THE EFFECT OF FINANCIAL REGULATION ON THE PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA

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DECLARATION

This research project is my original work and has not been presented to any other University or College for academic purposes.

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D61/71139/ 2014

SUPERVISORS APPROVAL

This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this project to my parents and siblings for their endless love, support and encouragement. Thank you for believing in me.

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ABBREVIATIONS

AMFI	Association of Microfinance Institutions
ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
CIS	Credit Information Sharing
DPF	Deposit Protection Fund
KPMG	Klynveld Peat Marwick Goerdeler
LAR	Loans at Risk
MFBs	Microfinance Banks
MFIs	Microfinance Institutions
NGOs	Non-Governmental Organizations
PAR	Portfolio at Risk
ROA	Return on Assets
ROE	Return on Equity
SACCO	Savings and Credit Co-operative
SPSS	Statistical Program for Social Studies

ABSTRACT

Micro-finance regulation is a form of supervision that subjects Micro-finance banks and institutions to comply with requirements, restrictions, and guidelines that aim to maintain the integrity of the sector. The regulation are passed by the parliaments as an Act which significantly maintain market confidence, protect financial stability, protect consumers, and regulate foreign participation in the financial markets. The study adopted a descriptive survey design in which all members of the population where considered in the sample. The study targeted five Micro-finance banks which are registered by the Association of Microfinance Institutions in Kenya by June 2017. The study data was secondary data and obtained from the Central Bank of Kenya annual reports and specific Micro-finance websites. The data was analyzed using SPSS and presented using tables and figures. From the study, it was established that percentage ratio of Solvency increased from year 2000-2008 and reduced from 2009-2016 due to the introduction of the regulation Act. From the study, it was established that asset quality improved after the introduction of the Act 2008. The study established that Micro-finance repayment capacity of the banks increased gradually from the years on the study. The Client outreach which presented the number of active accounts within the Micro-finance banks. The study established that the number of active accounts increased significantly from the 2000-2016. The financial performance increased significantly over the years under study after the introduction of the Act. The study concludes that solvency, asset quality, repayment capacity, client outreach and profitability was significantly affected by the Micro-Finance Act 2008. The study recommends that for the banks to remain profitable, solvent, repayment capacity and asset quality should strategies on how to increase the value of assets and reduce the operational expenses and liabilities. To keep high client outreach, the micro-finance banks must improve on the effectiveness on service delivery and efficiency in product innovation and development.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial regulation is a form of supervision that subjects financial institutions to requirements, restrictions, and guidelines that aim to maintain the integrity of the financial sector. Regulation is done to maintain market confidence, protect financial stability, protect consumers, and regulate foreign participation in the financial markets. (Llewellyn, 1999). Financial regulation allows for a well-structured financial system. This financial system is able to carry out supervisory, governance, risk-taking practices that allow the better financial performance as well as economic stability in sections of the economy (Caprio & Levine, 2006). Governments and regulatory bodies ensure that a country is able to experience tangible financial performance which is difficult because most countries experience corruption issues and policy formulation and implementation irregularities.

The study was be guided by the classic theory of life cycle of regulating agencies, the Laffont, and Tirole model and the regulatory capture theory. Bernstein (1955) suggested and proved the life cycle theory, then by Meier and Plumlee (1978). The classic theory outlined four life cycle stages that characterize a regulating agency. Laffont and Tirole (1991) modeled regulatory capture that showed how an interest group can capture a regulator from an information economics perspective. Regulatory capture theory by Nobel Laureate economist Stigler (1971) occurs when a created state regulatory agency protects the business interests of players that dominate the industry instead of the public interest that it was intended to regulate. A gamekeeper turns poacher is an example of how the Regulatory capture works.

Microfinance institutions in Kenya have been in operation since late 1990s whereby they were fully regulated. However, legislation was passed in 2006 followed by the Micro finance Act becoming operational in 2008 (CBK, 2016). Microfinance institutions can be categorized into deposit-taking microfinance institutions, non-deposit taking MFIs, and provides for banks to establish fully owned subsidiaries to undertake deposit taking microfinance business just as Rafiki Microfinance Bank is a subsidiary of Chase bank.

The implementation of the Act and the Regulations was aimed at promoting the orderly growth and development of a sound and stable microfinance industry. In addition, it provides a platform for the broadening and deepening of access to financial services throughout Kenya, especially to the low-income populace and small and medium enterprises in both urban and rural areas. There was noticeable growth in 2010 of 24 micro finance institutions in Kenya that had approximately 1.5 million active borrowers. According to AMFI, 54 members provide micro finance services in Kenya.

1.1.1 Financial Regulations

Financial regulation is a form of supervision that subjects financial institutions to certain restrictions and requirements (Goodhart, Dimitrios & Shubik, 2013). Financial institutions are required to follow certain rules and guidelines that ensure integrity is maintained within the financial system. Financial regulations are ensured in place by either governmental or non-governmental organizations. These regulations influence the banking sector structure working for the benefit of the clients. These regulations ensure that borrowing costs are lowered while the available financial products are increased (Barth, Caprio, & Levine, 1998). Existence of asymmetric information whereby financial customers lack access to full information to operate the banks.

Maintenance of financial regulations plays an integral part in the growth of an economy. Organizations measure their growth by the amount of finance they possess at a given time (Quinn, 1997). Adequate finances are considered strong enough to deal with changes that organizations face in their day-to-day activities. Further, financial regulations form policies that act as guidelines for organizations. These are laws that MFIs must abide to ensure a state of integrity and accountability.

These regulations ensure that the MFIs experience cash flow that is adequate to prevent bankruptcy by limiting out flow of cash. Credibility of MFIs brings forth clientele that ensures continuous cash flow for the stability of the overall economy. Thus, micro finance institutions must be structured in compliance with the financial regulations provided by the government. This is because only licensed financial institutions can provide services in most countries (Chin, Menzie, & Hiro, 2008).

1.1.2 Performance

Performance is the measure of how well an organization is able to generate revenues using the available assets (Capon, Farly & Hoening, 1990). The available resources must be used in an effective and most efficient way so that performance measurement can be achieved to determine how well financial institutions are doing (Harker & Zenios, 2008). Internal and external factors can be used as determinants of performance. Internal factors are those that are within the management control which can be either financial statement or non-financial statement. Factors like market share, regulations, inflation, and competition which are beyond the control of management are considered external factors.

Understanding performance in an organization is of importance. Organizations are able to evaluate their financial health over a long period. Institutions are able to compare their performance with that of their competitors across the industry. MFIs are able to compare industries in aggregation to determine their financial health and level of competition. There are various ways of measuring performance. Revenue achieved from operations, cash flow from firm operations, and total units sales can be used to measure performance. The annual report of an organization provides shareholders with information on financial performance. Stakeholders are able to measure the performance of the organization against others (Barth, Caprio, & Levine, 1998).

Performance can be measured using statements of financial position that determines the overall well-being of the firm. The recommended financial measures are put in five categories: liquidity, solvency, profitability, repayment capacity, and financial efficiency. Liquidity is the financial measure of an institutions capacity to offset its outstanding obligations. Current ratio is a measure of current assets and current liabilities and an institution is considered more liquid when the ratio is higher. Solvency measure is an indicator of the ability of an institution to repay all its debts from its assets that are in excess of liabilities. Debt to equity ratio, debt to asset ratio and equity to asset ratio are the most commonly used ratios to measure solvency.

The institution is exposed to high risk if the ratios are high. An institutions' revenue and expense analysis is used to measure profitability. Return on Assets and Return on Equity are the major profitability measures of an institution where the higher the value of the ratios the more profitable the institution is. Repayment capacity is the ability of an institution to repay its debts from its own income. Term debt and capital lease coverage ratio analysis can be used to determine whether additional capital.

Debt is required to sustain institutional operations. Financial efficiency analyses the relationship between inputs and outputs, the efficiency in using labor, management, and capital. Measures such as asset turnover ratio, institutions' operating expense ratio, its interest expense ratio, and depreciation expense ratio are used to determine the financial efficiency of an institution.

1.1.3 Financial Regulations and Performance

Regulations imposed on Micro Finance institutions impact on their performance depending on the nature of the regulation. MFIs have to deal with more than one regulation making it difficult to adjust their business practices in order to comply with the varying regulations under their operation. Prudential regulation protects the soundness, financial health, and stability of institutions by establishing effective framework of rules and factors that motivate institutions to operate in without being exposed to risks which can adversely affect their performance.

Regulations help in protecting the stability of financial services providers by ensuring they operate within the parameters provided by the government. The government plays the role of moderator between brokerage firms and consumers. Excessive regulation can hamper innovation and lead to increased costs, while leniency may bring inefficiency, fraud, and downfall of institutions. The assessment of the exact influence of the regulations in the financial sector becomes difficult to determine, but it is widespread.

1.1.4 Micro-Finance Institutions in Kenya

According to AMFI there are 54 registered microfinance institutions in Kenya. Kenya's financial sector has continued to experience growth in inclusiveness,

operational stability, and efficiency amid strong legal, institutional, and regulatory framework.

The diversity in the target market of the licensed MFBs has gone a long way in the achievement of deeper financial inclusion not only in the microfinance industry.The microfinance banks market share is based on a weighted composite index comprising of their assets held, capital, number of deposit accounts and loan accounts. The weighted composite index is used to classify microfinance banks into large, medium, or small. A microfinance bank which has a market share of above 5 per cent is classified as large; those of between 1 and 5 percent are medium and small if their market share is below 1 per cent.

According to Central bank of Kenya Report 2015, MFIs had a total asset base of 69,465,000 shillings, 40, 589, 0000 total deposits, 11,583, 000 total capital. Further, there were 932, 000 active deposit accounts and 342, 000 active loan accounts (AMFI, 2017). The Microfinance Act applies to institutions that conduct deposit-taking business which are licensed by the Central Bank of Kenya. The regulations state that the minimum capital requirement for a nationwide microfinance institution is 60 Million shillings while that of a community based institution is 20 Million shillings.

On reporting, the regulation requires microfinance institutions to submit quarterly single borrowers limit and insider lending reports, annual board evaluation and asset review reports, capital to risk weighted assets report, liquidity information report, prepare, submit and publish in a newspaper of nationwide circulation audited financial statements. The regulation also prohibits any institution from opening, closing or relocating a place of business without the written approval of the Central Bank of

Kenya. The Act also stipulates that all institutions have to contribute to the Deposit Protection Fund (DPF) an amount currently at 4% of the average monthly deposits.

This may be paid to a customer in case of insolvency up to a maximum of Ksh. 100,000 per depositor. An institution that fails to make such contributions to the DPF is liable for a fine not exceeding one-half percent of the unpaid amount for each day. The Act states that the Central Bank of Kenya is the last lender of resort for all the institutions and that their financial year will be a 12 months period ending on 31st of December each year. All accounts and financial accounting entries are to be recorded in the English language and denominated in Kenya shillings. These regulations do not cover SACCOs and Credit-only MFIs. The Act provides that a microfinance loan should be given as a credit facility. The maximum loans disbursed to an individual borrower shall not be in excess of 2% of the institutions core capital. Tough penalties are meted on the institutions that will not comply with the standards.

1.2 Research Problem

Financial regulation is key to the industry and it can affect the institutions' operations. The location of premises, provision of quality products and services that meet customer needs, insurance of deposits and ensuring that competent employees are hired comes with a cost. The regulations also hamper financial inclusion as institutions are forced to charge expensively for their products and services in the very competitive market to make profits thereby closing out the poor whom they should serve. In compliance with such stringent and competitive market, institutions bottom-line are negatively affected.

The restrictive regulatory framework has encouraged the emergence of informal microfinance institutions like the merry-go-rounds, trusted lending circles, local

moneylenders, and shylocks who take away the poor customers that the MFIs should be lending to thus driving them out of business. The regulations however provides a fair playing ground to all the institutions thus enabling them to provide competing services and products that will ensure maximum returns to the firms.

These MFIs experience stability and increased financial performance when in adherence to the rules that lead to positive performance. The regulatory framework encourages MFIs such as microfinance banks to transform into fully commercial banks which are more profitable. The MFIs in Kenya are regulated by the Central Bank of Kenya (CBK) that is mandated to license, regulate, and supervise deposit-taking businesses under the Microfinance Act and regulations. The Association of Microfinance Institutions of Kenya (AMFI) is an umbrella body that brings together major microfinance institutions in the country to enhance capacity.

Microfinance institutions are now included in the national Credit Information Sharing (CIS) platform which is a positive improvement for the industry as it enables institutions to rate the credit worthiness of their borrowers in a bid to reduce default rates and improve their aggregate loan portfolios. There has been growth in the industry as seen with microfinance institutions transforming into banks and offering banking services such as forex services, agency banking, third party cheques issuance, insurance services, and international fund transfers that have increased their profitability. Others that begun as deposit taking institutions are now fully licensed banks such as Jamii Bora Bank signaling the potential that the industry.

Omino (2005) studied on regulation and supervision of microfinance institutions in Kenya. Omino found that MFIs in Kenya operate under many legal forms such as; Companies limited by shares or by guarantees, NGOs, Trusts, Cooperatives, and

Associations. K'Aol and Ochanda (2002) did a study to establish factors influencing the establishment of Micro-finance Schemes in Kenya. The study revealed that there were no clear policies regulating micro finance institutions in Kenya and most micro finance institutions were registered under different Acts of Parliament.

Trujillo-Ponce (2012) studied the determinants of profitability in banks in Spain between 1999 and 2009 and found out that there existed a direct and significant relationship between loan loss provision ratio and asset quality on the profitability of the banks. The above studies were done under different legal structures whereby the institutions followed varying procedures. This study differs in that it is under one legal framework and that all MFIs are regulated by the microfinance Act, 2008. This study therefore aims at answering the question: Does financial regulations have an effect on the performance of microfinance institution in Kenya?

1.3 Objective of the Study

The objective of the study is to establish the effect of financial regulation on performance of microfinance institutions in Kenya.

1.4 Value of the Study

The study will assist the government in policy evaluation to assess the effectiveness of the Act on financial performance of MFIs. It will provide some insights about whether there are some regulatory issues that might be reformulated in order to better promote the development of the microfinance industry. It will also enable the government to formulate policies that allow effective capacity lending rates to avoid MFIs digging deeper in their pockets in repayments.

The study findings will assist MFIs in addressing and formulating proper strategies and other theories that will improve lending to clients. This will improve the financial

performance and growth of businesses. The MFIs will also be able to evaluate whether they fully implement the Microfinance Act. The findings of the study will also help the MFIS, with an insight into the understanding the impact of the Microfinance Act, 2006 on their operations.

The study will help the customers and the general public in determining whether the microfinance firms that they deposit their funds with, comply with the Act as this will enhance their confidence with the MFIs knowing that their deposit are safe. The Act also guarantees the customers' protections that incase the MFI collapses, their deposits will be refunded as their interest are safeguarded.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter comprises of the literature and it begins by looking at a theoretical review which includes the classic theory of the life cycle of regulating agencies; the Laffont and Tirole (1991) model and regulatory capture theory. It also consists of a review of empirical studies, determinants of financial performance, the conceptual framework and finally the literature review summary.

2.2 Theoretical Review

The following theories will be discussed: The classic theory of the life cycle of regulating agencies was advanced by Bernstein (1955), and later by Meier and Plumlee (1978), Laffont and Tirole (1991) model and the Regulatory Capture Theory that was advanced by Nobel Prize winner economist Stigltz (1971).

2.2.1 The Classic Theory

The classic theory of the life cycle of regulating agencies was advanced by Bernstein (1955), then by Meier and Plumlee (1978). This theory outlined four phases in the life of a regulating agency. Gestation stage is the first where an agency is established because of political and public furor to regulate an institution. Youth stage is the second where the institution is created with remnants of the initial public and political goodwill. In the third stage, maturity or regulatory failure, the general public no longer take active part in the institution because it has been in existence for some times now. The last stage is the old age or regulatory capture where the established agency comes to a compromise with the sector it was established to regulate. The players in the sector acquire authority, competence, and control over the agency.

The classic theory was modeled around the regulator lacking political influence and therefore dependent on the sector for monetary and material support. This led to its interests coincide with those of the regulated industry. The approach is like a cycle because once capture took place actions led to a resumption of political and public interest and the cycle begun again. This theory relates to this study in that there will always be regulations formulated time and again to meet the demands of the public. The theory suggests that the regulations have no impact on the performance of institutions they are created to regulate. The earlier regulations would not have been effective leading to negative performance of financial institutions.

2.2.2 Laffont and Tirole Model

Laffont and Tirole (1991) modeled regulatory capture from an information economics perspective and showed how interest groups can capture a regulator. The model comprised of a two level agency structure. In the first tier, the principal was the Congress while the agent was the supervisory body; however, in the second level the supervisory body became the principal and the regulated firm became the agent. In their model, the supervisory body received an income from Congress. If this income was equal to or greater than the reservation income of the supervisory body it could prevent capture.

However, there would be capture if the regulatory agency had an incentive to hide information from Congress. In a case where the supervisory body was captured by the regulated firms then power could harm them. Differences in intentions and localized information are thus the two basic components of incentive theory. That economic agents are after their own interests is the main paradigm for the analysis of market behavior by economists.

The incentive theory suggests maintenance of this major assumption in the analysis of organizations, small numbers markets and any kind of collective decision. This suggestion is limited in that social behavior in small groups is more involving and conventional behaviors that are culturally practiced play a large role in defining societies. The relationship of this theory to this study is that in such an agency-principal relationship, there is need for financial regulation to be in place to safeguard interests of both parties and if the interests are not adequately safeguarded an evaluation is done and necessary amendments done. The regulations therefore lead to a positive impact on the performance of institutions as the agents pursue the interests of their principal.

2.2.3 Regulatory Capture Theory

This theory is associated with Nobel Laureate economist Stigler (1971). Regulatory capture happens when a regulatory agency that is set up to serve the interests of the public instead focuses on business or special interests of those players that control the industry it is mandated to regulate. It is basically a government failure as it may stimulate large firms to produce negative externalities. These agencies are referred to as "captured agencies". For public choice theorists, regulatory capture occurs because groups or individuals with a high stakes interest in the outcome of policy or regulatory decisions.

They are expected to focus their resources and energies in attempting to gain the policy outcomes they prefer, while members of the public, each with only a tiny individual stake in outcome will ignore it altogether. The likelihood of a regulatory capture is a risk to which an agency is exposed by its nature. Regulatory agencies

should be guarded from external influence if not then they should not be formed lest they become victims and not protectors of the designated subjects.

This theory is related to this study in that an agency's performance needs to be evaluated to determine whether it's been influenced or whether it met the intended purpose for which it was formed. The theory suggests that there exists a positive relationship between regulations and performance.

2.3 The Determinants of Performance of MFIs

There are ways that performance of an institution can be measured under. Different stakeholders view performance from different angles: depositors are interested in an institutions long-term ability to look after their savings as prescribed by the supervisory authorities, debt and equity holders on the other hand are concerned about the ability to meets its obligations and generate profits for them to get a return on their investments. Some of these determinants is the clientele outreach that an institution has, the quality of loans disbursed, its profitability, amount of capital it has to finance its undertakings, the efficiency in which management runs the institution and its ability to meet depositors needs.

2.3.1. Customer Outreach

Outreach can be measured by the institutions' active number of clients or accounts. This number consists of borrowers of loans, depositors, or any other customers who are currently accessing any financial services offered by the institution. This measure is more relevant compared to the sum number of loans disbursed or clients attended to in a period. Outreach can also be looked at as the number of poor clients reached by an MFI with high quality financial products and services that are tailor-made to meet their specific needs. A single client may hold multiple accounts with an institution and

it's therefore important to track the number of active accounts to eliminate double counting in arriving at the number of individual accounts, i.e., number of accounts.

2.3.2. Loan Repayment

The ability of an institution to collect loans is important for its success. If the loan default rate is not kept to very low levels, it can quickly spin out of control. Furthermore, loan collection is a strong proxy for general management competence. The reporting of loan collection is complicated as institutions use different ratios in measuring different things. Self-reported collection performance by institutions may understate the extent of problems because of information system weakness rather than intent to deceive. It is therefore important for collection reporting to be verified by a competent independent party for it to be regarded reliable.

Portfolio at Risk (PAR) is the mostly used determinant of portfolio quality. It measures the amount of loan portfolio that is in arrears as a proportion of total institutional portfolio. A loan is typically considered at risk if its payment falls more than 30 days late. Some institutions use the Loans at Risk (LAR) measure that enumerates the number of loans in arrears and not their amounts, like it is in PAR. The PAR and LAR can however be manipulated by excluding renegotiated loans and write-offs that remove past due loans from the books.

2.3.3 Financial Sustainability

Few institutions can maintain and expand their services without covering their operational expenses and be able to generate net income. Return on assets (ROA) which analyses an institutions ability to generate profits from its assets is the most commonly used to measure profitability while return on equity (ROE) measures the returns produced on the owners' investment.

A number of microfinance institutions receive a significant number of grants and subsidized loans from their funders which may complicate the analysis of profitability. Creative accounting can be used to portray a different state of institutions profitability but regulations set, external auditors and tax authorities tend to limit this sort of creativity.

2.3.4 Asset Quality

The quality of assets that an institution holds is key as they are depended upon in times of non-performing loans and profitability generation. Institutions' assets can include current assets, credit portfolio, fixed assets, and other investments. An institution needs to anticipate, prevent, contain risks and to cover losses by being putting into consideration the level of risks to the assets they hold. Asset quality can be measured by the ratio of net non-performing loans to gross loans. Institutions that assume more risk are those whose loan growth is high. Profitability will be low for an institution whose credit risk exposure is high hence institutions can improve their performance by analyzing their and monitoring their credit risk.

2.3.5. Liquidity Management

Liquidity is defined as the ability of an institution to generate enough cash to meet its obligations mostly of depositors (Ongore and Kusa, 2013). An institutions level of liquidity and its profitability are positively related. The liquidity level of an institution is composed of the total loans disbursed to the customer deposits ratio and the customer deposits to assets ratio. An institution is considered liquid when its assets and investments can be easily reliable at short notice to enable it meet payment obligation in a timely manner. There are two dimensions of liquidity: the time required to convert the assets into money and the certainty of the realized price

Scott Albinson (2003) proposed three techniques used to measure liquidity: in analyzing the liquidity gap the future funding requirements of institutions are measured by making a comparison of the amount of assets and liabilities which will mature within a specific time. The other technique is the cash flow forecasting that indicates the inflow and outflow of cash over a period. Finally, scenario planning which considers possible future events by analyzing alternative possible scenario.

2.4 Review of Empirical Studies

Barth, Caprio and Levine (2002) carried out a survey between 1998 and 2000 that was funded by the World Bank. The purpose of the survey was to investigate the correlation between commercial bank regulations, their supervisory practices, the banks' performance, and its stability. The survey was intended to gather data on bank regulations and practices in supervision for more than 107 countries. They used regression analysis in the survey. The study concluded that there is a negative association between restricting the activities of a bank and its performance and stability as compared to when banks could freely diversify into other financial activities

Hartarska and Nadolnyak (2007) studied the impact of regulation on operational self-sufficiency and outreach of 114 MFIs from 62 countries. Data analysis on empirical evidence on macroeconomic and institutional framework revealed that regulations of MFIs have no direct effect on economic, operational or outreach success. The savings however have a positive impact on both dependent variables, but if regulation is the only way to access and encourage savings then the institutions will not benefit from the regulation.

Mersland and Strøm (2007) used data of 226 MFIs from 57 countries between years 2000 and 2006, examined the impact of internal corporate governance and external governance mechanisms on the MFI's financial performance and outreach. They used descriptive research design. The study provided empirical evidence that competition and not outreach enhances an institutions financial performance. Regulation has however no statistical significant impact on performance and outreach.

Otieno (2012) did a study on the effect of corporate governance has on the financial performance of commercial banks in Kenya. His target population was the 44 commercial banks that were operational at the time. He used a cross sectional and analytical research design in his study. He used SPSS and Spearman correlation coefficient and multiple regression analysis to determine the magnitude of the relationship and prediction of financial performance respectively. Otieno found a positive relationship between 20 corporate governance and the stability and good performance of a bank. Corporate governance accounted for 22.4 per cent of the financial performance of commercial banks in Kenya.

Vianney (2013) conducted a study in Rwanda that was intended to ascertain the relationship between regulation and the financial performance of commercial banks in Rwanda. He adopted a descriptive research design which enabled him to examine the above stated relationship. His sample size was 10 commercial banks. His findings were that regulation is not a significant predictor of financial performance of commercial banks in Rwanda. He stated that regulation is a key pillar of financial institutions operation and by extension to financial prosperity and stability. He recommended that the government of Rwanda should develop policies that would

help banks to operate in a conducive environment and this can create financial stability of financial institutions in the country hence regulations have no impact on the profitability institutions.

KPMG (2013) carried out a survey in the United States of America that involved 910 executives at US-based multinational corporations, banks, and asset management firms. The survey was geared towards outlining the measures that need to be taken to turn the perceived burden of regulations on transformation into opportunities. After the financial crisis of 2008, financial institutions found out that it was very expensive to comply with tighter regulations. The new regulations hampered the growth of revenue and profitability. This survey shows that regulations reduce the financial performance of financial institutions.

Mwega (2014) carried out a case study in the Kenyan financial sector to investigate the potential tradeoff between regulation and stability of Kenya's financial sector. The study focused on the banking sector. The study adopted an empirical approach, entailing quantitative work and focused policy analysis. He states that finance aims at propagating economic activity and the main aim of regulations is maintaining financial stability and enhancing economic growth. There is need to be balanced because when great focus is placed on stability of the financial sector it can hamper growth while on the other hand if emphasis is placed on growth it might bring about a financial crisis in the future. He concluded that reforms in the financial sector over the last ten years have strengthened the banking industry. Better products are being offered to customers and there has been a great improvement in the quality of service. There has also been an increase in profitability and stability. Therefore, according to this study, regulations have led to an increase in profitability. The researcher however stated that Kenya had a lightly regulated financial system.

2.5 Conceptual Framework

The framework illustrates the relationship between the independent variables which are the Solvency, Profitability, Asset quality, Repayment capacity and Client outreach while the dependent variable is the financial performance.

Independent Variable   **Dependent Variable**

Financial Regulations	Performance of MFIs
➢ Capital adequacy	➢ Assets Quality
➢ Liquidity management	➢ Clientele Outreach
➢ Management efficiency	➢ Loan Repayment
	➢ Solvency
	➢ Financial sustainability
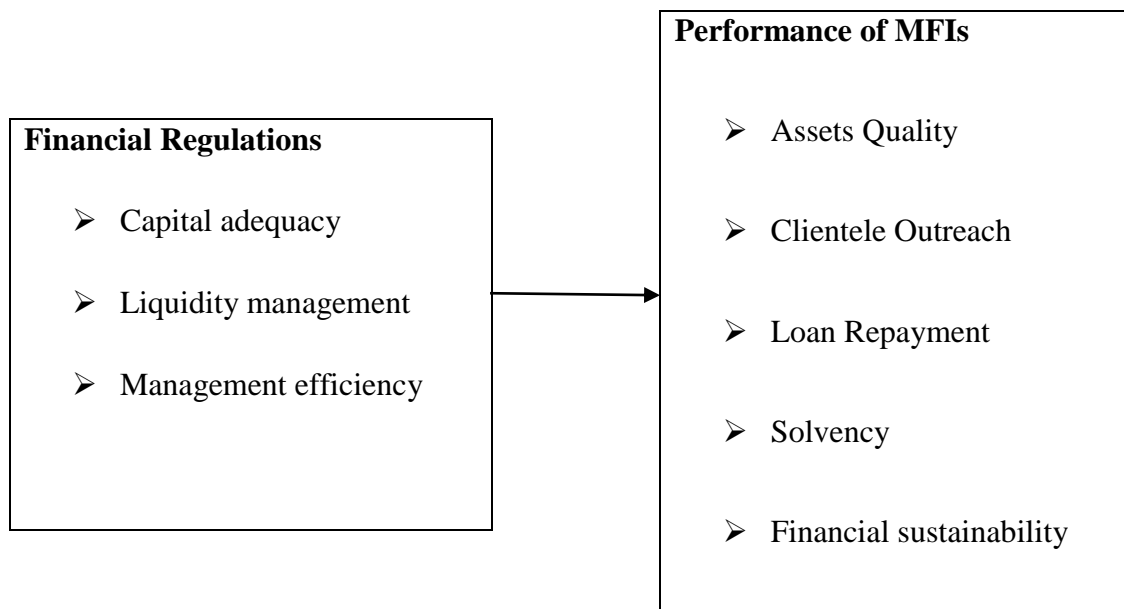
Figure 2.1 Conceptual Framework

It will show the relationship between regulation and financial performance of microfinance institutions in Kenya. The performance is measured in terms of client outreach whereby the higher the number of funded deposit accounts held by an institution the better its performance is. Institutions that have a regular and normal loan repayment are considered doing well. Loans that fall under watch, substandard, doubtful and in loss will lead to poor performance. Management efficiency should be attained through more earnings and the higher the ratio the better the performance.

The assets held by an institution should be of high quality to guarantee maximum income generated from them. Financial stability is key as it shows that the operations will be in continuity, obligations will be met as, and when they fall due. An institutions capital adequacy and its liquidity management will guarantee that it operates under the stipulated guidelines and the interests of both stakeholders are met.

2.6 Summary of Literature Review

From the literature review, there has been a focus on the effect of various regulations in different countries on the financial performance of commercial banks and multinationals. The concentration has mostly been on local and international commercial banks and how internal corporate governance has impacted on their financial performance. The CAMEL rating that entails capital adequacy, asset quality, management efficiency, earnings performance, and liquidity has been the major determinants that have been considered in analyzing performance.

There are other indicators except the CAMEL ratings that have not been researched on. The available research findings have also focused on the overall financial sector impact as a whole. This study will seek to carry out an impact analysis that the microfinance regulation has had on the financial performance of the microfinance institutions in Kenya and will use other performance measures like clientele outreach to assess the effect of the Microfinance Act on the financial performance of the MFIs in Kenya.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the methodology, which was used to carry out the study. It describes the research design, the population, and data collection methods and data analysis techniques.

3.2 Research Design

This study used descriptive research design which seeks to establish factors associated with certain occurrences, outcomes, conditions, and its main purpose is to describe the state of affairs as they exist (Kothari, 2004). It analyzed the Microfinance Act regulation that was introduced in Kenya in 2008. Descriptive design was used because it explains what this regulation is and what effect it has had on the financial performance of the five Micro-finance banks in Kenya.

3.3 Population

The study was based on census design since all members of the population were included in the research sample. The population of the study comprised of five Microfinance banks registered members of the Association of Microfinance Institutions in Kenya (AMFI, 2017) and started its operation at year before 2008.

3.4 Data Collection

The study used secondary data for analyzing the relationship between regulation and financial performance of MFIs. The secondary data was collected from Central Bank of Kenya (CBK) annual banks supervisory reports, financial statements on annual earnings of the microfinance institutions registered under AMFI. The data was sourced from AMFI website and books of accounts that have been recorded and published by the organizations under study.

The data collected was eight years before the operationalization of the Microfinance Act in 2008 and 8 years after the Act came into effect hence from the year 2000 to 2016.

3.5 Data Analysis

The data was analyzed using quantitative techniques. Statistical package for social sciences (SPSS) version 21 was used. Analysis of variance (ANOVA) was used to test the significant differences in financial performance of the MFIs before the Microfinance Act was enacted and after it was operationalized in 2008. Financial performance was measured by Net income over the Average total assets. Other aspects which affected profitability are the capital adequacy ratios, management efficiency ratios, repayment capacity, and outreach to clients.

3.5.1 Operationalization of the Variables

The variables were operationalized using indicators in the Table 3.1 below.

Table 3.1: Operationalization of the variables

Variable	Indicator	Measure
Solvency	Solvency ratio	Liquid assets over current liabilities
Profitability	Return on Assets and Return on Equity	Net income over average total assets
Asset quality	Non-performing loan ratio	Non-performing loans over total loans
Repayment capacity	Term debt ratio	Total liabilities over total assets
Client outreach	Number of Accounts	Clients and active deposit accounts held

Source: Author 2017

3.5.2 Significance of the Study

The significance of the study at 0.05 significance level was measured using the t test.

The t-test allowed the researcher to test if the difference between the performance of

MFIs before and after the enactment of the Act is significant as per the data derived

between the periods under study. Analysis of variance was used to test the

significance of the differences in performance.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

The chapter presents the data analysis, data findings and discussions. The data analysis is divided into solvency, Asset quality, Repayment capacity, Client outreach and Profitability of the Micro-finance banks.

4.2 Data Analysis

Data analysis was conducted using SPSS and presented into tables and graphs to give the variables growth from 2000-2016. The analysis is categorized into financial Solvency which is measured by the Liquid assets over current liabilities hence presented by the solvency ratio. The Banks financial performance is measured by Return on Assets which is Net income over average total assets. The Asset quality measured by Non-performing loans over total loans and presented using the Non-performing loan ratio. The repayment capacity is calculated by total liabilities over total assets and presented by the debt ratio. Finally, the Client outreach is measured by the number of Accounts or the number of clients with active deposit accounts.

4.2.1 Solvency

The objective of the study was to establish the solvency of the micro-finance banks eight years before and after the introduction of the Micro-finance act 2008. Solvency was measured using the solvency ratio which is calculated by Liquid assets over current liabilities. From the study, the solvency ratio of the banks indicated negative trend for the first eight years (2000-2007) and a positive trend from 2009-2016 for the all nine banks. The table 4.1 below presents the ratio mean which is presented by -2.32, -3.19, -3.01,-1.81, -1.41, -0.41, 0.11, 0.30 and 1.17 from year 2000-2008 when the Micro-finance Act 2008 was introduced. The average mean ratio is -1.16.

However, the standard deviation of the same period of 2000-2008 was 0.40, 1.51, 0.16, 0.43, 2.33, 2.31, 2.14, 1.79 and 1.57.

Table 4.1: Solvency (2000-2008)

Micro-Finance	2000	2001	2002	2003	2004	2005	2006	2007	2008
KWFT	-2.23	-2.12	-2.83	-1.99	1.21	1.42	1.89	2.19	2.34
Faulu	-2.76	-4.91	-3.09	-1.32	-2.35	-1.43	-0.89	-0.38	1.43
SMEP	-1.97	-2.53	-3.12	-2.13	-0.34	1.56	1.87	1.98	2.45
Sumac					-4.14	-3.2	-2.43	-2.1	-1.43
U&I								-0.21	1.05
Total	-6.96	-9.56	-9.04	-5.44	-5.62	-1.65	0.44	1.48	5.84
Mean	-2.32	-3.19	-3.01	-1.81	-1.41	-0.41	0.11	0.30	1.17
Std. Dev	0.40	1.51	0.16	0.43	2.33	2.31	2.14	1.79	1.57

Source: Author 2017

Table 4.2 below presents the mean solvency ratio from 2009-2016 after the introduction of the Micro-finance Act 2008 which was presented by 1.74, 1.98, 2.38, 2.47, 2.61, 2.98, 2.95 and 3.12.The mean is 2.53. The period after the introduction of the Micro-finance Act 2008 was presented by the standard deviation of 0.79, 0.84, 0.94, 0.83, 0.78, 0.81, 1.00 and 0.80 for the period 2009-2016.

Table 4.2: Solvency (2009-2016)

MicroFinance	2009	2010	2011	2012	2013	2014	2015	2016
KWFT	2.45	2.67	2.89	2.76	2.97	3.21	3.35	3.43
Faulu	1.76	1.96	2.12	2.21	2.14	2.89	2.21	2.76
SMEP	2.54	2.89	3.76	3.76	3.81	4.23	4.51	4.32
Sumac	0.67	0.82	1.43	1.62	1.89	2.13	2.14	2.21
U&I	1.29	1.54	1.72	2.01	2.23	2.45	2.54	2.86
Total	8.71	9.88	11.92	12.36	13.04	14.91	14.75	15.58
Mean	1.74	1.98	2.38	2.47	2.61	2.98	2.95	3.12
Std. Dev	0.79	0.84	0.94	0.83	0.78	0.81	1.00	0.80

Source: Author 2017

The Figure 4.1 below presents the graphical presentation of the Solvency ratio from year 2000-2016 of the KWFT, Faulu, SMEP, Sumac and U& I Micro-finance banks. The graph shows negative trend before year 2008 and positive trend after 2008.

Figure 4.1: Solvency
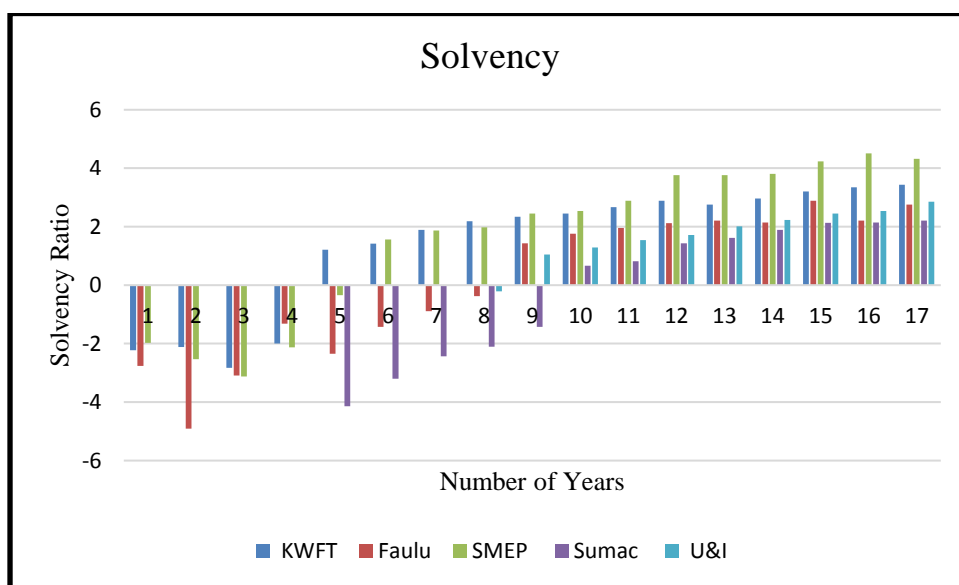
Source: Author 2017

4.2.2 Asset Quality

The objective of the study was to establish the asset quality of the micro-finance banks eight years before and after the introduction of the Micro-finance act 2008. The asset quality was measured by the taking Non-performing loans over total loans and presented using the Non-performing Loans ratio. From the table 4.3, the mean non-performing loans ration from the 2000-2008 when the Micro-finance Act 2008 was introduced was 9.71, 10.09, 10.21, 10.78, 13.02, 13.69, 14.47, 18.89 and 19.89. The mean is 13.42 for the period before Act was introduced.

The study established that the standard deviation of the asset quality mean before the introduction of the Micro-finance Act 2008 was presented by 7.39, 7.54, 7.84, 7.93, 8.21, 8.38, 8.54, 7.61 and 7.72 from year 2000-2008.

Table 4.3: Asset Quality (2000-2008)

MicroFinance	2000	2001	2002	2003	2004	2005	2006	2007	2008
KWFT	15.78	15.97	14.83	15.78	15.99	16.64	17.63	19.71	20.22
Faulu	23.78	24.73	25.72	26.75	27.82	28.93	30.09	31.29	32.54
SMEP	9.01	9.73	10.51	11.35	12.26	13.24	14.30	15.44	16.68
Sumac					9.03	9.66	10.34	11.06	11.84
U&I								16.96	18.15
Total	48.57	50.43	51.06	53.88	65.10	68.47	72.36	94.47	99.43
Mean	9.71	10.09	10.21	10.78	13.02	13.69	14.47	18.89	19.89
St. Dev.	7.39	7.54	7.84	7.93	8.21	8.38	8.54	7.61	7.72

Source: Author 2017

From the study, the mean asset quality of the Micro-finance banks after the period when Micro-finance Act 2008 was 20.96, 21.98, 23.05, 25.51, 26.76, 28.80, 30.71 and 31.70 for the period from 2009-2016 respectively. The mean ratio was 26.18 after the introduction of the Act. However, the standard deviation of the asset quality mean after the introduction of the Micro-Finance Act 2008 was presented by 7.84, 7.98, 8.16, 8.26, 8.30, 8.51, 8.68 and 8.59 respectively for the period 2009-2016.

Table 4.4: Asset Quality (2009-2016)

MicroFinance	2009	2010	2011	2012	2013	2014	2015	2016
KWFT	20.87	20.91	20.91	27.5	27.63	31.34	33.98	31.57
Faulu	33.85	35.20	36.61	38.07	39.60	41.18	42.83	44.54
SMEP	18.01	19.45	21.01	22.69	24.50	26.46	28.58	30.87
Sumac	12.67	13.55	14.50	15.52	16.60	17.76	19.01	20.34
U&I	19.42	20.78	22.23	23.79	25.45	27.23	29.14	31.18
Total	104.81	109.89	115.26	127.56	133.78	143.98	153.53	158.49
Mean	20.96	21.98	23.05	25.51	26.76	28.80	30.71	31.70
St. Dev.	7.84	7.98	8.16	8.26	8.30	8.51	8.68	8.59

Source: Author 2017

The Figure 4.2 below presents the graphical presentation of the Micro-Finance asset quality from the year 2000-2016. The graph shows a constant positive growth in the asset growth of the five Micro-finance banks.

Figure 4.2: Asset Quality

Asset Quality
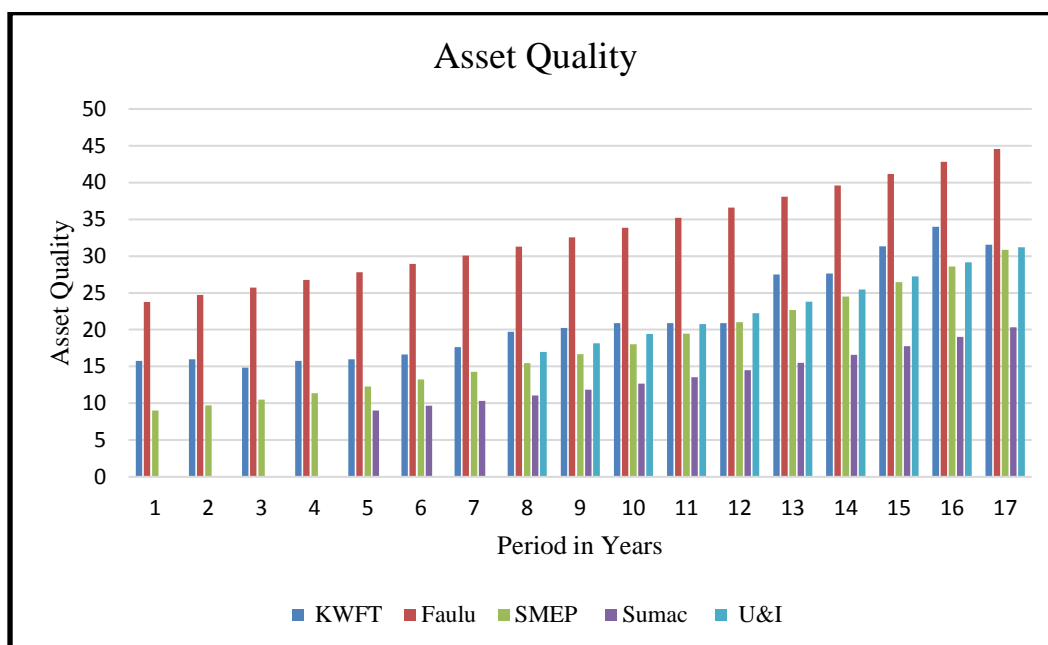
Source: Author 2017

4.2.3 Repayment Capacity

The objective of the study was to establish the repayment capacity of the micro-finance banks eight years before and after the introduction of the Micro-finance act 2008. From the study, the mean of repayment capacity of the micro-finance banks for the period before the introduction of the Micro-Finance Act 2008 was presented by 49.01, 50.24, 51.51, 52.81, 51.95, 54.14, 54.69, 55.13 and 55.68 from 2000-2008 respectively. The average mean was 52.79 before the introduction of the Act.

From the study Table 4.5 below, the standard deviation of the repayment capacity for the period before the introduction of the Act 2008 was presented by 1.42, 1.45, 1.49, 1.53, 4.55, 4.74, 4.79, 6.01 and 6.07 for the period between 2000-2008 respectively.

Table 4.5: Repayment Capacity (2000-2008)

MicroFinance	2000	2001	2002	2003	2004	2005	2006	2007	2008
KWFT	49.80	51.06	52.34	53.66	55.02	57.34	57.91	60.35	60.96
Faulu	49.85	51.10	52.39	53.71	55.07	57.39	57.97	60.41	61.02
SMEP	47.37	48.56	49.79	51.05	52.33	54.54	55.09	57.41	57.99
Sumac					45.40	47.31	47.79	49.80	50.31
U&I								47.66	48.14
Total	147.02	150.72	154.53	158.42	207.82	216.58	218.76	275.64	278.41
Mean	49.01	50.24	51.51	52.81	51.95	54.14	54.69	55.13	55.68
Std.Dev	1.42	1.45	1.49	1.53	4.55	4.74	4.79	6.01	6.07

Source: Author 2017

However, the mean of repayment capacity of the micro-finance banks for the period after the introduction of the Micro-Finance Act 2008 was presented by 58.03, 66.29, 58.30, 66.60, 58.57, 66.90, 76.43 and 76.78 for period 2009-2016 respectively. The mean was 65.99 after the introduction of the Act.

However, from the table 4.6 the standard deviation of the repayment capacity for the period after the introduction of the Micro-Finance Act 2008 was presented by 6.33, 7.23, 6.36, 7.26, 6.38, 7.29, 8.33 and 8.37 for the period 2009-2016 respectively.

Table 4.6: Repayment Capacity (2009-2016)

MicroFinance	2009	2010	2011	2012	2013	2014	2015	2016
KWFT	63.53	72.57	63.82	72.91	64.12	73.25	83.67	84.06
Faulu	63.59	72.64	63.88	72.98	64.18	73.31	83.75	84.14
SMEP	60.43	69.03	60.71	69.35	60.99	69.67	79.59	79.95
Sumac	52.43	59.89	52.67	60.16	52.91	60.44	69.05	69.36
U&I	50.17	57.31	50.40	57.58	50.64	57.84	66.08	66.38
Total	290.15	331.44	291.49	332.98	292.83	334.52	382.13	383.89
Mean	58.03	66.29	58.30	66.60	58.57	66.90	76.43	76.78
Std.Dev	6.33	7.23	6.36	7.26	6.38	7.29	8.33	8.37

Source: Author 2017

The Figure 4.3 below presents the graphical presentation of the repayment capacity of the five Microfinance banks in the study. The graph shows significant positive growth from the year 2000-2016.

Figure 4.3: Repayment Capacity
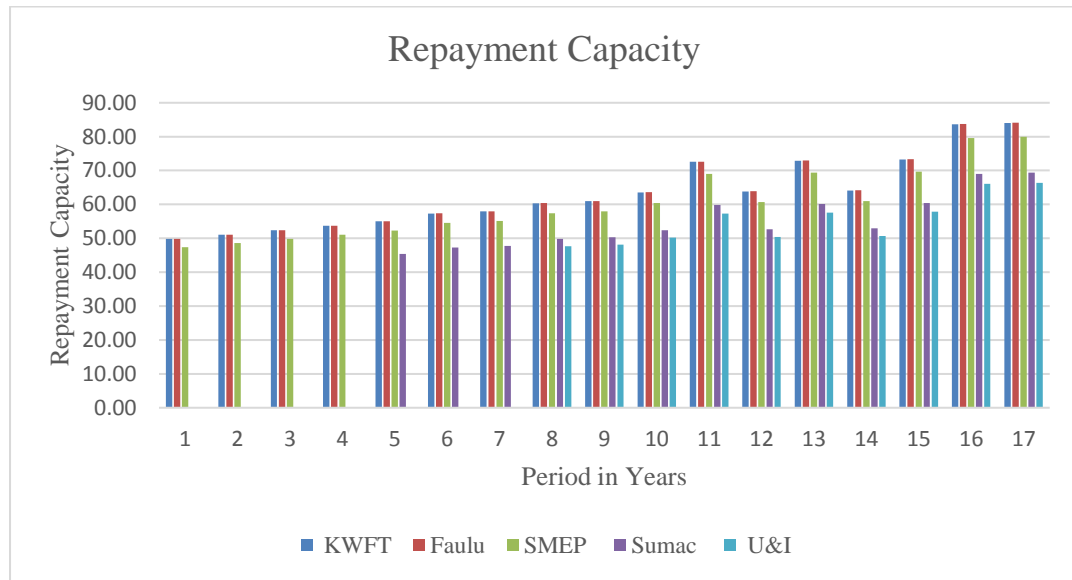
4.2.4 Client Outreach

The objective of the study was to investigate the effect of micro-finance act 2008 on the client outreach in terms of number of active accounts in the microfinance institutions in Kenya. The study was based on eight years before the act and eight year's after the act. From the Table 4.7 below, the client outreach of regulated micro-finance had a mean of active accounts at 136,652, 151,835, 168,706, 187,451, 156,413, 173,792, 155,140, 172,378 and 191,531 in which the Micro-Finance Act 2008 was introduced. The mean of active accounts for the period before introduction of the Act was 165,445.

The standard deviation of the client outreach from 2000-2008 before the introduction of the Micro-Finance Act 2008 was presented by 65497, 72774, 80860, 89845, 131924,146582,164622,182913 and 203237.

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Table 4.7: Client Outreach (2000-2008)

Micro	2000	2001	2002	2003	2004	2005	2006	2007	2008
KWFT	212,061	235,623	261,804	290,893	323,215	359,127	399,030	443,367	492,630
Faulu	103,943	115,493	128,325	142,583	158,426	176,029	195,588	217,320	241,466
SMEP	93,951	104,390	115,989	128,877	143,196	159,107	176,785	196,428	218,254
Sumac					816	906	1,007	1,119	1,243
U&I							3,291	3,657	4,063
Total	411,955	457,507	508,120	564,356	627,656	697,174	777,707	863,897	959,664
Mean	136,652	151,835	168,706	187,451	156,413	173,792	155,140	172,378	191,531
Std.Dev	65,497	72,774	80,860	89,845	131,924	146,582	164,622	182,913	203,237

Source: Author 2017

From the study, the number of active accounts grew drastically due to the introduction of the Micro-finance Act 2008 which ensured clean and trusted banking activities. The accounts number from 212,812; 236,458; 262,731; 291,924; 324,360; 360,400; 400,444 and 405,450 from 2009-2016. The average mean number of active accounts for the period after introduction of the Act in 2008 was 311,525.

The standard deviation of the client outreach from 2009-2016 after the introduction of the Micro-Finance Act 2008 was presented by 225819, 250910, 278789, 309766, 344184, 382427, 424919 and 427884

Table 4.8: Client Outreach (2009-2016)

Micro	2009	2010	2011	2012	2013	2014	2015	2016
KWFT	547,367	608,185	675,761	750,846	834,273	926,970	1,029,967	1,039,770
Faulu	268,296	298,107	331,229	368,033	408,925	454,361	504,846	508,472
SMEP	242,504	269,449	299,388	332,653	369,614	410,683	456,314	463,135
Sumac	1,381	1,535	1,705	1,895	2,105	2,339	2,599	6,629
U&I	4,515	5,016	5,574	6,193	6,881	7,646	8,495	9,245
Total	1,066,071	1,184,301	1,315,668	1,461,631	1,623,812	1,804,013	2,004,236	2,029,267
Mean	212,812	236,458	262,731	291,924	324,360	360,400	400,444	405,450
Std.Dev	225,819	250,910	278,789	309,766	344,184	382,427	424,919	427,884

The figure 4.4 below presents the graphical presentation of the Client outreach of the Microfinance banks before the introduction of the Act 2008 (2000-2008) and after the introduction of the Act 2008(1009-2016). The graph shows positive growth of the client outreach from 2000-2016.

Figure 4.4: Client Outreach
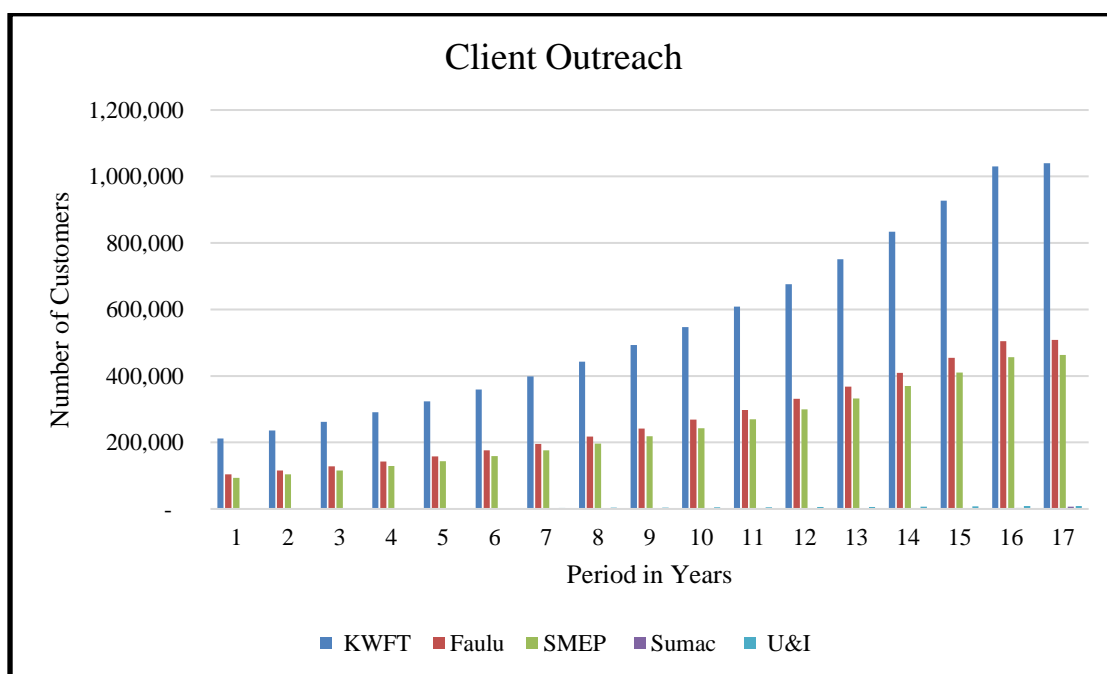
Source: Author 2017

4.2.5 Financial Performance

The objective of the study was to investigate the effect of micro-finance act 2008 on the performance of microfinance institutions in Kenya hence the study was based on eight years before the act and eight year's after the act. From the table 4.9 below, the regulated micro-finance had a profitability mean of -5.08%, -4.67%, -4.26%, -3.86%, -2.53%, -2.16%, -1.80%, -0.96% and -0.48% which translates to a mean of -2.87 before the introduction of the Micro-Finance Act 2008. However, the study established that the regulated Micro-finance bank profitability had a standard

deviation of 2.17, 2.12, 2.11, 2.14, 2.58, 2.58, 2.60, 2.53 and 2.70 before the act of 2008.

Table 4.9: Financial Performance (2008-2009)

MicroFinance	2000	2001	2002	2003	2004	2005	2006	2007	2008
KWFT	-5.67	-4.93	-4.19	-3.45	-2.71	-1.97	-1.23	-0.49	0.25
Faulu	-6.89	-6.65	-6.41	-6.17	-5.93	-5.69	-5.45	-5.21	-4.97
SMEP	-2.67	-2.43	-2.19	-1.95	-1.71	-1.47	-1.23	-0.99	-0.75
Sumac					0.24	0.48	0.72	0.96	1.2
U&I								0.94	1.88
Total	-15.23	-14.01	-12.8	-11.57	-10.11	-8.65	-7.19	-4.79	-2.39
Mean	-5.08	-4.67	-4.26	-3.86	-2.53	-2.16	-1.80	-0.96	-0.48
Std.Dev	2.17	2.12	2.11	2.14	2.58	2.58	2.60	2.53	2.70

Source: Author 2017

Table 4.10 below presents the percentage profitability after the introduction of the Micro-Finance Act 2008 which was 0.00 %, 0.78 %, 1.85%, 2.38 %, 2.87%, 3.36%, 3.84 % and 4.33% after the Micro-finance Act 2008 which is a mean of 2.46. However, the study established that standard deviation after the introduction of the Micro-Finance Act 2008 was 2.90, 2.55, 1.92, 2.17, 2.48, 2.79, 3.11 and 3.43 from year 2009-2016.

Table 4.10: Financial Performance (2009-2016)

MicroFinance	2009	2010	2011	2012	2013	2014	2015	2016
KWFT	0.99	1.73	2.47	3.21	3.95	4.69	5.43	6.17
Faulu	-4.73	-3.01	0.2	0.7	0.97	1.24	1.51	1.78
SMEP	-0.51	-0.27	-0.03	0.21	0.45	0.69	0.93	1.17
Sumac	1.44	1.68	1.92	2.16	2.4	2.64	2.88	3.12
U&I	2.82	3.76	4.7	5.64	6.58	7.52	8.46	9.4
Total	0.01	3.89	9.26	11.92	14.35	16.78	19.21	21.64
Mean	0.00	0.78	1.85	2.38	2.87	3.36	3.84	4.33
Std.Dev	2.90	2.55	1.92	2.17	2.48	2.79	3.11	3.43

Source: Author 2017

The figure 4.5 below gives the graphical presentation of the financial performance of the Microfinance banks before the introduction of the Act 2008 (2000-2008) and after the introduction of the Act 2008(1009-2016).

The graph shows positive growth of the financial performance from 2000-2016.

Figure 4.5: Financial Performance (2000-2016)
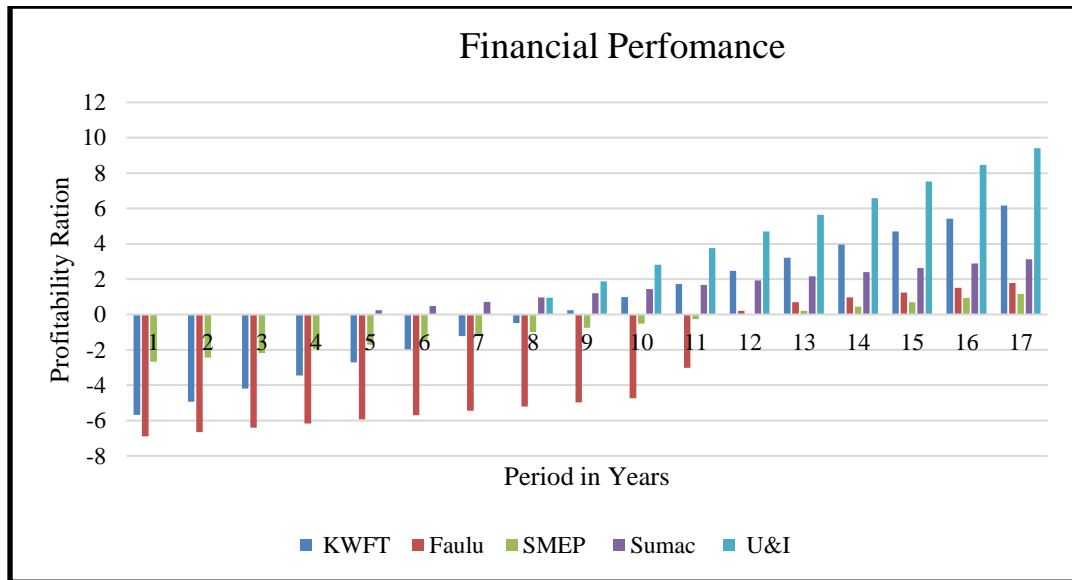
Source: Author 2017

4.3 Analysis of Variance (ANOVA)

The section gives the Analysis of Variance which was used to determine whether there is any significant relationship between the micro-finance performance before and after the regulation of the Micro-finance Act 2008.

4.3.1 Solvency

The ANOVA analysis and F-statistics for solvency below reveals the value of $F_{(4, 75)} = 6.51$ and $p < 0.05$ significance level. The difference between the mean is significant.

Table 4.11: ANOVA Solvency

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.92	2	3.304	6.51	.000(a)
Within Groups	52.717	77	.507		
Total	62.63	79			

Source: Author 2017

4.3.2 Asset Quality

The ANOVA analysis and F-statistics for asset quality reveals the value of F (4, 75) =3.74 and p<0.05 significance level. The difference between the mean is significant.

Table 4.12: ANOVA Asset Quality

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.78	2	2.194	3.74	.002(a)
Within Groups	60.43	77	.5.87		
Total	68.213	79			

Source: Author 2017

4.3.3 Repayment Capacity

The ANOVA analysis and F-statistics for repayment capacity reveals the value of F (4, 75) =5.26 and p<0.05 significance level. The difference between the means is significant.

Table 4.13: ANOVA Repayment Capacity

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.59	2	4.199	5.26	.002(a)
Within Groups	83.07	77	.799		
Total	95.67	79			

Source: Author 2017

4.3.4 Client Outreach

The ANOVA analysis and F-statistics for client outreach reveals the value of F (4, 75) =6.275 and p<0.05 significance level. The difference between the mean is significant.

Table 4.14: ANOVA Client Outreach

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	11.95	2	3.98	6.275	.001(a)
Within Groups	66.05	77	.635		
Total	78.00	79			

Source: Author 2017

4.3.5 Financial Performance

The ANOVA analysis and F-statistics for financial performance reveals the value of F (4, 75) =12.58 and p<0.05 significance level. The difference between the means is significant.

Table 4.15: ANOVA (Financial Performance)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	15.08	2	7.54	12.58	.000(a)
Within Groups	62.92	77	.599		
Total	78.00	79			

Source: Author 2017

4.4 Discussion of Findings

The objective of the study was to establish the effect of financial regulation on the performance of Microfinance institutions in Kenya, eight years before and after the introduction of the Microfinance Act. From the study, the solvency ratio of the banks indicated negative trend for the first eight years before the introduction of the Act and a positive trend after Act was introduced for the all five banks. This concurred to the study of Dayson and Quach (2006) who assessed the performance of Micro-finance

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Institutions in Europe and concluded that solvency in significantly affected by the Micro-finance operational regulation.

The study established that the asset quality increased significantly for the period before and after the Act was introduced. The results were in line with Gathuku (2010) who investigated the responses of microfinance institution to regulation through Microfinance Act 2006 which improved the asset quality of all regulate Micro-finance banks in Kenya.

The study established that the increase in mean of repayment capacity of the micro-finance banks for the period before the introduction of the Act 2008 was significant. After the establishment of the Act 2008, the repayment increased too which gives confidence on the Micro-finance investors since the liabilities reduced with increase in Assets.

The study established that the mean of customer outreach increased significantly during the period leading to the introduction of the Act in 2008. This shows that the Act had positive impact on the introducing new members to the banks. This was attributed in the study of Rhyne (2003) on the experience of Micro-finance Institutions which supports the current regulation and supervision.

The study established that the profitability mean increased significantly before and after the Act was introduced. This concurred with the study of Dayson and Quach (2006) who accessed the financial performance of Microfinance Institutions in Europe and established that proper regulation affected the micro-finance profitability positively.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The chapter presents the summary, conclusion and the recommendation of the study based on the study findings. The sections are divided into solvency, asset quality, repayment capacity, client outreach and financial performance. The chapter concludes on the suggestion of further studies.

5.2 Summary of the Findings

The summary of the study is based on the findings and categorized into solvency, asset quality, repayment capacity, client outreach and financial performance of the micro-finance banks eight years before and after the introduction of the Micro-finance Act 2008. The study established that solvency ratio of the banks indicated negative trend before the Act was introduced and a positive trend after the Act was introduced for the all five banks. The Micro-finance banks significantly increased the value of liquid assets and reduced the level of liabilities and operating expenditure.

The study established that the asset quality decreased for the period between 2000 and 2008 in which the Act was introduced. However, after the Act, the asset quality improved from the year 2009 to 2016. The mean and analysis of variance was significant.

The study established that repayment capacity of the micro-finance banks significantly increased due to lack of proper regulation on their operations. However, the repayment capacity reduced which gives confidence on the Micro-finance investors since the liabilities reduced with increase in Assets. The increase was significant.

From the study, the customer outreach gradually increased within 2000-2008 in which the Act was introduced. However, the number with active accounts significantly increased after the Act in 2008.

The study established that the financial performance gradually increased within 2000-2008 in which the Act was introduced. However, the profitability significantly increased after the Act.

5.3 Conclusion

The study concluded that the solvency of the micro-finance banks was performing poorly before the Act and improved significantly after the Act was introduced in 2008. The Act ensured that the Micro-finance banks increases its liquid assets and reduce the current liabilities which ensured the banks remain solvent enough to pay their dues when they fall due.

The asset quality of the Micro-finance banks significantly increased between 2000 and 2008. However, the introduction of the Act 2008 monitored the loan portfolio and reduced the number of Non-performing loans and increased the net loans issued to the customers for the period 2009-2016 after the introduction of the Act.

The repayment capacity of the Micro-finance banks gradually increased due to lack of proper guidelines in operations between the years 2000-2008. After the introduction of the Act 2008, the Micro-finance repayment capacity had significant increase from 2009-2016 due to compliance of banking and lending guidelines, rules and procedures established in the Micro-finance Act 2008. This was as a result of reduced net liabilities and increased net assets within the financial years within which the study considered.

From the study, the client outreach which is a measure of the number of active accounts within the bank increased between the years of study. The mean number of active accounts increased from year 2000-2008 with small margin. After the establishment of the Act 2008, the number of active accounts significantly increased due to the confidence of the general public about the Micro-finance banks after the Act streamlined the operations. The Number increased due to the increase in efficiency in operation and customer service.

The financial performance of the banks was very low in the year 2000 which kept on an increasing mode up to 2008 when the regulation Act was introduced hence streamlined the credit operation and the accumulation of the Micro-finance both fixed and current assets. From the study, the financial performance significantly increased between years 2009-2016 after the introduction of the Act which was as a result effectively conversion of assets into revenue.

5.4 Recommendation

From the study findings, it is recommended that all Micro-finance banks in Kenya to follow all regulation and guidelines in the Act 2008 to facilitate effective and efficiency in operation and service delivery. The study recommends that the banks to improve their solvency by increasing the value of liquid assets and reduce the current liabilities within their operation.

The study recommends that Micro-finance banks to control the level of Non-performing loans and accounts and increase the loan book value in order to maintain its asset quality level. This is attributed by information sharing on the client's credit history among the Micro-finance banks and other financial institutions in Kenya.

The study recommends that to ensure sound repayment capacity in micro-finance banking, the banks must reduce the value of liabilities within its operations and increase the value of assets. This will ensure that the repayment capacity of the banks is maintained according to the current Micro-finance regulation hence effective operation and payments of debts.

The study recommends that the banks should do more marketing to enroll more customers on board who may get loans or give the bank deposits. However, the bank should also maintain the current number of customers who are at risk of migrating to other financial institutions.

5.5 Suggestion for Further Study

For future research, a study can be carried out on the effect of interest rate capping on the Micro-finance financial performance since its introduction in June 2016. The regulation controls the interest rates to be charged 4% above the base CBK lending rate which stands at 10%.

A study can be conducted on the contribution of the banking regulation on the effectiveness of service delivery and efficiency in product development within the banking sector. This is due to more product innovation the last five years which the Micro-finance banks are adopting

REFERENCES

Act of Parliament, the Microfinance Act 2006, *Kenya Gazette.*

Bernstein Marver H. (1955). *Regulating Business by Independent Commission*. Princeton: Princeton University Press.

Brix, L. & K. McKee (2010). Consumer Protection Regulation in Low-access Environments: opportunities to Promote Responsible Finance, *CGAP Focus*. Washington, DC: CGAP.

Campbell, T. (2006). Financial regulation and its significance for microfinance in Latin America and Caribbean. Washington: Inter-American Development Bank, *Accessed on 20th March 2006.*

Cull, Asli Demirgüç-Kunt, Morduch (2009), Does regulatory Supervision curtail microfinance profitability and outreach? Financial Access Initiative, *Working Paper Series*.

Dayson, K. and Quach, H. (2006). *Toward a Performance Assessment of Microfinance Institutions in Europe*, Finance and the Common Good, No 25, Autumn

Gathuku A. (2010). Responses of microfinance institution to regulation through Microfinance Act 2006*, Unpublished MBA project*, University of Nairobi.

Kusewa L. (2007). The impact of regulation of the retirement benefits sector on the financial performance of occupational pension schemes in Kenya, *Unpublished MBA Project,* University of Nairobi.

Lascelles & Mendelson (2009), Microfinance Banana Skins report –Confronting crisis and change*. Center for the study of Financial Innovation.*

Frankfurt School of Finance and Management, *Transforming Microfinance in Kenya; the experience of Faulu Kenya and Kenya Women Finance Trust*.

Hartarska, V & Nadolnyak, D., (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence. *Applied Economics,* 39(10–12), 1207–1222.

Helms, B., (2006). Access for All: Building Inclusive Financial Systems. C-GAP: Washington: World Bank Publications.

K'Aol and Ochanda, 2002, *Factors Influencing the Establishment of Micro-finance Schemes in Kenya.*

Laffont, Jean-Jacques, and Tirole (1991). The politics of government decision-making: A theory of regulatory capture, *The Quarterly Journal of Economics*.

Maimbo (2002). Finance and development briefing papers on prudential regulation. *Institute for Development Policy and Management*, University of Manchester.

Meier, Kenneth J., and Plumlee, John J. (1978). Regulatory Administration and Organizational Rigidity in the Western *Political Quarterly.*

Mersland and Strøm, R., (2007). Performance and Corporate Governance in Microfinance Institutions. *MPRA Paper* 3887, University of Munich.

Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods, Quantitative and Qualitative Approaches*, Nairobi: Africa Centre for Technology Studies.

Okwachi, E. (2008). An evaluation of the effectiveness of state regulation of the insurance industry in Kenya, *Unpublished MBA project,* University of Nairobi

Omino, G (2005), Regulation and supervision of microfinance institutions in Kenya, Essays on Regulation and Supervision, *IRIS Center and funded by Consultative Group to Assist the Poor,* Washington, D.C.

Porteous, D, Collins, D & Abrams, J (2010), Prudential regulation in microfinance, Policy Framing Note 3, *Financial Access Initiative & NYU Wagner Graduate School*, New York.

Ndung`u (2010), *The strategic directions and regulatory support for a stronger MFI sector*, Kenya.

Rhyne (2003), *The Experience of Microfinance Institutions with Regulation and Supervision.*

Rock, R., Otero, M., Saltzman, S., 1998. *Microenterprise Best Practices. Principles and practices of microfinance governance DAI/USAID*: Washington, pp. 1-58.

Stigler (1971). The theory of economic regulation. *Bell Journal of Economics and Management Science.*

Stiglitz, J. (2001) Principles of financial regulation: A dynamic portfolio approach, *The World Bank Research Observer*, 16(1), 1-18.

APPENDIX I: COMPUTED STUDY MEASURABLES

SOLVENCY

Micro	2000	'01	'02	'03	'04	'05	'06	'07	'08
KWFT	-2.23	2.12	-2.83	-1.99	1.21	1.42	1.8	2.19	2.3
Faulu	-2.76	4.91	-3.09	-1.32	-2.35	-1.43	0.8	-0.38	1.4
SMEP	-1.97	2.53	-3.12	-2.13	-0.34	1.56	1.8	1.98	2.4
Sumac					-4.14	-3.2	2.4	-2.1	1.4
U&I								-0.21	1.0

PROFITABILITY

	2000	'01	'02	'03	'04	'05	'06	'07	'08
KWFT	-5.67	4.93	-4.19	-3.45	-2.71	-1.97	1.23	-0.49	0.2
Faulu	-6.89	6.65	-6.41	-6.17	-5.93	-5.69	5.45	-5.21	4.9
SMEP	-2.67	2.43	-2.19	-1.95	-1.71	-1.47	1.23	-0.99	0.7
Sumac					0.24	0.48	0.72	0.96	1.2
U&I								0.94	1.88

ASSET QUALITY

	2000	'01	'02	'03	'04	'05	'06	'07	'08
KWFT	15.7	15.9	14.83	15.78	15.99	16.64	17.6	19.71	20
Faulu	23.7	24.7	25.72	26.75	27.82	28.93	30.0	31.29	32
SMEP	9.01	9.73	10.51	11.35	12.26	13.24	14.3	15.44	16
Sumac					9.03	9.66	10.3	11.06	11
U&I								16.96	18

REPAYMENT

	2000	'01	'02	'03	'04	'05	'06	'07	'08
KWFT	49.8	51.0	52.34	53.66	55.02	57.34	57.9	60.35	60
Faulu	49.8	51.1	52.39	53.71	55.07	57.39	57.9	60.41	61
SMEP	47.3	48.5	49.79	51.05	52.33	54.54	55.0	57.41	57
Sumac					45.40	47.31	47.7	49.80	50
U&I								47.66	48

CLIENT OUTREACH

	2000	'01	'02	'03	'04	'05	'06	'07	'08
KWFT	2120	235	2618	2908	3232	3591	399	4433	492
Faulu	1039	115	1283	1425	1584	1760	195	2173	241
SMEP	9395	104	5989	8877	3196	9107	678	6428	825
Sumac					815	906	100	1118	124
U&I							329	3656	406

SOLVENCY

Micro	'09	'10	'11	'12	'13	'14	'15	'16
KWFT	2.4	2.67	2.89	2.76	2.97	3.21	3.35	3.43
Faulu	1.7	1.96	2.12	2.21	2.14	2.89	2.21	2.76
SMEP	2.5	2.89	3.76	3.76	3.81	4.23	4.51	4.32
Sumac	0.6	0.82	1.43	1.62	1.89	2.13	2.14	2.21
U&I	1.2	1.54	1.72	2.01	2.23	2.45	2.54	2.86

PROFITABILITY

	'09	'10	'11	'12	'13	'14	'15	'16
KWFT	0.9	1.73	2.47	3.21	3.95	4.69	5.43	6.17
Faulu	4.7	-3.01	0.2	0.7	0.97	1.24	1.51	1.78
SMEP	0.5	-0.27	-0.03	0.21	0.45	0.69	0.93	1.17
Sumac	1.4	1.68	1.92	2.16	2.4	2.64	2.88	3.12
U&I	2.8	3.76	4.7	5.64	6.58	7.52	8.46	9.4

ASSET QUALITY

	'09	'10	'11	'12	'13	'14	'15	'16
KWFT	20	20.91	20.91	27.5	27.63	31.34	33.98	31.57
Faulu	33	35.20	36.61	38.07	39.60	41.18	42.83	44.54
SMEP	18	19.45	21.01	22.69	24.50	26.46	28.58	30.87
Sumac	12	13.55	14.50	15.52	16.60	17.76	19.01	20.34
U&I	19	20.78	22.23	23.79	25.45	27.23	29.14	31.18

REPAYMENT

	'09	'10	'11	'12	'13	'14	'15	'16
KWFT	63	72.57	63.82	72.91	64.12	73.25	83.67	84.06
Faulu	63	72.64	63.88	72.98	64.18	73.31	83.75	84.14
SMEP	60	69.03	60.71	69.35	60.99	69.67	79.59	79.95
Sumac	52	59.89	52.67	60.16	52.91	60.44	69.05	69.36
U&I	50	57.31	50.40	57.58	50.64	57.84	66.08	66.38

CLIENT OUTREACH

	'09	'10	'11	'12	'13	'14	'15	'16
KWFT	547	608185	67576	75084	83427	92697	1029967	10397
Faulu	268	298107	33122	36803	40892	45436	504846	50847
SMEP	242	269449	29938	33265	36961	41068	456314	46313
Sumac	138	1535	1705	1895	2105	2339	2599	6629
U&I	451	5016	5574	6193	6881	7646	8495	9245

APPENDIX II: MICROFINANCE BANKS

1. Kenya Women Microfinance Bank

2. Rafiki Microfinance Bank Ltd

3. Faulu Kenya Microfinance Bank

4. SMEP Microfinance Bank Ltd

5. Remu Microfinance Bank Ltd

6. Century Microfinance Bank Ltd

7. Sumac Microfinance Bank Ltd

8. U&I Microfinance Bank Ltd

9. Caritas Microfinance Bank Ltd

10. Daraja Microfinance Bank