance institution and pro poor programs. The Act applies to every deposit taking micro finance business and specialised non deposit taking micro finance providing loans or other facilities to low income households. The Microfinance Act 2006 became operational with effect from 2nd May 2008 (Microfinance Act 2006).

Some of the provisions are detailed below; (a) Minimum capital requirement; the minimum capital requirement shall at least KES sixty million or core capital not less than eight percent of total deposit liabilities which shall be calculated from the financial statements. (b) Minimum liquid assets; an institution shall maintain such minimum holding of liquid assets ie notes and coins, treasury bills and bonds, balances held at banks after deducting therefrom any balances those owed to those banks. (c) Place of business; no person carrying out deposit taking business shall carry out such business outside Kenya or open/close any branch or place of business without prior approval by Central Bank of Kenya. (d) Prohibited activities; the institution shall not engage in the following activities; open current account, issue third party cheque, invest in enterprise capital, trust operations, underwriting or placement of securities. (e) Declaration of dividends; no institution shall pay dividends on its shares or make any form of distribution to its shareholders until all its capital expenditures has been written off and provision has been made for bad and doubtful debts. (f) Application for loans and credit facilities; a person who applies for loan or credit facility shall provide evidence of his ability to repay the loan or credit facility. (g) Limits on loans and credit facilities; no institution shall grant a loan or credit facility to and end-user single borrower where the loan exceeds its core capital. (h) Insider lending; no institution shall grant a loan or credit facility to an officer or member of staff of the institution in excess of such limits as may be prescribed by the Central Bank of Kenya. (i) Limit on shares; no person shall hold directly or indirectly or otherwise more than twenty five percent of the institution shares. (j)Management of institutions; every institution shall be managed by Board of Directors consisting of not less than five Directors, a qualified director shall be approved by the

Central Bank of Kenya, the board of directors shall elect non - executive chairperson among themselves. (k) Financial year; the financial year of the institution shall be the period of twelve months ending on the 31st day of December in each year. (m) Submission of the accounts to the Central Bank; an institution shall not later than three months after the end of the financial year submit to the Central Bank the following: audited financial statement with a copy of the auditor's report. (n) Disclosures in the financial statement; the financial statement of an institution shall disclose; the person if any who holds more than twenty five percent of the institution shares, any lending to insiders, any advance or credit facility exceeding such limit of its core capital. (m) Appointment of internal auditor; every institution shall appoint internal auditor who shall report to the board of directors on the financial matters of the institution. (o) Contribution to the deposit protection fund; all institutions shall contribute to the deposit protection fund.

1.1.2 Financial Performance

Gupta (1992) asserts that accounting ratios aid inter-firm and intra firm comparisons, which can be attempted by use of other ways but accounting ratios, are responsible in this respect. Accounting ratios not only indicate the present position, they also indicate the cause leading to up to the position to a large extent. Accounting ratios may indicate not only that financial position is precarious but also the past policies actions which have caused it. Best rules are obtained when ratios for a number of years are put in a tabular form so that the figures for one year can be easily compared with those of other years. Accounting data tabulated for a number of years indicate the trend of the change. This

helps in preparation of estimates for the future. Ratios can also help in ascertaining other figures if one figure is available.

When comparing financial performance of any entity over a given period, performance indicators applicable in both periods should be used. Ivan (1984) argues that the efficiency of an activity cannot be evaluated on the basis of merely one indicator e.g. comparison of profit with capital. Different indicators should be used. The difficulty however lies on the fact that different indicators have different deficiencies or may even move in opposite direction. The says that efficiency of business entities being studied can only be assessed after relating these different indicators in a system of interdependent indicators where each is functionally dependent on others.

Weston (1986) concludes that each type of analysis has a purpose or use that determines the relationship emphasised. The analyst may for example be a banker considering whether to grant short term loan to a firm. Bankers are primarily interested in the firms near term liquidity position, so they stress ratios that measure liquidity. In contrast long term creditors place far more emphasis on earning power and operating efficiency. They know that profitable operations erode asset values and that a strong current position is no guarantee that funds will be available to repay a 20 year bond issue. Management is of course concerned with all these aspects of financial analysis; it must be able to repay its debt to long term and short term creditors so well as earn profits for shareholders.

Weston (1986) classifies ratios into six fundamental types: (a) Liquidity ratios, which measure the forms ability to meet its maturing short term liabilities. (b) Leverage ratios, which measures the extent to which the firm has been financed by debt (c) Activity ratios, which measure how effectively the firm is using its resources. (d) Profitability ratios, which measures the effectiveness as shown by the returns generated on sales and investment. (e) Growth ratios, which measure the firm's ability to maintain its economic position n in the growth of economy and industry. (f) Valuation ratios, which measures that ability of management to create market values in excess of investment cost outlay.

1.1.3 Financial Performance vs. Regulation and Supervision

Shirley (1989) asserts in practice, under government control business entities rarely face conditions of good performance. They often have objectives different from and incompatible with profit maximization. They operate in non- competitive markets. The autonomy is compromised by the government intervention. Their managers are not held accountable for the results and are not given incentives to improve performance and the way they are selected and rewarded encourages qualities more appropriate to a central bureaucracy than a competitive enterprise. Non-viable entities under government are seldom liquidated.

Another motivation for an adequate regulatory framework is the impact in supporting the creation of new MFI's or improving the performance of the existing institutions. Providing an individual regulatory framework for Microfinance activity may well have the effect of increasing the volume of financial services delivered and the number of clients served. It is recommended not to over-specify this structure since it may have a

negative effect on innovation and competition (Rosenberg et al., 2003) and can lead to regulatory fragmentation (Valenzuela et al., 1999).

Moreover, regulation is considered very important for MFI's which want to expand their funding sources and improve their appearance in front of donors and institutional investors. Regulated institutions are viewed as trustworthy activities where to invest money, and furthermore, donors prefer to allocate funds in licensed and supervised institutions where at least fraud and illegal use of money are prohibited and monitored (Meagher, 2002). In addition, supervision is required from MFI's in order to promote their self through rating from private agencies and disclosure through dissemination of their performance indicators, social values and outreach.

1.1.4 Deposit Taking Microfinance Institutions

According to the Central Bank of Kenya (CBK), the prescribed process for licensing a deposit-taking microfinance (DTM) business requires four main steps (CBK, n.d). The first step is approval of the name; the second step is to apply for a license while the third step is assessment by CBK and issuance of letter of intent. Upon meeting the requirements for licensing, CBK advises the applicant on the next step and requests payment of license fees, preparation of business premises, and installation of management information systems and completion of remaining documentation. Upon satisfaction, CBK will then issue the license as the final step.

In May 2009, Faulu Kenya became the first microfinance institution to be credited as a deposit taking institution after receiving the license from CBK followed by KWFT

in March 2010 , to become the second MFI licensed in Kenya. UWEZO DTM obtained the deposit-taking license in November 2010 emerging third; SMEP was awarded the deposit-taking nationwide license in December 2010 to become the fourth deposit taking MFI in Kenya. REMU DTM acquired the deposit taking license from CBK in January, 2011 as a start up to become the fifth deposit DTM followed by Rafiki DTM, a low end deposit taking microfinance was established in 2011 to become the sixth licensed DTM. Century DTM was the seventh to be awarded license in September 2012 while Sumac DTM was granted the deposit-taking license in October 2012 and became the 8th DTM in Kenya, finally U & I DTM was granted deposit taking license in April 2013 to become the 9th DTM in Kenya. (CBK, 2013).

According to (CBK, 2012), the gross loans and advances for the 6 Deposit Taking Microfinance (DTMs) operating at end of June 2012 increased by 17.8 percent to KES.17.9 billion from KES. 15.2 billion as at June 2011. Similarly, the deposits base increased by 28.1 percent to stand at KES. 12.3 billion from KES. 9.6 billion in June 2011. The number of deposit accounts stood at 1.6 million while the number of loan accounts were 0.5 million.

1.2 Statement of the Problem

The previous studies have always have laid emphasis on the need to regulate the operations of microfinance institutions (MekonenYelewemWessen 2007, CGAP 1997,CGAP 2003, Otero M 2001). The main challenge of unregulated MFIs is limited access to financial resources. There are major benefits derived from regulation such as gaining permission to mobilize deposits from the public coupled with the opportunity to

offer a wider range of financial services to their clients as collateral and such funds are usually held by commercial banks.

Regulation and supervision of the microfinance sector is expected to lead to quality growth, broaden the funding base for MFIs eligible to mobilize and administer deposits, credit facilities, other financial services, and initiate the process of integrating these institutions into the formal financial system. The regulation of the sector will enable authorities to define procedures for their operations, entrance, exit, and ultimately create an environment for fair competition and efficiency in the sector. On the other hand, supervision encompasses all means by which regulators enforce compliance with a given legal and regulatory framework. (Basu, 1998).

Deposit taking involves a potential risk of loss depending on how the deposits are employed. As such, MFIs intending to take deposits must be regulated and supervised by an external authority to ensure that deposits are prudently employed and cushioned by adequate capitalization. According to the proposed Bill, money is considered to be a deposit if it has been placed by members of the public; repayable on demand or at expiry of a fixed period or after notice and employed by lending, investing or in any other manner for the account and at the risk of the person employing the money. (CGAP,2000).

There are insufficient studies in this area with no studies to investigate the effects of Microfinance Act 2006 on the performance of DTMs in Kenya despite several studies highlighting major challenges with the implementation of the Act. The pace of

transformation has been very slow with very many MFIs maintaining their credit only status hence the question of whether there are any benefits associated with transformation. Have there been improvements on MFIs performance as a result of new regulations?

1.3 Objectives of the study

The general objective of this research project was to establish the effects of Microfinance Act 2006 on the financial performance of the DTMs in Kenya.

On the other hand the main specific objective to establish the effects of regulatory and supervisory framework on the financial performance of deposit taking microfinance institutions in Kenya.

1.4 Importance of the study

This study will contribute to the literature by examining specifically the effects of Microfinance Act 2006 on the financial performance of DTMs in Kenya, main issues and progress besides noting the major lessons learned from the experience of adoption of the Act. This information is expected to drive discussions and act as a basis for further research on the role of regulatory and supervisory framework for DTMs. The study will be of benefit as follows;

Customers/ Depositors / Members of the public; the study will be of interest to the customers and prospective depositors / members of the MFIs. Through the study findings, the depositors and customers will have adequate information to enable them make informed decision on which MFI they are willing to take membership. They will also be

able to appreciate the role of regulation and supervision on MFIs hence boosting their confidence on financial intermediation.

Microfinance Practitioners; Through this study, already established MFIs as well as those that are to be registered will have a predetermined option to assist them to be in business now and in future. DTMs will be able to understand the need to be abreast with the Microfinance Act 2006 and put in place mechanisms that will help their operations so as not to be locked out in business. The MFIs which are not yet operating as deposit taking microfinance institutions will have a reference point when they opt to do so. The management will also be able to access whether the benefits of regulation outweigh the costs and make major investment decision by complying with the regulation. The findings will enable the practitioners focus on the transformation and compliance with Microfinance Act of 2006.

Government Policy Makers; the interest of the government is to protect its citizens from exploitation and malpractices of individuals. In most cases the government is compelled to intervene from time to time on consumer rights and protection. From the study, the government will be able to determine the extent of success in the implementation of the new regulations as well as identify inherent deficiencies in the system to come up with solutions geared towards high levels of efficiency in the MFIs operations. The study would be used as a benchmark for comparing MFIs performance to other regulators in the market i.e. capital markets through CMA and banks through CBK.

Academicians/ Researchers**;** the study will contribute to the body of knowledge through suggesting areas for improvement. It will also be helpful to other academicians and practitioners in the microfinance industry who will want to understand the role of MFIs regulation as an extra model of financial markets regulations in Kenya as opposed to earlier on when the CBK was not charged with this responsibility. This is seen as an indicator of financial sector deepening in Kenya. The study is going to contribute to the existing body of knowledge in the field. Future researchers may use the findings of this study as a basis for further research.

Central Bank of Kenya; CBK is the body mandated by the government to provide a supervisory role to the DTMs. This study will be helpful to the institution through the provision of firsthand information that regards to challenges faced by MFIs as they cope with new regulations and thus help develop measures that will address the identified areas.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter details the theoretical framework, rationale for regulation, PEARLS analysis indicators and empirical review.

2.2 Theoretical Framework

2.2.1 Wagner's Law of Expanding State Activity

Over one hundred years ago a German economist, Adolph Wagner in his classic book, Grundlegung der Politischen Ökonomie (1863) formulated a 'law' of expanding state activity. He asserted that there is a long run propensity for the scope of government to increase with higher levels of economic development.

Wagner's contribution to public expenditure theories is particularly significant when we consider that before Wagner made his observations, the prevailing view was the notion that as a country grows richer, government activities would have a tendency to decline (Henrekson, 1993). To a large extent this view is still prevalent in modern economic thought. Indeed, many conservative economists in the debate on the role of government assert that the expansion of government activity in macroeconomic affairs associated with the Keynesian revolution.

Wagner offered three reasons in support of his hypothesis. Firstly, as nations develop, they experience increased complexity of legal relationships and communications, as a result of the immense division of labour that accrues with industrialization. Because of this, Wagner envisaged an enlarged role for the state in the form of public, regulatory and protective activity. Further, increased urbanization and population density would lead to greater public expenditure on law and order, and economic regulation due to the associated risk of more conflict in densely populated urban communities. Because of the substitution of private for public activity, the administrative and protective functions of the state would expand. Thus, as nations become more advanced the number and/or magnitude of market failures would force the state to become more regulatory in nature, thereby expanding its role and this would inevitably involve higher public expenditures.

Wagner predicted the expansion of 'cultural and welfare' expenditures based on the presumption that as income rises, society would demand more education, entertainment, a more equitable distribution of wealth and income, and generally more public services. Public Services were seen as normal goods, that is, their income elasticities of demand exceeded unity. Wagner cited education and culture as areas in which collective producers were more efficient than private producers.

2.2.2 Agency Theory

An agency relationship may be defined as a contract under which one or more people (the principals) hire another person (the agent) to perform some services on their behalf, and delegate some decision making authority to that agent. Agency can be used to justify government goals of safety whereby regulatory intervention is required for the protection

of public savings when it is threatened by the behavior of public institutions (Stiglitiz, 1989).

Sinkey 1992 is the only theoretician to attempt to develop a general theory of regulation. He combined agency theory focusing on problems of hidden action (moral hazard) and hidden information (adverse selection) with the theory of production of regulatory and financial services where output is dependent on two variable of confidence and convenience. The role and importance of government guarantees are most demonstrated in case of distressed institutions. Given the confidence function, a distressed institution is simply one with low or negative net worth, unstable earnings and unreliable information (ie low quality information). All this is evidence in breakdown in agency relationships resulting in increased financial risk and lower return due to incorrect and poor risk management. It could also be due to imperfection in the information set, which results in banks being unable to perform their roles as delegated monitors. That is their loan screening ability is so affected that the credit risk of loan portfolio escalates, resulting in the above normal and doubtful debts.

2.2.3 Contestability theory of multimarket competition

An important component of regulation process which maintains that market structure adapts through entry and exit to permit customer demand to be served at minimum costs. Regulatory interference slows the rate of adaptation by imposing entry restrictions and correspondence avoidance costs on particular firms. In a free society in which multiple legislatures and regulatory agencies compete for regulates, tax receipts and budgeted funds, authorities cannot induce either great or long lasting divergences between the

actual and the cost minimizing market structure. However this divergence may be justified if it produces greater stability. If regulatory goals in controlling the banking sector restricts entry and exit then it is non-contestable market where the economic principles of perfect competition, cannot be applied, economies of scope and scale may be best achieved by smaller numbers of larger banks than by the opposite (Baumol, Panzar, and Willig, 1983).

Sinkey (1992) now relates the regulatory dialect model in relation to exclusionary rules imposed on financial institutions, particularly rules producing non contestable markets. In accordance with the struggle concept exclusionary rules promote attempt to circumvent such restrictions. Such attempts are, of course not costless. The avoidance costs are the incremental costs of creating unregulated substitute product or institutional arrangement such as the derivatives produced by the over the counter markets. As long as the reduced cost of joint production exceeds the costs of avoidance then joint production is favoured. In other words if benefits of joint production (economies of scope) exceed the avoidance costs, avoidance activities are encouraged. The social cost of regulatory exclusion is the sum of (a) administrative costs of promulgating and enforcing restrictions and (b) the smaller of the forfeited economies of scope and avoidance costs. Regulatory changes may be aimed at improving the confidence and convenience functions of the banks but may be defeated through the regulatory dialectic process, structural arbitrage and the degree of contestability of the market place

2.2.4 The Chicago Theory of Regulation

In 1971 a start was made on the development of a theory of regulation called by some the economic theory of regulation (Posner, 1974) and by others as the Chicago theory of government (Noll, 1989a). 'The theory of economic Regulation' by Stigler (1971) appeared in that year. His central proposition was that 'as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit'. The benefit of regulation is that the government can grant subsidies or ban the entry of competitors to the branch directly so that the level of prices rises. The government can as well maintain the prices more easily than a cartel besides the government suppressing the use of substitutes in support of complements.

2.3 Rationale for Regulation and Supervision of Microfinance Institution

2.3.1 Preserving financial sector soundness

The core objectives of financial regulation are to preserve the stability and soundness of the financial system and to protect the deposits of the public (Llewellyn, 1999). A primary reason for regulating and supervising traditional financial institutions is consumer protection for public depositors in financial institutions.

2.3.2 Ensuring institutional soundness

According to the Banana Skins report (2009, pg 28), "the concern most frequently cited by respondents is that many countries still lack specific MF Regulation, which means that MFIs are either unregulated, or forced to conform to other, mainly commercial banking regulation. This is a particular issue for deposit taking, an activity that more MFIs want to get into. The wrong regulation can affect the viability of the business

model, undermine depositor and investor confidence and expose MFIs to political interference".

Moral hazard issues sometimes arise because the interests of financial institutions vis-à-vis the interests of consumers per se are not necessarily compatible. Depositors and investors may not be in a position to judge the soundness of a financial institution (the issue of asymmetric information) much less to influence the institution's management (Stiglizt, 2001).

2.3.3 Information sharing

The existence of information asymmetries defines the special nature of the financial industry and explains its heavier regulation compared to other industries (Arun, 2005; Stiglitz, 2001). In fact, the asymmetric distribution of information among the different stakeholders (shareholders, debtors, and depositors) raises the need to counterbalance their particular interests through regulation, and especially, to protect the interests of small depositors (Vogel et al, 2000; Jansson, 1997).

2.4 Mechanisms and Approaches to supervision

External supervision is usually provided to central banks or specialized supervisory agencies working outside the central bank. Some other counties experience indicates that all or a part of the supervisory work can be delegated to auditors or consultancy firms. According to Chaves and Gonzalez vega (1994), prudential supervision refers to the process of enforcing the regulatory framework. The financial intermediaries are monitored and directed to ensure that they comply the regulatory requirements and

not threaten the financial system as a whole. Efficient regulatory policies are useless they are backed by enforcement mechanisms of efficient supervision (Christen and Rosenberg, 2003).

2.4.1 Financial Regulation

According to Peck Christen, R.Lyman and Rosenberg (2003) regulation refers to a set of enforceable binding rules that govern the conduct of legal entities or individuals, whether they are adopted by a legislative body (laws) or an executive body (regulations). All the arguments that support the application of regulation to banks are naturally extended to non-banks (Stiglitz, 2001; Jansson, 1997). However, as Stiglitz (2001, pg.10) explains "the extent and nature of the regulation may differ markedly between banks and non-banks depending on the role the latter institutions play in the economy".

2.4.2 Prudential Regulation

Whereas prudential regulation "refers to the set of general principles or legal rules that aim to contribute to the stable and efficient performance of financial institutions and markets (Chaves and Gonzalez_Vega, 1994). Therefore, the purpose of prudential regulation is to ensure the financial soundness of financial intermediaries (in our case MFIs) and try to prevent if not reduce financial system instability and losses of depositors money. Whereas prudential supervision refers to external oversight of the financial intermediaries though examination and monitoring mechanisms to verify compliance with regulation.

This intends to protect the soundness, financial health and stability of the financial system. It involves establishing an appropriate framework of norms and incentives by which financial institutions must behave without taking excessive risks that could affect their

performance. The goals of prudential regulation are the ones claimed as justifications for regulating the financial system, i.e., preserve the stability and soundness of the financial system and protect the small depositors (Arun, 2005; Christen et al, 2003). Therefore, its oversight should be the responsibility of a public and specialised supervisory body (Llewellyn, 1999).

2.4.3 Non-prudential Regulation

This seeks to promote good behaviour in the system, focusing on the way the financial firms conduct their business (Llewellyn, 1999; Hardy et al, 2003). It's related to pursuing consumer protection, information disclosure and their fair business practices, which are similar to the ones applied to their industries (Arun, 2005; Hardy et al 2003; Christen et al, 2003). It's argued that non prude4ntial regulation could be self-imposed or controlled by the authority (Christen et al, 2003). None the less, it is more efficient if the same regulatory agency is in charge of the design, implementation and oversight of the prudential and non-prudential standard because of the economies of scale in information, knowledge and expertise about the market.

It is argued that non-prudential regulation could be self- imposed or controlled by any other authority (Christen et al, 2003). Nonetheless, it is more efficient if the same regulatory agency is in-charge of the design, implementation and oversight of prudential and non-prudential standards because of the economies of scale in information, knowledge and expertise about the members of the market.

2.5 Microfinance institutions in local financial markets

The 1990s saw a paradigm shift in approaches to microfinance that moved the rationale for interventions in credit provision from one of subsidized delivery to the need to build healthy financial systems (Otero and Rhyne, 1994). This was the result of an increasingly rich body of detailed research into informal financial arrangements converging with insights from the new institutional economics and practical experience of lending to poor people (McGregor 1988). This resulted in a number of key departures from earlier thinking. First, poor people can and will pay relatively high interest rates for loans and their concern is for repeated and reliable access rather than costs. Second, poor people can and do save and practical experience suggested that compulsory savings requirements linked to loan access and could provide funds for on-lending. Third, group-based methods (regularly found in informal arrangements) could reduce transaction costs and had the potential to ensure that large microfinance institutions could expand their outreach, reduce their costs as they grew in size, mobilize funds for on-lending independently of donors, and hence became independently self-sustaining so providing services in the long term(Jonson and Rogaly, 1997).

The Ohio School has been a key player in the application of New Institutional approaches to financial markets and has also considered the role of MFIs in developing the rural financial markets (RFM) however, they suggest that 'the route to better RFM performance is not well marked' (Von Pischke, 1983) but a well - functioning rural financial market should have the following characteristics. It should Mobilize rural savings as well as disburse credit, grow to meet expanding opportunities without the need

for subsidies, expand the array of vehicles for attracting savings, offer varied and flexible lending terms and conditions, have institutions which are healthy and expanding, have active competition among formal and informal borrowers and lenders, the costs of financial services should fall as a result of innovation, the economically active population should have expanding access and the capability of the RFM to take part in larger financial markets should grow.

2.6 PEARLS analysis and brief description of each acronym

Since 1990, the World Council of Credit Unions has been using a set of financial ratios known as PEARLS. Each letter of the word PEARLS measures key areas as follows: **P**rotection, **E**ffective Financial Structure, **A**sset Quality, **R**ates of Return and Costs, **L**iquidity, **S**igns of Growth.

2.6.1 Protection

Protection indicators are measured by;

Table 1: Protection Indicators

Indicator	Goal (Excellence)
P1- Loan Losses / Loan delinquency > 12 Months	100%
P2 – Net Loan Loss Allowances/ Loan delinquency 1-12 months	35%
P3 – Complete Loan Charge – off delinquency > 12 months	Yes
P4 – Annual Loan Charge-offs / Average Loan Portfolio	Minimised
P5 – Accumulated Charge-offs recovered / Accumulated charge-offs	>75%
P6 – Solvency Net value of assets / Total shares & deposits	$\geq 111\%$

2.6.2 Effective Financial Structure

This is the most important variable that affects growth, profitability and efficiency.

Table 2: Effective Financial Structure Indicators

Indicator	Goal (Excellence)
E1 – Net Loans / Total Assets	70 – 80 %
E2 – Liquid Investments / Total Assets	≤ 16%
E3 – Financial Investments / Total Assets	≤ 2%
E4 – Non – financial investments / Total Assets	0%
E5 – Savings Deposits / Total Assets	70 – 80%
E6 – External credit / Total Assets	0 – 5%
E7 - Members Share Capital / Total Assets	≤ 20%
E8 – Institutional capital / Total Assets	≥ 10%
E9 – Net Institutional Capital / Total Assets	≥ 10%

2.6.3 Asset Quality

Asset Quality is the main variable that affects the institutional profitability; this was measured as follows;

Table 3: Asset Quality Indicators

Indicator	Goal (Excellence)
A1 – Total Loan Deliquency / Gross Loan Portfolio	≤ 5%
A2 - Non earnings Assets / Total Assets	≤ 5%
A3 - Net Zero Cost Funds / Non – earnings Assets	≥200%

2.6.4 The Rates of Return on Costs

The Rates of Return and Costs indicators monitor the return earned on each type of asset (use of funds) and the cost of each type of liability (source of funds). On the assets side, one can determine what types of assets earn the highest returns. On the liability side, one can determine what are the least and most expensive sources of funds.

Yields and costs directly affect the growth rates of an institution. The intent is for an institution to: pay real rates of return on savings and shares, charge rates on loans that recover all costs and pay competitive salaries for employees.

The goal of R1, Net Loan Income divided by the Average Net Loan Portfolio, is for loan prices to be set at entrepreneurial rates. The entrepreneurial rate needs to cover the cost of funds, the cost of operations and administration, the cost of provisions and the cost of contributions to increase capital.

The income ratios identify income from net loans, liquid assets, financial investments and non-financial investments. Financial cost ratios look at the costs of savings deposits, external credit and dividends on shares. Operating cost ratios (R9, R10) separate out operating costs and provisions for risk assets.

Table 4: The Rates of Return on Costs Indicators

Indicator	Goal (Excellence)
R1 – Net Loan Income / Average Net Loan Portfolio	Entrepreneurial Rate
R2 – Liquid Investment Income / Average Liquid Investments	Market Rates
R3- Financial Investment Income / Average Financial Investments	Market Rates
R4 – Non –financial Inv. Income / Average Non fin. Investments	$\geq$ R1
R5 – Fin. Costs: Savings Deposit / Average Savings Deposit	Market Rates>Inflation
R6 – Fin. Costs: External Credit/ Average External Credit	Market Rates
R7 – Fin. Costs: Members shares / Average Members shares	Market rates > R5
R8 – Gross Margin / Average Assets	E9 = 10%
R9 – Operating Expenses / Average Assets	$\leq$ 5%
R10 – Provisions for risk Assets / Average Assets	P=100%, P2=35%
R11 - Other income or Expenses / Average Assets	Minimized
R12 – Net Income / Average Assets (ROA)	E9=10%

2.6.5 Liquidity

Managing liquidity is an essential component of administering a savings institution.

Table 5: Liquidity Indicators

Indicator	Goal (Excellence)
L1 – Liquid Assets – ST Payables / Total Deposits	15 – 20%
L2 – Liquid Reserves / Total Savings Deposits	10%
L3 – Non – earning Liquid Assets / Total Assets	< 1%

2.6.6 Signs of Growth

Signs of Growth reflect member-client satisfaction, appropriateness of product offerings and financial strength. Growth directly affects an institution's financial structure and requires close monitoring to maintain balance; for example, growth in savings (S5) drives growth in total assets (S11), but if loans (S1) are not growing as quickly as savings, then

the institution will have high liquidity (L1) and low earnings (R12). Similarly, as savings are growing, it is important to watch that institutional capital (S8) is increasing at a similar pace so that there will be a buffer to protect those savings against unexpected losses. The growth indicators of PEARLS can help managers maintain a balanced and effective financial structure.

Table 6: Signs of Growth Indicators

Indicator	Goal (Excellence)
S1- Net Loans	E1 = 70 – 80%
S2 – Liquid Investments	E2 $\leq$ 16%
S3 – Financial Investments	E3 $\leq$ 2%
S4 – Non – financial investments	E4 = 0%
S5 – Savings Deposit	E5 = 70-80%
S6 – External Credit	E6 = 0 – 5%
S7 – Member shares	E7 $\leq$ 20%
S8 – Institutional Capital	E8 $\geq$ 10%
S9 Net Institutional Capital	E9 $\geq$ 10%
S10 – Membership	$\geq$15%
S11 – Total Assets	> Inflation + 10%

2.7 Empirical Reviews

This section reviews the local and international studies that argue the pros and cons of regulation and supervision of MFIs. This section also reviews studies on the extent of compliance with the regulatory and supervisory framework.

Oriaro(2000) established that the dominant characteristics of MFIs that hinder regulation are targeting low-income assets less clients, extending unsecured loans based on group guarantee, and capitalization by donors. A significant number of MFIs in developing countries operate either as NGOs or as projects run by International NGOs. A key component of regulation of MFIs is the establishment of ownership. This presents issues for the NGO MFI as well as the founders and funders. These issues include the legal limits of ownership of regulated institution, legal restriction.

High minimum capital requirements are entry barriers for smaller MFIs and tend to favour a few larger ones (Christen et al., 2003). Raising the required minimum capital may take time to achieve. It is hard for smaller MFIs to be transformed into regulated institutions because soliciting for investors requires going through a due diligence process. This a common tool used to weed off smaller MFIs as was used in Ghana. In Kenya, the regulation offers three options: national DTM, community DTM or remain as credit-only MFI. Those MFIs applying for nationwide DTM are required to raise KES 60 million (equivalent to USD 7.5 million) and for community-based DTM the minimum capital is KES 20 million (USD 4 million) (Ndung'u, 2010a). Nationwide DTM institutions are allowed to roll out their operations across the country, while community-based DTMs have their operations restricted to a defined geographical area.

MFIs may have a challenge in meeting capital adequacy requirements. The difficulties in meeting loan loss-provision standards set for MFIs by most regulators. There is controversy as to whether the capital adequacy requirements for specialised MFIs should

be tighter than the requirements applied to diversified commercial banks (Christen et al., 2003; Handy et al., 2002). Well-managed MFIs maintain excellent repayment performance, with delinquency typically lower than in commercial banks (Ramírez, 2004), but in some countries, the banking laws consider loans provided to micro-entrepreneurs risky. In this perception, microloans are supposed to be classified as risky assets fundamentally due to lack of collateral and diversity, and be heavily provided for (Delfiner et al., 2006).

When regulation comes to effect deposit-taking business becomes permissible only to those institutions that have complied with the law. According to Nyanjwa (2009), permission to mobilise deposits from the public expired on 3 May 2009 and those MFIs that were doing so after this date, were violating the law. The law provides transforming institutions a four-year divestiture period for those that launched their application for license within the transition period. Those who applied after the transition period had lapsed, are expected to meet all requirements of the law from the onset of application (Nyanjwa, 2009). This could discourage some institutions from transforming.

According to the reporting requirements, as outlined in the Microfinance Act (GOK, 2006) and Regulations (GOK, 2008a), MFIs would require good MIS and stable software applications for this purpose. There are up to 22 different reports with varied frequency of reporting ranging from daily to annual. The penalties for non-compliance or late submission are huge. The reports cover, among other things, asset and liability management, capital adequacy, liquidity, financial statements, disclosure on large loans,

performance, returns on directors and management. These reports are meant to ensure that acceptable performance standards are upheld, and to ensure compliance with accounting standards, accountability and transparency and depositor protection (Mwatela, 2008).

Crafts (2006) noted that regulation can result to resources being directed to compliance rather than the creation of productive output. Secondly, regulations can impose constraints on the choice of production techniques (eg by preventing the use of inputs) or lead to a misallocation of resources (e.g by imposing certain activities). While the former effect will result in a reduction in the level of productivity as the output from factor inputs reduces, the latter effect can actually reduce the longer term growth rate of productivity through reductions to the level of technological progress. However (Crafts 2006) suggest that the direct impact of compliance costs, while important, is likely to only have a relatively small impact on productivity when compared to the other channels, illustrating this with an estimate that if administration costs doubled from 1.5 per cent of GDP to 3 per cent GDP, this would possible lead to a 0.15 per cent year reduction in productivity growth. This impact should not be underestimated, particularly in the case of smaller firms which are limited in their capacity to absorb such costs, as a result of lack of management time to deal with compliance and inability to exploit the same economies of large scale firms.

A country's laws may require regulatory approval of any acquisition that would result in an individual or legal entity, together with related parties (including companies that are

controlled, controlling, or subject to common control), owning a "significant interest." Approval is typically based on a "fit and proper" standard, which may include an assessment of the potential owner's financial condition and trustworthiness. This may pose problems that do not have "deep pockets," something few have. Transformation to deposit taking involves change in legal status. The legal transformation is that of moving from an ownerless to owned institution (usually through shareholding). A limited liability company is formed to take up the business of the transformed institution (Lauer, 2008).

Some MFIs have social mission to help the poor while others have commercial missions to make profit for their shareholders. Regulation leads to a drift in the original vision and mission as it gains a commercial orientation and aims to maximize shareholders value. MFIs that are transforming into profit making institutions have generally been accused of neglecting their social mission of providing credit to below average income earners (Wainaina, 2002). The MFI may be owned by shareholders whose main objective differ significantly from those of the NGO founders. (Lauer 2008).

Several authors have shown empirically that organisations responses to institutional pressure are affected by institutional characteristics including ownership structure (Goodrick and Salancik, 1996). Wainaina(2002) observed that in most MFIs, the Chief Executive Officer and the Chair of the Board was one and the same person. Most NGOs in developing countries suffer from lack of separation of ownership and control and the extent of dispersion

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study utilized a descriptive survey design. The design was adopted because of its appropriateness in describing the current situation of the phenomenon (Kothari, 1990).

3.2 Target Population

Cooper and Schindler (2003) define population as the total collection of elements about which the researcher made inferences. The population under this study used 9 Deposit Taking Microfinance Institutions (DTMs).The target population was drawn from the DTMs that are registered with the Central Bank of Kenya(CBK 2013). The target population was chosen because CBK is tasked with registration and licensing of DTMs.

3.3 Sample Design

3.3.1 Sample

Nairobi was chosen for reasons that most DTMs are located in this county. A sample of nine DTMs in Nairobi was selected from the CBK records. Information was gathered from the MFIs and DTMs financial reports, audit reports and supervision reports from the Central Bank of Kenya.

3.3.2 Sample Frame

A sample frame refers to a list of elements from which the sample is actually drawn and is closely related to the population (Cooper and Swindler, 2003). The sampling frame in this study was a list Deposit Taking Microfinance Limited.

3.3.3 Sampling Techniques

Since the sample was not such big, a census approach was used. All the 9 DTMs were considered for the study, a non-probability sampling technique such as purposive was used to obtain further information from related institutions and regulatory bodies.

3.4 Data Collection

Secondary data was used conduct the study. Secondary data are data that have been collected for some other purpose. Secondary data can provide a useful source from which to answer the research question(s). Punch (1998) mentions several advantages of using existing data. Secondary data was collected from the financial reports by the DTMs and MFIs including the audited reports submitted to the Central Bank of Kenya between financial years 2009 to 2012. Other secondary data was sourced from The Mix Market (2013) and the individual institutions website for the period under review.

3.5 Data Analysis Technique

Financial ratios were used to analyze the financial performance; the major financial ratios used in the study were namely; Return on Assets, Return on Equity, Portfolio at Risk, Risk Coverage Ratio, Operating expense ratio, debt / equity ratio and portfolio yield. The analysis focused on the following financial performance indicators as given by the World

Council of Credit Union (WOCCU). These ratio analysis are adequately described in appendix III

From these ratios, mean, variance and standard deviation were generated to help the researcher carry out test of significance. The main reason why ratios analysis was used is because they are convenient way to summarize large quantities of financial data to compare performance. Dominic (1994) says that the reason why ratios are used as opposed to absolute values is a mathematical one and is basically in order to facilitate comparisons by adjusting for size. Users of financial ratios assume that the ratios possess the appropriate statistical properties for handling and summarizing a given data.

Data was sorted, coded and checked for completeness. Then quantitative analysis was applied using descriptive statistics which are the mean mode and median. Qualitative data was organized into themes and used to draw conclusions.

T-test was used to determine if the two sets of data are significantly different from each other. One sample t-test was applied as follows;

$$t = \frac{\overline{x} - \mu_0}{s/\sqrt{n}}$$

The null and alternative hypotheses were considered as follows:

H0: There is no change in financial performance before and after transformation to deposit taking microfinance institutions.

H1: There is change in financial performance after transformation to deposit taking microfinance institutions.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

In this chapter, the results of the researcher have been presented, analyzed and discussed. The main objective of this study is establishing the effects of regulatory and supervisory framework on the financial performance of deposit taking microfinance institutions in Kenya. Secondary data was collected from the nine deposit taking microfinance institutions which mainly comprised the annual financial statements and audit reports. Due to limitation of the study, some DTMs were incorporated as in 2013 while some just were mainly incorporated as DTMs without transforming from credit only microfinance institutions. This necessitated data analysis to be conducted on three deposit taking microfinance institutions that were present both pre and post transformation eras. Data analysis was further conducted to test the financial performance of the credit only microfinance institutions versus the deposit taking microfinance institutions. To achieve the objective of this research, data on PEARL ratios are studied. It is the belief of the researcher that when the above factors are carefully analyzed, it will be possible to determine the effects of the Micro finance Act 2006 on DTMs.

4.2 Test of significant differences.

Statistical tests were carried out to find out whether there were any significant differences between ratios computed for the DTMs before transformation and ratios computed after transformation as indicated in appendix III. The test followed the following steps;

H0: Null hypothesis ie there is no change in financial performance before and after transformation to deposit taking microfinance institutions.

H1: Alternative hypothesis ie there is change in financial performance after transformation to deposit taking microfinance institutions.

A statistical decision is made by rejecting the null hypothesis if the test statistic lies in the critical region; or fails to reject H0. Hence the two samples do not provide enough evidence to support rejection of H0. Then perhaps more sample investigation should be done.

This part of the analysis involved the comparison of the performance of the licensed DTMs and those that did not become licensed The analysis for any change were done using the T-test analysis for the following DTMs ; Faulu, KWFT and SMEP during the year 2009, 2010 and 2011, 2012. The years 2009, 2010 were taken as the years before licensing and the years 2011, 2012 after transformation.

4.2.1 Profitability.

The test for change in profitability through T-test shows a two critical tail of 2.776445 and a t statistic of -0.62127 for return on equity and a two critical tail of 2.776445 and a t statistic of -0.75509 for return on assets. The t-statistics lies within the range of the two

critical tail which implies that there's no significant change in profitability of the DTMs

after transformation at 95% level of confidence. We therefore conclude that there's no

significant change in profitability for DTMs after transformation

Return on Equity and Return on Assets

Table 7: T-test for Return on Equity and Return on Assets

R.O.E FOR LICENCED DTMS
t-Test: Two-Sample Assuming Equal Variances

	Before transformation	*After transformation*
Mean	0.047267	0.082333
Variance	0.004751	0.004806
Observations	3	3
df	4	
t Stat	-0.62127	
t Critical one-tail	2.131847	
t Critical two-tail	2.776445	

Return On Assets

t-Test: Two-Sample Assuming Equal Variances

	Before transformation	*after transformation*
Mean	-0.36667	0.733333
Variance	5.623333	0.743333
Observations	3	3
Pooled Variance	3.183333	
df	4	
t Stat	-0.75509	
t Critical one-tail	2.131847	
t Critical two-tail	2.776445	

4.2.2 Asset Quality

Portfolio at Risk

Table 8: T-test for Portfolio at Risk

PAR
t-Test: Two-Sample Assuming Equal Variances

	Before transformation	after transformation
Mean	13.36667	8.766667
Variance	5.663333	29.34333
Observations	3	3
Pooled Variance	17.50333	
Df	4	
t Stat	1.346614	
t Critical one-tail	2.131847	
t Critical two-tail	2.776445	

The test for change in asset quality through T-test shows a two critical tail of 2.776445 and a t statistic of 1.346614 for portfolio at risk therefore it lies within the range at 95% confidence interval. This implies that there's significant change in risk coverage ratio but no significant change in portfolio at risk of the DTMs after transformation.

4.2.3 Protection

Risk coverage ratio

Table 9: T-test for Risk coverage ratio

RISK COVERAGE
t-Test: Two-Sample Assuming Equal Variances

	Before transformation	*after transformation*
Mean	43.8	39.63333
Variance	2.37	3.243333
Observations	3	3
Pooled Variance	2.806667	
Df	4	
t Stat	3.046064	
t Critical one-tail	2.131847	
t Critical two-tail	2.776445	

A two critical tail of 2.776445 and a t statistic of 3.046064 for risk coverage ratio therefore it lies without the range of 95% confidence interval. This implies that there's significant change in risk coverage ratio but no significant change in portfolio at risk of the DTMs after transformation.

4.2.4 Efficiency and Productivity

Operating expense ratio

Table 10: T-test for operating expense ratio

OPERATING EXPENSES
t-Test: Two-Sample Assuming Equal Variances

	Before transformation	*After transformation*
Mean	27.9	27.16667
Variance	89.31	24.69333
Observations	3	3
df	4	
t Stat	0.118961	
t Critical one-tail	2.131847	
t Critical two-tail	2.776445	

The test for change in efficiency and productivity through T-test shows a two critical tail of 2.776445 and a t statistic of 0.118961 for operating expenses therefore it lies within the confidence interval of 95%. From the results, it's rational to conclude that there's no significant change in efficiency and productivity of the DTMs after transformation. We therefore accept H0 hypothesis that there's no significant change in efficiency and productivity for DTMs after transformation.

4.2.5 Capital Adequacy & ALM

Debt / Equity Ratio

Table 11: T-test for Debt/ Equity ratio

DEBT/EQUITY
t-Test: Two-Sample Assuming Equal Variances

	Before transformation	*After transformation*
Mean	8.266667	7.633333
Variance	4.503333	0.543333
Observations	3	3
Pooled Variance	2.523333	
df	4	
t Stat	0.488304	
t Critical one-tail	2.131847	
t Critical two-tail	2.776445	

The test for change in capital adequacy and ALM through T-test shows a two critical tail of 2.776445 and a t statistic of 0.488304 for debt/ equity ratio therefore it lies within a 95% confidence interval. From the results, it's rational to conclude that there's no significant change in capital adequacy & ALM of the DTMs after transformation. We therefore accept H0 hypothesis that there's no significant change in capital adequacy & ALM for DTMs after transformation.

4.3 Findings and interpretations of the ratio analysis versus WOCCU Goals.

This part of the study involved the analysis of the performance of the micro finance institutions before their licensing as DTMs and after licensing. Out of the current nine DTMs only three have enough data that could be used to show such difference. The ratios as per the PEARL analysis that were used include; return on assets (R.O.A), return on

equity (R.O.E), portfolio yield, operating expenses, risk coverage ratio, debt/ equity and portfolio at risk . Mean statistics was used and the results analyzed.

4.3.1 Profitability ratios.

Profitability was deemed to do the analysis to find out whether the results are in different in terms of profitability. Two profitability ratios namely return on equity and return on assets were used to establish the effects of regulatory and supervisory framework on the financial performance of deposit taking microfinance institutions in Kenya. The main goal of return on equity was to measure the rate of return on stockholders (owners) investment. The mean ROE before transformation was 4.7% while after transformation the ROE was 8.2% recording an improvement on ROE after transformation. The main goal of ROA is to measure the adequacy of earnings besides the capacity to build institutional capital. The mean ROA before transformation was 3.6% and 7.3% recording an increase on ROA however this was below the minimum rate of 10% according to World Council of Credit Unions standards signifying performance below par hence the conclusion that the regulatory and supervisory framework had no effect on financial performance of DTMs based on the profitability ratios.

4.3.2 Asset Quality Ratios

The delinquency is the most important measure of the institutional weakness; if delinquency is high it affects all other key areas of credit union operations. The mean Portfolio at risk before transformation was 13.3% and 8.7% after transformation recording a slight improvement on loan delinquency however this was above the WOCCU standards of less than or equal to 5%. The study found out that the regulatory

and supervisory role did not effect on financial performance of DTMs based on the asset quality ratios.

4.3.3 Protection

The main purpose is to measure the adequacy of allowances for loan losses when compared to the allowances required for covering all loans delinquent over 30 days. The mean risk coverage ratio was 43.8% before transformation and 39.6% after transformation which is dependent on the loan delinquency indicating an increase in the delinquency henceforth a decrease in the risk coverage ratio. This ratio is below the WOCCU goal of greater than or equal 100% therefore contributing to no effect on financial performance of the DTMs despite the introduction of Microfinance Act 2006.

4.3.4 Efficiency and Production

The main purpose is to measure the costs associated with the management of all credit union assets, it measures the degree of operational efficiency or inefficiency. The mean operating expense ratio was 27.9 % and 27.1% after transformation indicating no significant change. This was above the WOCCU goal of less than 10% indicating some level of inefficiency leading to the conclusion that there was no effect on financial performance of the DTMs.

4.3.5 Capital Adequacy

This measures debt to equity base, the mean rate was 8.2% before transformation and 7.6% after transformation signifying a slight reduction of debt base in the financial structure of the transformed DTMs.

4.4 Comparisons between transformed and not transformed MFIs

Table 12: Comparisons between transformed and not transformed MFIs

	TRANSFORMED					NOT TRANSFORMED			
	FAULU	KWFT	SMEP	MEAN		MOLYN	MICRO AFRICA	SISDO	MEAN
ROE	2	15.7	7	8.233333		11.9	0.6	7.9	6.8
ROA	0.2	1.5	0.9	0.866667		4.6	0.3	2.9	2.6
PAR	5.2	6.1	15	8.766667		1.6	3.54	14.8	6.646667
DEBT/EQUITY	8.2	7.9	6.8	7.633333		1.6	1.6	1.9	1.7
OPERATING EXPENSE	32.9	24.5	24.1	27.16667		15.8	29.6	26.3	23.9
RISK COVERAGE RATIO	41.4	45.6	37.8	41.6		132.4	95.5	57.5	95.13333
PORTFOLIO YIELD	39.4	32.3	31.7	34.46667		30.7	38.4	31.8	33.63333

The mean for the transformed DTMs in relation to Return on Equity, Portfolio at Risk, Debt/ Equity ratio, operating expenses and portfolio yield were higher compared to the un-transformed DTMs. This showed that the transformed DTMs had a relatively better performance after their licensing. The credit only micro-finance institutions had a higher mean for Return on Asset and risk coverage ratio compared to the transformed DTMs.

4.5 Summary Analysis

The study had the specific objective of establishing the effects of regulatory and supervisory framework on the financial performance of deposit taking microfinance institutions in Kenya. The government implementation of the Microfinance Act 2006 was seen as not making DTMs perform effectively. The World Council of Credit Unions advocates for the quality in the management of financial institutions. The analysis conducted in this chapter reveals that there was no change in the performance of the DTMs after licensing by the Central Bank of Kenya. This can be identified through both the T-test analysis and mean rate of the ratio analysis computed.

According to the comparison of the performance of the DTM institutions before and after transformation the results in the study reveal no significant difference in their performance using the PEARL ratios. The ratio analysis did not comply with WOCCU set goals. This means that the Microfinance Act 2006 did not have any effect on the financial performance of the transformed DTMs in Kenya.

Comparing the performance of the micro finance institutions that transformed and those that didn't, the study found that there was a significant difference in their performance. Critical analysis revealed that the transformed DTMs had higher mean in the following ratios; Return on Equity, Portfolio at Risk, Debt/ Equity ratio, operating expenses and portfolio yield. This means that the performance of the transformed DTMs was better compared to the credit only microfinance institutions.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings from chapter four, and also provides the conclusion of the study based on the objectives of the study. The conclusions and recommendations drawn are in quest of addressing the research objective of the study for establishing the effects of regulatory and supervisory framework on the financial performance of deposit taking microfinance institutions in Kenya.

5.2 Summary of Findings

The objective was achieved by analyzing the growth ratios, liquidity ratios, effective financial structure, and asset quality and profitability ratios. In the analysis we found out that the financial performance of DTMs in the two eras were not significantly different since all the seven tests done none failed to accept the null hypothesis, however minor advantages were seen to have existed after transformation especially profitability ratios computed clearly showed that DTMs performance was good after transformation. The mean for the transformed DTMs in relation to Return on Equity, Portfolio at Risk, Debt/ Equity ratio, operating expenses and portfolio yield were higher compared to the un-

transformed MFIs. This showed that the transformed DTMs had a relatively better performance after their licensing. The un-transformed micro-finance institutions had a higher mean for Return on Asset and risk coverage ratio compared to the transformed DTMs.

As at 31st December 2012, the licensed and operational DTMs had a net asset base of Ksh. 32.4 billion having increased from Ksh. 24.8 billion as at 31st December 2011. The Net advances accounted for 61 percent of the DTMs total assets while deposit balances at banks and financial institutions accounted for 21 percent. Net fixed assets constituted 9 percent of the total assets base. Customer deposits represented 48 percent of the DTMs total funding sources while borrowings and capital accounted for 34 percent and 12 percent respectively. This is an indication that customer deposits have become an important funding source for DTMs business and therefore the institutions' are relying less on borrowed funds. Where- as 43 percent of the funding base in December 2011 was from borrowing, the proportion of borrowed funds declined to 34 percent as at December 2012. However, a considerable amount of the deposits are attributable to customers' loan guarantee funds. Loan guarantee fund is the cash collateral representing funds that must be contributed by borrowers as a condition for receiving a loan and may be withdrawn in the event that all group members have repaid outstanding loans. The challenge for the institutions is to maintain the momentum by developing innovative strategies for deposit mobilization. It's thus noted that these developments were achieved by steps taken by the transformed DTMs leaving behind credit only microfinance institutions.

The overall study findings were found to support the null hypothesis that there is no change in financial performance of deposit taking microfinance institutions in Kenya.

The ratio analyses were below the set benchmarks by World Council of Credit Union for determining financial performance.

5.3 Conclusions

From the findings of this study and the ensuing discussion, this research points out the importance of regulation microfinance operations. The role of regulation in bringing sanity and stability in the financial sector cannot be underscored. As MFIs grow both in outreach and asset base, public interest on security of their resources also increases. Financial scandals in the name of microfinance has twice happened in Kenya could cause panic and loss of public confidence in the entire financial sector. Regulation is therefore necessary.

The research identifies a worrying prediction on the future of microfinance. The high levels of uncertainty on profitability, addressing challenges of providing financial services to the disadvantaged and unlikely substantial increase in deposits are areas of concern. This casts doubts on whether regulation of microfinance institutions increases deposit mobilisation and its overall benefits to institutions and society.

5.4 Recommendations

The study established quite a number of findings that can be used to make recommendations that can help both the DTMs and future studies. Continued and improved performance is called for, the DTM management should realize that the economic environment has changed and issues like environmental scanning should be

done before investment decisions are taken. DTMs should look beyond the internal operations and develop strategies to strengthen their economic survival in future.

The regulatory framework for microfinance should provide room for various players in the sector and thus the tiered approach to regulation is appropriate. There should be adequate motivation for institutions to operate at most convenient environment for them. A considerable effort should be made by the regulator to understand the sector it is trying to regulate. This could be improved by setting up a working committee comprising of members from the regulator, practitioners and consultants among others. This framework has worked well in Pakistan (Ahmed & Shah, 2007). The regulatory process should be based on shared experience.

Institutions that are large enough and have potential to offer deposit-taking business sustainably may be helped initially either through donor funds or concessionary loans set aside for this purpose. This will enable potential institutions to transform faster for the benefit of the target customers in particular and state in general. This helps to level the playing ground and avoid well established commercial banks taking advantage of their resources to distort the market.

DTMs are financial intermediaries, like the rest in the financial markets, they must strive to be efficient and be able to provide competitive services in order to attract and retain members. DTMs should realize that part of institutional effectiveness will be their ability to source for new ways of increasing their revenues through diversified services.

DTMs should appreciate that investment decisions require special attention because they influence the firms' growth in the long run; they affect the risk rate if the firm, they are

irreversible at substantial loss and they are among the most difficult decisions to make, managers are advised that before investing in long term or short term portfolios they should carry out proper estimations of the following; estimation of the required rate of return, application of the a decision rule for making the choice.

5.5 Limitations of the study

The researcher encountered quite a number of challenges related to the research and most particularly during data collection. There was unavailable data for comparison especially on the DTMs such as Rafiki DTM, Uwezo DTM and Remu DTM which started their activities as deposit taking microfinance institutions without transforming from credit only microfinance institutions. U & I DTM was also incorporated in April 2013 limiting the scope of the study besides lack of financial data to guide the study. Most of the DTMs obtained their licenses during different financial periods making it very difficult to generalize the base year for transformation forcing the researcher to perform case by case analysis.

Most academicians and users of financial ratios assume that ratios possess the appropriate statistical properties of handling and sumarising the given data which is also assumed to be normally distributed. The t – distribution used in this study assumed that sampling was done from a population that is approximately normal. The users and readers should note that there are cases where the statistical approach used brings in bias, rendering the assumption useless.

5.6 Suggestions for Further Research

There is need to carry out further research in Kenya on the sustainability of DTMs. Researchers should explore the relationship between outreach and financial sustainability of deposit taking Microfinance institutions in Kenya. This is because DTMs are expanding further into so many branches and there is need to establish whether this expansion is fruitful in the long term sustainability of DTMs in Kenya.

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APPENDICES

Appendix 1: Letter of Introduction

To whom it may concern

Dear Sirs,

INTRODUCTION LETTER

REF: DAVID ODUOR OBOTA – D61/76218/2012

I am a post graduate student at the University of Nairobi pursuing a master's degree in Business Administration. In addition to the pre-requisite course work, I am carrying out a research project to establish the effects of Microfinance Act 2006 on the financial performance of DTMs in Kenya. The study will be carried on the MFIs that are members of Association of Microfinance Institutions of Kenya. (AMFI) and the DTMs licensed by Central Bank of Kenya. The findings will be confidential and will be strictly used for academic purposes. Your name or your institution will at no time appear in my report, a copy of the final report can be availed to you upon request.

For any further clarification or concern about the study, please ask or contact the researcher on Email: obotahdavid@yahoo.com Tel: 0726 423 744

Your authorization and assistance will be highly appreciated.

Yours sincerely,

David Obota.

MBA Student University of Nairobi.

Appendix II: List of Deposit Taking Microfinance Institutions.

1. Faulu Kenya DTM Limited

   Date Licensed: 21st May 2009

2. Kenya Women Finance Trust DTM Limited

   Date Licensed: 31st March 2010

3. SMEP Deposit Taking Microfinance Limited

   Date Licensed: 14th December 2010

4. Remu Deposit Taking Microfinance Limited

   Date Licensed: 31st December 2010

5. Rafiki Deposit Taking Microfinance Limited

   Date Licensed: 14th June 2011

6. Uwezo Deposit Taking Microfinance Limited

   Date Licensed: 8th November 2010

7. Century Deposit Taking Microfinance Limited

   Date Licensed: 17th September 2012

8. SUMAC Deposit Taking Microfinance Limited

   Date Licensed: 29th October 2012

9. U & I Deposit Taking Microfinance Limited

   Date Licensed: 8th April 2013

Source: Central Bank of Kenya 2013

Appendix III: Definition and Calculations of Ratios

R1. Return on Assets

ROA = <u>Net income before donations</u>

        Average Total Assets

	RETURN ON ASSETS			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
FAULU KENYA	-0.1	-3	-0.2	-1.2
KWFT	4.3	1.6	1.5	-0.33333
SMEP	5	0.3	0.9	-2.03333
SUMAC	3.3	5.3	6	7.566667
MICRO AFRICA	-0.9	4.5	0.3	2.5
EQUITY BANK	4.7	6.6	6.3	7.466667

R2. Portfolio at Risk

PAR = <u>Outstanding balance on loans > 30 Days</u>

        Gross outstanding Portfolio

	PAR			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
FAULU KENYA	9.0	10.8	5.2	4.5
KWFT	1.5	15.5	6.1	12.3
SMEP	20.7	13.8	15.0	10.8
SUMAC	8.1	7.6	5.0	3.8
MICRO AFRICA	10.0	4.4	3.5	2.7
EQUITY BANK	9.1	6.2	3.5	3.1

R3. Portfolio Yield

Portfolio to Assets Ratio = Net Outstanding Portfolio

Total Assets

	PORTIFOLIO YIELD			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
FAULU KENYA	30.2	37.6	39.4	39.8
KWFT	30.9	33.9	32.3	31.7
SMEP	29.1	28.6	31.7	32.1
SUMAC	48	41.9	37.6	36.4
MICRO AFRICA	36.1	33.8	38.4	35.2
EQUITY BANK	17.6	21.1	22.3	23.9

R4. Operating Expenses

Operating Expenses Ratio = Operating Expenses

Average Gross Outstanding Portfolio

	OPERATING EXPENSES			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
FAULU KENYA	30	38.8	32.9	34.6
KWFT	18.7	22	24.5	25.3
SMEP	21.7	22.9	24.1	24.7
SUMAC	44.3	32.8	27.3	28.1
MICRO AFRICA	35.4	31.3	29.6	29.2
EQUITY BANK	12.6	13.6	12.9	11.8

R5. Risk Coverage

Risk Coverage Ratio = Loan Loss Reserve

Portfolio at risk > 30days

	RISK COVERAGE			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
FAULU KENYA	30.8	44.2	41.4	38.6
KWFT	29.3	42.1	39.7	38.1
SMEP	23.3	45.1	37.8	39.2
SUMAC	0	19.4	41.4	43.3
MICRO AFRICA	62.8	55.3	95.5	85.6
EQUITY BANK	38.7	38	60.7	62.4

R6. Debt/Equity

Debt to Equity = Total Liabilities

Total Equity

	DEBT TO EQUITY			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
Faulu Kenya	5.6	7.3	8.2	7.86
KWFT	4.4	10.7	7.9	8.098
SMEP	3.6	6.8	6.8	7.234
SUMAC	0.1	0.1	1.3	1.399
MICRO AFRICA	0.7	0.9	1.6	1.724
EQUITY BANK	3.1	3.7	4	4.0056

R7. Return on Equity

ROE = <u>Net Income before donations</u>

     Average Equity

	RETURN ON EQUITY			
YEAR	2009	2010	2011	2012
MICROFINANCE	%	%	%	%
FAULU KENYA	-0.80%	-0.22%	2.00%	3.13%
KWFT	23.30%	12.60%	15.70%	9.60%
SMEP	23.10%	1.80%	7.00%	-5.47%
SUMAC	8.10%	7.70%	5.00%	3.83%
MICRO AFRICA	-1.60%	8.10%	0.60%	4.57%
EQUITY BANK	19.60%	29.30%	30.90%	33.90%

R8. Overall performance for Transformed DTMs Vs. Credit Only MFIs in 2011

RATIO ANALYSIS	TRANSFORMED DTMS				NON TRANSFORMED [CREDIT ONLY]			
	FAULU KENYA	KWFT	SMEP	MEAN	MOLYN	MICRO AFRICA	SISDO	MEAN
	%	%	%	%	%	%	%	%
ROE	2	15.7	7	8.233333	11.9	0.6	7.9	6.8
ROA	0.2	1.5	0.9	0.866667	4.6	0.3	2.9	2.6
PAR	5.2	6.1	15	8.766667	1.6	3.54	14.8	6.6466667
DEBT/EQUITY	8.2	7.9	6.8	7.633333	1.6	1.6	1.9	1.7
OPERATING EXPENSE	32.9	24.5	24.1	27.16667	15.8	29.6	26.3	23.9
RISK COVERAGE RATIO	41.4	45.6	37.8	41.6	132.4	95.5	57.5	95.133333
PORTIFOLIO YIELD	39.4	32.3	31.7	34.46667	30.7	38.4	31.8	33.633333