[DETERMINANTS THAT INFLUENCE FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA: CASE STUDY OF NAIROBI COUNTY]

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the Research Proposal contains no material previously published or written by another person except where due reference is made in the Research Proposal itself.

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This Research Proposal has been submitted for examination with my approval as the Supervisor.

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Table of Contents

LIST OF ABBREVIATIONS

AMFI- Association of Microfinance Institutions in Kenya

MFI- Microfinance Institutions

MFB- Microfinance Banks.

CHAPTER ONE: INTRODUCTION.

1.1 Background of the study.

According to (Lafourcade, Isern, Brown, & Mwangi, 2005), microfinance institutions in Sub-Saharan Africa include a broad range of diverse and geographically dispersed institutions offering financial services to low income clients, non-governmental organizations, non-bank financial institutions, cooperatives, rural banks, savings and postal financial institutions and an increasing number of commercial banks.

(Hartungi, 2007) States that microfinance institutions play a vital role in the economic development of many developing countries. He further mentions that they offer loans and technical assistance in business development to low income communities in developing countries. (Hoque, 2011), suggest that microfinance institutions offer a variety of products, which include: remittances and transfers, payment services, insurance services and other financial products or services that are not offered by commercial banks to low income clients.

(Gupta, 2008)Mentions that the microfinance industry in most African countries remains largely underdeveloped despite the series of financial sector reforms undertaken by African countries. (Senbet, 2008) Explains that financial systems in African countries still exhibit substantial degrees of inefficiencies in their savings mobilization and in the allocation of resources into productive activities. (Zeller, 2002)States that the poor people in developing nations lack access to formal financial services and that the problem is especially serious in rural areas, constraining their ability to acquire assets, start businesses and finance emerging needs and to insure themselves against illness and disasters. (Zeller, 2002), further mentions that most microfinance programs are small, vulnerable to resource constraints, operate in a few locations and serve specific clusters of clients hence being exposed to systematic risks of undiversified loan portfolios. Interestingly, they point out that most microfinance institutions mobilize few savings and are not financially self-sufficient making them dependent on the whims of donors and governments for their future existence. They stress the point that competition is on

the rise from banks and finance companies venturing into microfinance by seeking out the wealthier clientele groups in urban areas and as a result, microfinance institutions targeting the poor risk losing their better-off clients to competitors that offer more flexible products with larger loan sizes and better conditions.

Microfinance institutions are disciplined by markets as well as their own internal controls. In the new competitive environment, microfinance institutions need to serve their markets effectively by focusing on their client's needs and competitive threats by continually refining its products and services in order to maintain the loyalty of consumers who are key to the sustainability of the microfinance institution. Innovations are seen as one of the main sources of a competitive advantage critical to company growth. A lot of companies put in great effort in beating the competition and in making improvements in the market place by introducing innovations. Ceaseless cost pressures and increasing public demands, compel constant innovation and most organizations have to innovate constantly simply to survive (Gerry, Kevan, & Richard, 2008).

In recent years, numerous successful experiences in the field of microfinance have contributed to spreading the notion that the improvement of the living standards of the poorest can be realized not just through small loans for production requirements, but also through a wide range of financial services (Mario La Torre, 2006). Institutional innovations can make it possible for microfinance to reach the poor with financial services on a sustainable basis (Zeller, 2002).Technological innovations and product refinements however are needed to reduce costs, increase outreach, boost profitability and to strengthen the capacity of African microfinance institutions (Lafourcade, Isern, Brown, & Mwangi, 2005).Future growth will require microfinance institutions to innovate in order to retain clients and to serve those clients who have been left behind in past expansions (Zeller, 2002). (Zeller, 2002)Candidly states that innovations can be replicated and microfinance institutions that ignore them may quickly lose their clients to competitors. Product innovation plays a vital role in increasing the client outreach for any organization. This increase in customer base requires that more effort is put in by

microfinance institutions to develop new products so as to achieve sustainability and to increase profitability (Kapoor, 2013).

Product innovation is a recurrent process of refining terms, characteristics, and conditions of a product based on customer feedback and market analysis (Kapoor, 2013). (Hadia, 2009), on innovations in financial services explored several organizational factors that are responsible for a successful innovation process. These include: strategic factors, learning organizational perspective, organizational culture of innovation, inter functional coordination and communication, role of leaders and managers, and strong and visible senior management support and commitment. (Mbogo & Ashika, 2011)Attempted to establish a positive correlation between organizational specific factors such as financial and human resources for microfinance institutions and product innovation in their study on Kenyan microfinance institutions. (Abir & Chokri, 2010) Identified diversified nature of business, size of the organization, availability of financial resources and spread as major internal variables affecting the decisions relating to new product development. This research will concentrate only on strategic orientation, competitive edge, customer orientation and organizational culture as determinants that influence product innovation in microfinance institutions in Kenya.

Product innovations in microfinance institutions typically result from organizations striving to extend outreach, increase impact and promote sustainability. In the last decade, microfinance institutions have experienced a boom in innovations of lending products (Dean, 2009)

In Kenya, microfinance institutions such as Kenya Women's Finance Trust and K-REP have embraced product innovations in order to increase client outreach and profitability. Kenya women's Finance Trust impressive reputation comes from its innovative approach and unwavering commitment to its mission and meeting the needs of women. Likewise, K-REP has introduced a new type of agency based on membership in order to diversify its clientele and to increase outreach.

1.2Problem Statement.

Micro Finance is a tool that has been accepted over time to offer poor people access to basic financial services such as loans, savings, money transfer services and micro finance. There are scanty studies on the financial performance of MFIs as most scholars have carried out studies on social performance of MFIs. There are also very few studies on financial performance of MFIs that is relevant to Kenya. In addition the microfinance sector in Kenya is at its growth stage hence there is need for studies to be done that will enable it be financially viable and sustainable as they serve the unbanked. While most of the institutions are formed for social reasons, primarily poverty alleviation and offering financial services to the unbanked and mostly those in the low income bracket, this objective cannot be achieved if the firms do not operate in a profitable environment. A profitable MFI will expand its base and be able to reach its target clients besides offering them financial products and services at a much reduced cost and little logistics compared to the established commercial banks.

A study on the determinants of MFIs' performance in central and Eastern Europe by (Hartaska, 2005) present evidence in a multidimensional context. However, she estimates different equations for each of the indicators. The study undertaken by (Gibson, 2012) attempted to investigate the factors that determine the financial performance of the 30 MFIs that are registered and regulated by the AMFI. The study focused on twenty eight different variables. With this study the weighted influence of a particular determinant is hard to establish. In a study to examine the determinants of financial performance of deposit taking MFIs, (Ongaki, 2012) found that there is a positive relationship between profit ratio and interest income ratio. This study differs from that of Gibson as it focuses on factors other than interest income ratio.

Empirical evidence indicates that studies focusing on Microfinance and in particular determinants of financial performance of MFIs are limited. The studies undertaken have been broad and focusing on a wide range of issues without narrowing down to specifics like the study by (Gibson, 2012). Most of the studies carried out advocates for further research on the factors which that have continued to cause poor financial performance of

MFIs in the Sub- Saharan region which has a higher poverty index. Most of the evidence in regard to MFIs performance largely focuses on the developed economies and the findings are not necessarily relevant to the sub-regions needs and Kenya in particular.

This study will focus on identifying the influence of the determinants of performance on financial performance of MFIs in Kenya.

1.3 Research Objectives

The study aims;

i. To establish the determinants that influence financial performance of microfinance institutions in Kenya.
ii. To assess extent to which each of the determinants affect product innovation in microfinance institutions in Kenya.

1.4 Research Questions

i. What are some of the determinants that influence financial performance of microfinance institutions in Kenya?
ii. To what extent does each of the determinants affect financial performance in microfinance institutions in Kenya?

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter gives an overview of financial performance of MFIs and determinants of financial performance. It outlines theoretical framework of the study and review of previous studies on determinants of financial performance.

2.2. Financial Performance of Microfinance Institutions

Beyond the intermediation function, the financial performance of financial institutions has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor performance can lead to failure and crisis which have negative repercussions on the economic growth (Ongore & Kusa, 2013).

Financial performance is a subjective measure of how well an organization can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales (Jayawardhena & Foley, 2000).

Profit is the ultimate goal of any firm and to measure the profitability of a firm, there are a variety of ratios used of which Return on Assets, Return on Equity and Net Interest Margin are the major ones (Murthy & Sree, 2003).

Financial performance of microfinance institutions is essentially what defines its sustainability. Financial performance refers to the ability of the institution to cover all its costs from operations without depending on external support (Thapa, 2008). The costs here include present costs incurred to support current operations and those incurred to support growth. Financial performance is the ability of an MFI to keep on going towards microfinance objective without donor support. These definitions centre on one main

point, that is, the ability to depend on self-operations. The definitions also imply the possibility of making profit out of the microfinance operations (Thapa, 2008).

2.2.1 Return on Equity (ROE)

ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested. ROE, along with return on assets (ROA), measure the overall corporate financial performance (Rappaport, 1986). Shareholder value is created when the equity returns of a company exceed the cost of that equity. ROE is calculated by taking the profit after tax and preference dividends of a given year and dividing it by the book value of equity at the beginning of the year. Equity would consist of issued ordinary share capital, plus the share premium and reserves. ROE is what the shareholders look in return for their investment. According to (Ongore & Kusa, 2013) a business that has a high return on equity is more likely to be one that is capable of generating cash internally. It is further explained that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stakeholders. ROE reflects how effectively a bank's management is using its shareholders' funds. Thus it can be deduced from the above statement that the better the ROE the more effective the management is in utilizing the shareholders' capital (Ongore & Kusa, 2013) (Kharwish, 2011)

2.3 Determinants of Financial Performance

The performance of MFIs can be affected by internal and external factors. The internal factors are basically influenced by the internal decisions of management and board. The external factors are sector wide or country wide factors which are beyond the control of the company and affect the profitability of these institutions (Al-Tamimi & Hassan, 2010); (Aburime, 2005).

Profitability is a function of internal and external factors. Internal factors include institution-specific; while external factors include both industry-specific and macroeconomic factors (Mercia, Evren, & Hassan., 2002). The various factors identified to influence the performance of MFIs are either firm specific or market specific (Gibson, 2012).

According to (Athanasoglou, Sophocles, & Mathaios, 2005), the determinants of financial performance of MFIs includes level of capital, liquidity levels, management capability, asset quality, levels of inflation, interest rates and general prevailing economic conditions.

2.3.1 Asset quality

Asset affects the profitability of a financial institution. Assets include among others current asset, credit portfolio, fixed asset, and other investments. Loan is the major asset from which income is generated. The quality of loan portfolio determines profitability

The highest risk facing a financial institution is the losses derived from delinquent loans (Dang, 2011). Thus, nonperforming loan ratios are the best proxies for asset quality. Low nonperforming loans to total loans shows that a healthy portfolio of a financial institution. The lower the ratio the better the bank performing (Sangmi & Tabassum, 2010). Results from a study by (Ongaki, 2012) indicated that there is a positive relationship between profit ratio and asset quality ratio. An increase in asset quality ratio leads to an increase in profit margin

2.3.2 Capital Adequacy

Capital adequacy of an MFI will influence its profitability. Capital is the amount of own funds available to support the bank's business and act as a buffer in case of adverse situations. Financial institutions will depend on its core capital as capital creates liquidity for the financial institution due to the fact that deposits are essentially other people's money which can be recalled at any time. Greater capital reduces the chance of financial distress (Dang, 2011). (Muriu, 2011) found that a proportionally higher deposit as a percentage of total assets is associated with improved profitability. However, the magnitude of this effect is very sensitive to MFI age. Voluntary deposit mobilization may therefore help MFIs achieve independence from donors and investors, since it provides MFIs with inexpensive and sustainable source of funds for making loans. Consistent with the agency costs hypothesis, the results show that highly leveraged MFIs are more profitable. This may benefit MFIs if higher debt to equity ratio were to increase profitability by a greater margin than the cost of the debt (Muriu, 2011).

2.3.3 Liquidity Management

The most common financial ratios that reflect the liquidity position are customer deposit to total asset and total loan to customer deposits. Liquidity determines the level of performance of any financial institution. It refers to the ability of the institution to fulfill its obligations, mainly of depositors. Adequate level of liquidity is positively related with profitability (Dang, 2011). Different financial ratios are used to measure liquidity position a financial institution but the most common financial ratios used are customer deposit to total asset and total loan to customer deposits (Dang, 2011). (Molyneux & Thornton, 1992), found a negative and significant relationship between the level of liquidity and profitability. In contrast, (Bourke, 1989) reported an opposite result; while the effects of credit risk on profitability could be negative.

2.3.4 Management efficiency

Management efficiency is one of the complex units to capture with financial ratios yet it's a key determinant of any financial institutions' profitability. The performance of management is often expressed through subjective evaluation of management systems, quality of staff, controls systems among others. However, management quality can be measured by different financial ratios like total asset growth, loan growth rate, earning growth rate and operational efficiency in managing operating expenses (Ongore & Kusa, 2013). One of the ratios used to measure management quality is operating expenses to total asset. In this regard, management quality determines the level of operating expenses and in turn affects profitability (Athanasoglou, Sophocles, & Mathaios, 2005).

Efficiency raises the profitability of financial institutions, implying a negative relationship between operating expense ratio and profitability (Bourke, 1989). A study on Malaysian financial institutions by (Guru, Staunton, & Balalashanmugam, 2002) also show that efficient management is among the most important factors that explain high profitability.

2.3.5 Outreach level

The term outreach covers a wider range of concepts besides the number of clients served by an MFI (Anduanbessa, 2009). According to (Lafourcade, Isern, Brown, & Mwangi, 2005), outreach is the effort of MFIs to extend microfinance services to the people who are underserved by financial institutions. They believe that outreach can be measured in terms of breadth which is denoted by the number of clients served, volume of services which is denoted by total savings on deposit and total outstanding portfolio and depth which is denoted by the socio-economic level of clients that MFIs reach. Likewise, (Meyer, 2002) emphasized four types of outreach measures: the number of persons served the number of women, the depth of outreach and the number of financial services provided. (Conning, 1999) Defined outreach in terms of breadth and depth. According to this definition, outreach refers to MFIs extending their financial services to a wider audience, especially towards the poorest of the poor. In contrast to this definition of outreach, (Navajas, Schreiner, Meyer, Gonzalez-Vega, & Rod, 2000) presented that there are following six aspects of outreach; Depth, worth of users, cost of users, breadth, length and scope.

(Hartaska, 2005) Reports that number of borrowers had no significant impact on financial sustainability. (Cull, Demirguc-Kunt, & Morduch, 2007) provided a new dimension to existing literature in their study which explicitly explored whether there is empirical evidence for a trade-off between the depth of outreach and profitability. They look into this issue by examining whether more profitability is associated with a lower depth of outreach to the poor and the institutional design with respect to the trade-off between financial performance and depth of outreach of microfinance. By running regressions it was found that financial self-sufficiency is not linked to any of the outreach measures and concluded that the pursuit of profit and outreach can go hand in hand.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents research methodology that was used in this study. It encompasses the research design, target population, sampling and sample design, data collection instruments and procedure. Data reliability and validity, model specification and limitations of the study are also discussed. Statistical methods and tools used in data collection and analysis are also included.

3.2 Research Design

This explanatory study was based on secondary obtained from mix market and published statements of fourteen MFIs for eight years from January 2005 to December 2012.

3.3 Target Population

The target population for this study was 49 Micro Finance Institutions registered with the Association of Micro Finance Institutions (AMFI) and report their financials on the MIX market.

3.4 Sampling Design and Sample Size

The study used simple random sampling technique. MFIs that started operation after 2005 and those with head offices outside Nairobi were excluded from the study. As a result, a sample of 14 MFIs which are indicated in the appendices, were used in the study.

3.5 Data Collection instruments and procedure

Secondary data was collected from the financial reports of the individual MFIs. Continuous data required for the various variables was collected for a period of eight years from January 2005 to December 2012.

ROE was used as an indicator of financial performance in this study. The variables in this study were obtained from the various ratios as seen below.

Financial Performance was indicated by Return on Equity.

Return on Equity	ROE	Net income after tax/total equity capital
Asset Quality	AQ	PAR 30.
Capital Adequacy	CA	Total capital/total asset
Liquidity Management	LM	Total customer deposit/total loan
Management Efficiency	ME	Total expense/total assets
Outreach Level	OL	Total number of active borrowers.

3.6 Data Analysis

Generalized Least Square technique was used to analyze the effect of independent variables; asset quality, capital adequacy, liquidity management, management efficiency and outreach level on financial performance of MFIs. Data was analyzed using Eviews software. To test for the strength of the model and the relationship between variables, the research applied significance values generated. The results were tested at 95% confidence level and 5% level of significance. If the significance level was found to be less than the critical value set, a conclusion was reached that the model was significant in explaining the relationship between the independent variable and the dependent variable. Otherwise the model would not be regarded as being significant.

3.7 Analytical Model

Return On Equity was used as an indicator of the dependent variable, financial performance and the determinants, which are the independent variables, were management efficiency, asset quality, outreach level, liquidity management and capital adequacy. Panel data was analyzed using Generalized Least Square (GLS) to establish the relationship between the variables. The following analytical model was used;

$$Y_{it} = \beta_0 + \beta_1 AQ_{it} + \beta_2 CA_{it} + \beta_3 LM_{it} + \beta_4 ME_{it} + \beta_5 OL_{it} + \varepsilon_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where;

Y_{it} is the performance of MFI as expressed by ROE

AQ_{it} is Asset Quality of MFI

CA_{it} is Capital Adequacy of MFI

LM_{it} is Liquidity Management of MFI

ME_{it} is Management Efficiency of MFI

OL_{it} is Outreach Level of MFI

$ß_0$ is the constant term

$ß_1$,-$ß_5$ are the Coefficients parameters.

$Ɛ_{it}$ is the Error term where *i* is cross sectional and *t* time identifier.

3.8 Limitations of the study

There is a big challenge during data collection with regards to the number of MFIs that have their financial reports published. This led to having fewer firms in the study than would have been desired.

There are many factors that influence the performance of microfinance institutions which were not included in this study. There are also many new firms in the microfinance industry hence they could not be included in this study due to lack of data for the desired years.

CHAPTER FOUR: DATA ANALYSIS.

4.1 Introduction

This chapter is a presentation of the analyzed data that was collected for the purpose of this research that was aimed at analyzing the various determinants of financial performance of micro finance institutions in Kenya. The sampled population contained annual data on Return on Equity, Capital Adequacy, Liquidity, Management Efficiency and outreach level for a period of eight years from January 2005 to December 2012. Findings based on the analysis done were presented. Data analysis was carried out using Eviews. Results of the data analysis are as indicated below in a summarized manner.

4.2 Data Presentation

4.2.1 Source of Data and presentation

Data used in this research was obtained from a population of 49 MFIs where a sample of 14 microfinance institutions was randomly selected putting into consideration those that are located in Nairobi. The panel data used consisted of Return on Equity, Capital Adequacy, Liquidity management, Management Efficiency, Outreach level and Asset quality for a period of eight years from January 2005 to December 2012. The variables are explained by the various measurable ratios.. The information was obtained from a study of secondary data.

	Capital adequacy	Liquidity management	Outreach level	Asset quality	Management efficiency	Return on equity
Mean	0.27341	0.57068	72220.6	0.093371	0.289455	0.773382
Median	0.2202	0.5502	15516.5	0.07675	0.2402	0.0723
Maximum	0.9809	2.2009	715969	0.3781	2.0118	86.9979
Minimum	-0.1835	0	150	0	0.0966	-9.9874
Standard deviation	0.208377	0.347312	141301.5	0.078748	0.222246	8.291521
Skewness	0.995892	1.145489	2.998552	1.29108	4.740139	10.15572
Kurtosis	4.046976	6.695887	11.63019	4.564056	34.32292	106.3322

			515.412	42.5311		51753.7
Jarque bera	23.62904	88.23808	2	5	4998.004	8
Probability	0.000007	0	0	0	0	0
Observation	112	112	112	112	112	112

The data had 112 observations. The dependent variable indicator which is the Return on Equity had a mean of 0.77 and a standard deviation of 8.29 over the study period. This implies that the average performance of MFIs in Nairobi was at about 77%.

Capital adequacy measured by Total capital to Total Asset had a mean 0.27 and a standard deviation of 0.21. This could imply that MFIs prefer less risky investment hence lower profit. Within the same period, capital adequacy had a minimum of -0.18 and a maximum of 0.98.

Liquidity management measured by total loan to deposits ratio had a mean of 0.57 which indicate that MFIs in Nairobi use 57% of customer deposit on lending. This could be attributed to the fact that customer deposit is one of the cheapest sources of domestic resources.

Asset quality was measured by PAR30 was as high as 0.378 and had a mean of 0.093 indicating that on average the exposure to credit risk was low.

Outreach level measured by the number of active borrowers indicated that on average there were about 7,220 clients served by MFIs in Nairobi county and as many as 715,969. The minimum number of customers served was 150.

Management efficiency measured by the total expenses incurred per asset employed had a mean ratio of 0.29 and a maximum of 2.01. This indicates on average the management is efficiently managing its expenses in relation to the available assets.

4.2.2 Regression model, analysis and results.

A generalized least square regression model was used in this study. The fixed effect regression was used.

ROE	Coefficient of regression	Std. error	t-statistic	p>|t|	95% Confidence interval	
Constant	0.212591	4.64472	0.05	0.964	-9.0109	9.436084
Management quality	-4.62618	5.43961	-0.85	0.397	-15.4282	6.17581
Asset quality	34.36409	12.44	2.76	0.007	9.660725	59.06746
Outreach level	3.76E-06	1.32E-05	0.29	0.776	-2.2E-05	2.99E-05
Liquidity management	1.377816	4.741244	0.29	0.772	-8.03735	10.79299
Capital adequacy	-8.63628	7.085196	-1.22	0.226	-22.7061	5.433514

The constant is 0.212, which is the value that ROE takes when all the independent variables are zero. The coefficient of asset quality is 34.364 which imply that a unit increase in asset quality will result in the dependent variable to increase by 34.364 units. The t value is 2.76 which is greater than 1.96 hence we can conclude at 95% confidence level that asset quality has a significant influence on the dependent variable.

The p value of 0.007 is less than 0.05 which shows that asset quality has a significant influence on the dependent variable.

Liquidity management had a coefficient value of 1.378. This means that as the magnitude of liquidity management increases by a unit, the magnitude of the dependent variable increases by 1.378 units. The t value of liquidity management is 0.29 which is less than 1.96 and the p value is 0.772 which is greater than 0.05. These two results indicate that liquidity management has insignificant influence on the dependent variable. Therefore at 95% confidence level, liquidity management is statistically insignificant in influencing variations in the dependent variable.

The coefficient of outreach level is 0.00000038 which is positive but very close to zero. This therefore means that a unit change in outreach level will cause a minimal effect on the independent variable. A unit increase in outreach level will cause the independent

variable to increase by 0.00000038 units. The t value of 0.29 is less than 1.96 which means that outreach level is statistically insignificant in influencing the dependent variable.
A p value of 0.776 is greater than 0.05 at 95% confidence level indicate that outreach level is statistically insignificant in influencing financial performance.
Capital adequacy has a negative influence on financial performance as shown by the coefficient of 8.636. This implies that an increase in capital adequacy by one unit will result in financial performance decreasing by 8.636 units. The t value of -1.22 is less than 1.96 and the p value of 0.226 is greater than 0.05 at 95% confidence level to show that capital adequacy is statistically

insignificant in influencing the independent variable. Management efficiency has a coefficient of -4.626 which negatively influences the independent variable. A unit increase in management efficiency will cause financial performance to decrease by 4.626 units. The t value of -0.85 is less than 1.96 shows that management efficiency is statistically insignificant in influencing financial performance. This is also shown by the two-tail p value of 0.397 which is lower than 0.05.

CHAPTER FIVE.

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.

5.0 Introduction

This chapter presents the summary of the findings of the study, the conclusions and recommendations. It also provides some suggestions for further study.

5.1 Summary of findings

The research set out to investigate the determinants of financial performance of micro finance institutions putting keen interest especially to those in Nairobi County. This was an explanatory study that used secondary data collected through review of audited financial statements of the selected microfinance institutions. Data from a sample of fourteen firms was obtained and analysed. The data contained information for the period January 2005 through to December 2012 on Return on Equity, Capital Adequacy, Liquidity management, Outreach level, Management Efficiency and asset quality, these being variables formulated from measurement of different financial ratios as explained in the methodology. The study utilized panel data regression analysis to provide information on the descriptive statistics of various variables of the regression model together with the coefficients of the regression model.

In order to achieve the specific objective, the study utilized the hypothesis that asset quality has no influence on financial performance of Micro Finance Institutions in Nairobi Kenya The results of the study rejected this null hypothesis at 95% confidence level where coefficient was 34.364 and the t value was 2.76 ($t>1.96$). Asset quality had a positive and significant influence on financial performance of MFIs in Nairobi County. This was in line with the results from a study by (Ongaki, 2012) which indicated that there is a positive relationship between profit ratio and asset quality ratio. An increase in asset quality ratio leads to an increase in profit margin. (Tehulu, 2013) used unbalanced panel data collected from 23 microfinance institutions (MFIs) in East Africa from the period 2004 to 2009, the regression results revealed that MFIs' financial sustainability is positively and significantly driven by loans intensity and size.

The second hypothesis of the study was that capital adequacy has no influence on the financial performance of Micro Finance Institutions in Nairobi Kenya. The results of the study accepted the null hypothesis at 95% confidence level where the coefficient of -8.636 and t value of -1.22 ($t<1.96$) revealed a negative and statistically insignificant effect on financial performance of MFIs in Nairobi county. This is in line with the findings of (Muriu, 2011) who found that a proportionally higher deposit as a percentage of total assets is associated with improved profitability. However, the magnitude of this effect is very sensitive to MFI age.

The third hypothesis was that liquidity management efficiency has no influence on the financial performance of Micro Finance Institutions in Nairobi Kenya. The results of the study accepted the null hypothesis at 95% confidence level where the coefficient of 1.378 and t value of 0.29($t<1.96$). Liquidity management was found to be positively related but statistically insignificant in determining the financial performance of MFIs in Nairobi County. (Molyneux & Thornton, 1992), found a negative and significant relationship between the level of liquidity and profitability. In contrast, (Bourke, 1989) reported an opposite result.

The fourth null hypothesis was that Management efficiency has no influence on the financial performance of Micro Finance Institutions in Nairobi Kenya was accepted. This conclusion was in line with the result of the study at 95% confidence level where the coefficient was -4.626 and a t value of -0.85. Management efficiency was found to be negatively related and statistically insignificant in determining the financial performance of MFIs in Nairobi County. These findings contradict those of (Bourke, 1989) which concluded that efficiency raises the profitability of financial institutions, implying a negative relationship between operating expense ratio and profitability (Bourke, 1989). A study on Malaysian financial institutions by (Guru, Staunton, & Balalashanmugam, 2002) also shows that efficient management is among the most important factors that explain high profitability.

The last hypothesis of this study was that outreach level has no influence on the financial performance of Micro Finance Institutions in Nairobi Kenya. The results of the study accepted this hypothesis at 95% confidence level where the coefficient of 0.0000037 and a t value of 0.29 ($t<1.96$). Outreach level was found to have a weak positive relationship and statistically insignificant as a determinant of financial performance of MFIs in Nairobi County. These findings were in line with that of (Hartaska, 2005) who found that the number of borrowers had no significant impact on financial performance. (Cull, Demirguc-Kunt, & Morduch, 2007) Provided a new dimension to existing literature in their study which explicitly explored whether there is empirical evidence for a trade-off between the depth of outreach and profitability. They look into this issue by examining whether more profitability is associated with a lower depth of outreach to the poor and the institutional design with respect to the trade-off between financial performance and depth of outreach of microfinance. By running regressions it was found that financial self-sufficiency is not linked to any of the outreach measures and concluded that the pursuit of profit and outreach can go hand in hand.

5.2 Conclusions

This paper set out to investigate the determinants of financial performance of micro financial institutions in Nairobi County. The study specific objectives of the study were to determine the influence of asset quality, liquidity management, management efficiency, outreach level and capital adequacy on the financial performance of Micro Finance institutions in Nairobi Kenya.

The findings of this study indicate that capital adequacy, management efficiency, outreach level and liquidity management were statistically insignificant in influencing the financial performance of Micro finance institutions in Nairobi. Despite being statistically insignificant, Liquidity management and outreach level had a positive influence on financial performance measured by ROE while capital adequacy and management efficiency had a negative influence on financial performance as indicated by the beta coefficients It can be concluded that Return on Equity which is a measure of

the firm's financial health did not have a significant relationship with capital adequacy, management efficiency, outreach level and liquidity management.

The result also indicated that asset quality was statistically significant in influencing financial performance of Micro finance institutions in Nairobi. Asset quality had a positive influence on the dependent variable with a beta coefficient of 34.364. This means that a large effect on the resultant value of the dependent variable is largely being as a result of Asset quality. This demonstrates that apart from asset quality, the other independent variables in this model are not the primary determinants for financial performance of MFIs in Nairobi County.

The study therefore demonstrated that financial performance can be achieved in firms by directly applying and managing asset quality since it is an important determinant of financial performance of MFIs in Nairobi County. The statistically insignificant variable, Capital adequacy, management efficiency, outreach level and liquidity management should however not be ignored since they still have an effect on financial performance of MFIs to some extent.

5.3 Policy recommendations

The MFIs should focus more effort on formulating plans, strategies and policies that directly enhance and influence asset quality and other factors which directly influence asset quality so as to achieve an improvement on financial performance besides working on improving the overall organization efficiency. Other factors that influence asset quality apart from portfolio at risk which was an indicator of asset quality in this study should also be managed to achieve great financial performance.

No two firms will have the same challenges all the time. Having various unique operations and clientele, firms need to focus on improving their unique strengths and focus more on determinants that greatly contribute to their financial performance even though the determinants are statistically insignificant in this study. A wide range of products and service delivery to a firm's core market are also important.

Micro Finance Institutions are still in the growth stage although they are growing fast. There should be government policies laid down to support the growth of this sector and

protect it from the large commercial banks due to the role it plays in reaching the low income earners and the unbanked.

More efforts are needed from the regulatory agencies and government in monitoring the operations of MFIs so as to protect customer deposits and ensure that MFIs are managed professionally.

5.4 Suggestions for further studies

An extended research can be carried out on other alternative determinants besides the ones stated in this study to understand their influence on financial performance of micro finance institutions.

A study can be undertaken on the role of MFIs in the economic growth and its impact on poverty alleviation especially in the low income areas of Kenya. Key emphasis should be put on innovation to increase financial performance of MFIs.

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LIST OF APPENDICES.

APPENDIX 1.

List of MFIs Studied

1. Faulu Kenya Ltd
2. K-rep bank.
3. Equity Bank Ltd
4. Kenya Women Finance Trust-DTM.
5. SMEP- Small and Micro Enterprise Project DTM.
6. ECLOF-Kenya Ecumenical Church Loan Fund.
7. Kenya Agency to Development of Enterprise and Technology.
8. Micro Africa Ltd
9. Opportunity Kenya
10. Yehu Microfinance
11. Pamoja Women Development Programme
12. Juhudi Kilimo Co. Ltd
13. Kenya Entrepreneurship Empowerment Foundation
14. Business Initiative and Management Assistance Services

APPENDIX 2..

DATA RATIOS USED IN ANALYSIS.

The firm numbers 1-14 represent the various MFIs as listed in appendix 1 respectively. The ratios are calculated from the various specific data sets from audited financial papers.

firm	Year	CAPITAL ADEQUACY	LIQUIDITY MANAGEMENT	OUTREACH LEVEL	ROE	MANAGEMENT EFFICIENCY	ASSET QUALITY
1	2005	0.2738	0.615	39074	0.0202	0.2109	0.078
1	2006	0.2184	0.626	68434	0.2479	0.167	0.032
1	2007	0.1722	0.616	90339	0.1531	0.2143	0.02
1	2008	0.1412	0.502	91105	-0.0696	0.212	0.0343
1	2009	0.1514	0.6636	102371	-0.1207	0.2624	0.086
1	2010	0.1207	0.6927	85226	-0.2521	0.3046	0.1082
1	2011	0.1082	0.5939	82328	-0.0439	0.2639	0.139
1	2012	0.0862	0.8672	78387	0.2787	0.2261	0.0643
2	2005	0.2089	0.7941	69279	0.0419	0.1671	0.0942
2	2006	0.172	0.8779	114301	0.1196	0.1763	0.0546
2	2007	0.1446	0.8641	153961	0.1366	0.1893	0.1257
2	2008	0.1363	0.7269	66215	-0.327	0.268	0.2233
2	2009	0.1551	0.8222	67987	-0.1878	0.2517	0.2674
2	2010	0.1509	0.9111	65073	0.0447	0.1784	0.2372
2	2011	0.2822	0.6837	55441	0.1027	0.1431	0.0818
2	2012	0.1681	0.8883	25802	0.2585	0.1529	0.13
3	2005	0.1391	1.5298	110112	0.2405	0.1524	0.243
3	2006	0.1099	2.2009	239541	0.397	0.1522	0.1219
3	2007	0.281	1.4188	392822	0.2208	0.1082	0.0811
3	2008	0.2549	1.1704	542249	0.2151	0.1231	0.0857
3	2009	0.2418	1.0608	715969	0.2122	0.1165	0.1819
3	2010	0.2114	1.2754	524902	0.2889	0.1103	0.0668
3	2011	0.1981	1.1537	630088	0.3241	0.1037	0.0346
3	2012	0.1977	1.1253	655969	0.2961	0.1103	0.0641
4	2005	0.321	0.6049	62970	0.1099	0.1898	0.0174
4	2006	0.2679	0.5593	85555	0.149	0.1752	0.0362
4	2007	0.2288	0.4308	164568	0.2099	0.1832	0.0123
4	2008	0.1889	0.3972	247532	0.3221	0.1869	0.0238
4	2009	0.1854	0.4206	334188	0.2819	0.2175	0.0131
4	2010	0.0856	0.502	413040	0.1247	0.208	0.1553
4	2011	0.113	0.6177	279850	0.1307	0.2128	0.0824
4	2012	0.1146	0.7072	247375	0.2371	0.248	0.0555
5	2005	0.31	0.5234	21633	0.0711	0.1873	0.1157
5	2006	0.2994	0.539	21542	0.0178	0.2014	0.1234
5	2007	0.2783	0.5519	23787	0.0241	0.2321	0.2402
5	2008	0.2092	0.4787	36649	0.0158	0.2429	0.164
5	2009	0.2174	0.5607	85678	0.0474	0.2415	0.213
5	2010	0.129	0.5195	37822	0.1164	0.2601	0.1413
5	2011	0.1296	0.5312	52139	0.0836	0.2389	0.1624

5	2012	0.2002	0.5485	52055	0.084	0.26	0.201
6	2005	0.3254	0.4454	13550	-0.2022	0.2323	0.06141
6	2006	0.3456	0.4656	13200	-0.2133	0.2567	0.0771
6	2007	0.352	0.4648	13600	-0.2322	0.2424	0.0712
6	2008	0.2918	0.5896	14343	-0.2422	0.2723	0.0802
6	2009	0.2894	0.5677	16902	0.1182	0.2012	0.0806
6	2010	0.2812	0.5814	15513	0.0491	0.2242	0.1403
6	2011	0.26451	0.6548	18947	0.0388	0.2113	0.0575
6	2012	0.2505	0.7389	17658	-0.0937	0.2214	0.0811
7	2005	0.4257	0.6814	13018	-0.146	0.318	0.0014
7	2006	0.4841	0.5668	16575	-0.1385	0.3273	0.0764
7	2007	0.3929	0.5403	19421	-0.488	0.478	0.1717
7	2008	0.3415	0.5987	15135	-0.6102	0.3609	0.0587
7	2009	0.2871	0.6336	17358	-0.3182	0.3362	0.0949
7	2010	0.2518	0.6636	17559	-0.2349	0.2827	0.0573
7	2011	0.194	0.8492	12420	-0.3958	0.2656	0.0911
7	2012	0.1433	0.6819	15520	1.719	0.417	0.062
8	2005	0.213	0	2383	-0.4073	0.5392	0.0999
8	2006	0.1533	0	2479	0.0788	0.1889	0.105
8	2007	0.6771	0	1946	1.3623	0.2544	0.0985
8	2008	0.5786	0	3225	-0.0149	0.1581	0.0982
8	2009	0.5305	0.1952	5765	0.0735	0.1708	0.0445
8	2010	0.4873	0.2714	9540	0.1707	0.5109	0.0357
8	2011	0.2811	0.1555	12684	1.2537	0.4152	0.0639
8	2012	0.2751	0.1424	14525	1.3721	0.4524	0.0526
9	2005	0.1211	0.012	5217	0.98654	0.5122	0.0685
9	2006	0.1234	0.2201	7451	-0.7268	0.5239	0.0702
9	2007	0.1343	0.2309	8137	-0.7896	0.5329	0.0782
9	2008	-0.0886	0.5157	10332	86.9979	0.5448	0.2347
9	2009	-0.1835	0.4611	6758	1.3239	0.4502	0.0211
9	2010	-0.0818	0.4706	7341	0.9693	0.3655	0.0037
9	2011	0.2138	0.5006	8862	-0.6232	0.3743	0.0085
9	2012	0.2221	0.6021	9250	-0.4251	0.3112	0.0095
10	2005	0.0565	0.4908	20000	1.9367	0.1483	0.00212
10	2006	0.0875	0.4591	35000	0.9993	0.0966	0.01001
10	2007	0.085	0.4078	37600	0.2982	0.1066	0
10	2008	0.0311	0.7816	42000	0.2599	0.1873	0
10	2009	0.025	0.7632	27624	0.088	0.1974	0.0356
10	2010	0.0046	0.7765	31427	0.0213	0.2013	0.0374
10	2011	0.1204	0.7739	38517	0.5478	0.2201	0.0553
10	2012	0.1113	0.785	42350	0.3125	0.2165	0.0546
11	2005	0.6342	0.3586	4635	-0.0923	0.1792	0.2151
11	2006	0.542	0.2751	4047	-0.2911	0.262	0.368
11	2007	0.4599	1.3065	6147	-0.2512	0.2519	0.2125
11	2008	0.222	0.5861	14003	0.5286	0.2654	0.052
11	2009	0.7114	0.25466	3304	0.3253	0.2415	0.0553
11	2010	0.7214	0.3256	4520	0.0122	0.2654	0.0037
11	2011	0.6751	0.4586	4251	0.2356	0.2145	0.2544
11	2012	0.6584	0.2356	4125	0.1232	0.2215	0.2012
12	2005	0.1122	0.4125	5207	-0.2912	0.3009	0.2591
12	2006	0.1294	0.1256	6524	-0.1486	0.2717	0.3781
12	2007	0.2395	0.2556	9850	0.0053	0.3729	0.2227

12	2008	0.0394	0.3487	12241	0.0073	0.3917	0.0527
12	2009	0.2144	0.4595	3562	-0.2917	0.3719	0.1209
12	2010	0.1303	0	3471	-0.8465	0.3719	0.0526
12	2011	0.0203	0	4506	-1.3363	0.3025	0.0922
12	2012	0.0085	0.3551	9518	-1.609	0.2888	0.0322
13	2005	0.5257	0.9915	11637	-0.0515	0.2196	0.1501
13	2006	0.5517	0.9518	9796	0.0294	0.1184	0.1657
13	2007	0.4521	0.8176	10963	0.0241	0.1488	0.0789
13	2008	0.4313	0.8024	12252	0.0419	0.1337	0.0914
13	2009	0.3774	0.8611	10353	-0.0657	0.172	0.1201
13	2010	0.4186	0.6073	9749	0.0785	0.1528	0.0459
13	2011	0.3453	0.5131	10221	-0.0128	0.2574	0.0456
13	2012	0.3041	0.508	10347	0.1107	0.1114	0.078
14	2005	0.8157	0.2135	2596	-0.3116	0.7114	0
14	2006	0.0974	0.2532	4516	-0.7959	0.8484	0
14	2007	0.9809	0	4951	0.7431	0.281	0.0256
14	2008	0.8948	0	6151	0.163	0.3408	0.02455
14	2009	0.5147	0.6152	9613	0.6975	0.4526	0.0407
14	2010	0.5052	0.5058	803	-9.9874	2.0118	0
14	2011	0.5841	0.1542	150	0.3654	0.7542	0.0325
14	2012	0.6021	0.4521	208	0.212	0.9542	0.0231

APPENDIX 3.

RANDOM EFFECTS GLS REGRESSSION.

Random-effects GLS regression — Number of obs = 112
Group variable: firm — Number of groups = 14
R-sq: within = 0.0717 — Obs per group: min = 8
between = 0.1030 — avg = 8.0
overall = 0.0673 — max = 8
Random effects u_i ~ Gaussian — Wald chi2(5) = 7.66
corr(u_i, X) = 0 (assumed) — Prob > chi2 = 0.1758

ROE	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Management efficiency	1.717454	3.88495	0.44	0.658	-5.896909	9.331817
Asset quality	20.66651	10.32153	2.00	0.045	.436695	40.89633
Outreach level	-1.48e-06	6.73e-06	-0.22	0.825	-.0000147	.0000117
Liquidity management	-1.157323	2.770623	-0.42	0.676	-6.587644	4.272997
Capital adequacy	-7.917539	4.071914	-1.94	0.052	-15.89834	.0632661
Constant	1.284097	2.755819	0.47	0.641	-4.11721	6.685403

sigma_u	1.3010187
sigma_e	8.0821797
rho	.02525805 (fraction of variance due to u_i)