

**THE RELATIONSHIP BETWEEN FIRM SIZE AND
FINANCIAL PERFORMANCE OF MICROFINANCE
BANKS IN KENYA**

HALIMA S. OMAR

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DECLARATION

This research project is my original work and has not been presented to any other institution of higher learning for an award of a certificate, diploma or a degree.

Signature Date.....

Halima Omar

D61/61202/2013

This research project has been submitted for examination with my approval as the University of Nairobi supervisor

Signature Date.....

Mr. James Ng'ang'a

Lecturer, University of Nairobi

Department of Finance and Accounting

University of Nairobi

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DEDICATION

This project is dedicated to my family and friends who gave me moral support and encouragement when I was pursuing my studies.

ABSTRACT

The banking industry has had stiff competition over the last few years. This kind of competition has forced microfinance banks to adjust themselves in order to cope with this kind of environment to meet customer expectations. The sought to determine the relationship between firm size and financial performance of microfinance banks in Kenya. The study used a descriptive survey. The study carried out a census survey of nine (9) microfinance banks that had been in operation for five years (2010-2014). The study used secondary sources of data that was obtained from central bank of Kenya audited reports of the nine microfinance banks. Data analysis involved descriptive statistics, correlation analysis and regression analysis. The study found that most microfinance banks are small in size and however most of them have experienced high growth over the years in terms of customer deposits and operating efficiency. This could be attributable to improved financial performance and growth in asset base in the period of study. Pearson's correlation results found that there was no correlation between asset quality, log of assets and customer deposits with financial performance of microfinance banks in Kenya apart from operating efficiency and financial performance which was found to have a strong correlation. The regression analysis concluded that operating efficiency and logarithm of assets had a statistically significant relationship with financial performance of microfinance banks in Kenya. The limitation of this study is that the study faced significant funding and costs constraints which limited the scope of the study to microfinance banks. A comparative study should be conducted in other sectors like manufacturing firms, insurance companies or investment firms to find out which kind of relationship that exists between firm size and financial performance then findings can be compared and plausible conclusions drawn.

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ABBREVIATIONS AND ACRONYMS

CBK- Central Bank of Kenya

KEPSS-Kenya Electronic Payment and Settlements System

ROA-Return on Assets

ROE-Return on Equity

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The contemporary business environment is constantly changing. This has forced firms to find ways of dealing with this kind of competition. Chell and Baines (2000) argue that one of the ways that most firms are adapting to is reducing costs of operations, use of debt to benefit from tax deductions, purchasing raw materials in large quantities to get discounts and maintain good relations with suppliers and other stakeholders. In so doing, firms are able to enhance their profitability. Thus, the firm is able to grow and increase on its size. Chell and Baines (2004) further indicate that a larger firm is open to many opportunities: the top management can consider opening new branches to increase their sales, outreach, and increase their capacity and profitability. This acts as a proxy for improved growth and financial performance of the firm. It accrues a number of benefits for instance it enables the firm to easily qualify for credit facilities, gain trust from its suppliers, and thus improve financial performance. This is in line with the Boyd and Runkle's (1993) who showed that there is a positive relationship between firm size and asset return volatility.

According to Brewer and Jagtiani (2013) the size of the firm affects its financial performance in many ways. Large firms can exploit economies of scale and scope and thus being more efficient compared to small firms. It is worth noting that small sized firms might have less power compared to large firms and thus they might find it difficult to effectively compete with large firms especially in competitive markets. On the other hand, as firms become larger, they might suffer from inefficiencies, leading to inferior financial performance. Large firms are more likely to manage their working capital components efficiently than small firms.

Most large firms enjoy economies of scale hence they are able to mitigate their costs and boost financial performance. This means that a positive relationship is expected between the size of the firm and profitability. Chell and Baines (2004) posit that growth of small firms is more sensitive to internal finance than that of larger firms. Small firms are more likely to face financial constraints; this prevents them to gain access to finances from banks. These firms are prepared to pay higher interest rates for additional loans and thus fail to consider issuing external equity in order to stay in control.

1.1.1 Size of the Firm

Schmalensee (2001) define size in terms of total assets and used a number of accounting profitability measures including profit margin and return on assets. Boyd and Runkle (1993) argue that a larger firm is more cost efficient and less likely to fail. This theory suggests that being bigger proffers an advantage in reducing pooled risks through a large number of contracting parties, thereby reducing the possibility of failure. Larger institutions are believed to have more profitable investment opportunities, higher efficiency, more diversification and a lower risk level. As pointed out by Mainelli and Giffords (2010), firms larger in size can enjoy economies of scale and scope, and also pass an important criterion to enable them to compete globally.

The size of a firm can be measured in a number of ways: assets, sales, employees and value added are commonly used measures. Technological theories of the firm that focus on economies of scale arising out of capital inputs would argue that assets or sales are the preferred measures of size. According to the organizational theory is of the firm: size and sales might not be preferable measures of size. This is because the

primary concern for this theory is how transactions, agency and span of control costs affect profitability (Mainelli and Giffords, 2010) Costs that are associated primarily with how the organization is controlled through a hierarchy rather than with the value and number of physical assets. Therefore, value added or number of employees rather than assets or sales is a better measure of firm size for organizational theories.

1.1.2 Financial Performance

According to Penman (2007) financial performance can be defined as the accomplishment of a given task that is measured using predetermined standards of accuracy completeness, efficiency and effectiveness. Financial performance measures are used to evaluate how well a company is using its resources to make profits. Examples of financial performance include operating income, earnings before interest and taxes, and net asset value. It is important to note that no one measure of financial performance should be taken on its own. Rather, a thorough assessment of a firm's performance should take into consideration more than one measure of financial performance.

The measures of financial performance are: return on equity (ROE) and return on assets (ROA): Return on equity measures the efficiency of a firm at generating profits from each unit of shareholder equity, also known as net assets or assets minus liabilities. Return on assets expresses the net income earned by a company as a percentage of the total assets available for use by that company. With return on Assets companies with higher amounts of assets should be able to earn higher levels of income and profitability. Return on Assets measures management's ability to earn a return on the firm's resource (Pandy, 2005).

1.1.3 The Relationship between Firm Size and Financial Performance

Firm size, is an important characteristic to gain performance. Large firms have more resources and capacity to undertake more product lines and higher production capacity together with organizational resources. This enables the firm to improve their financial performance since they can mitigate risks (Alvarez and Barney, 2001). Although smaller firms may be more flexible, it can be argued that larger firms have better prerequisites for behavior compared to their smaller counterparts. This is because larger firms may be better equipped to engage in inter-firm networking both in width (number of networking actors) and depth (networking intensity with the actors), with other organizations as well as outside the banking industry (Pais and Stork, 2011)

Large firms are posited to exhibit more trust to their cooperative partners in compared to smaller firms. This kind of trust enables large firms to gain high level of confidence that a firm has for its cooperative partners in matters of reliability and integrity to accomplish their obligation in the partnership. Boyd and Runkle (1993) argue that trust can serve as a substitute for, or a complement to, more formalized governance structure. Firms characterized by high levels of trust in cooperative partners will expect less potential drawbacks from exposure to possible losses or harm derived from actions taken by its partners in a situation of dependence and uncertainty. This assists the firm to save costs and hence improve financial performance.

1.1.4 Microfinance Banks in Kenya

Microfinance banks play a pivotal role in deepening the financial markets by expanding access to affordable and appropriate financial services and products to majority of Kenyans. The microfinance Act, 2006 and Regulations 2008 was

operationalized to an enabling environment for microfinance banks to grow and increase their size (CBK, 2013).

Some of the reforms that have been carried out in the sector include: giving microfinance banks a chance to participate in the national payments system that involves the Kenya Electronic Payment and Settlements System (KEPSS), designed to process large value and time critical payments on a real time basis (Robinson, 2002). Today, microfinance banks can now apply to the CBK to offer an expanded and diversified product range including money remittances and foreign exchange transactions. This will enable them to grow and expand (Sharma & Nepal, 1997).

But most microfinance firms are intent on expanding their operations. Growth of some kind, either in revenues, profits, number of employees, or size of facilities, is essential for almost every business. This has been as a result of trying to cope with the external environment in terms of expansion, market share and profitability (Robinson, 2002). This however is critical for the survival of these microfinance banks. Some microfinance banks are engaging themselves in corporate social responsibility in order to increase their sales volumes. This is intended to create a good corporate reputation in order to market the organization and increase confidence of their products and services to customers.

1.2 Research Problem

Growth plays a pivotal role in performance of the firm. A large firm can easily expand its existing operations through diversification. This is because they possess huge resources and capacity to invest (Freel, 2000). In turn, the firm is able to mitigate its financial losses as compared to smaller firms. This highly contributes to improved financial performance. Keister (2001) posits that profits and size have a positive

relationship. Freel (2000) argues that large firms are less susceptible to bankruptcy because they tend to be more diversified than smaller companies. Low levels of bankruptcy enable large firms to take on more debts. Larger firms might reduce the level of information asymmetries in the market and obtain financial resources more easily which in turn leads to financial performance of the firm.

The banking industry has had stiff competition over the last few years. This kind of competition has forced microfinance banks to adjust themselves in order to cope with this kind of environment to meet customer expectations. Robinson (2002) indicates that some microfinance banks are diversifying their portfolios to mitigate risks in the external environment. Others have invested in modern technologies to cut operational costs. This is intended to boost performance and increase their size (Rao, 2001).

Studies by Hall and Weiss (1967) reported that size did tend to be associated with higher profit rates among the Fortune 500 companies for the years 1956 through 1962. Rajan and Zingales (2001) did a study on the relationship between size of the firm and profitability in United States manufacturing firms. The results of the study confirmed that the size of the firm was a contributor to profitability. Osborn (1997) explored on the impact of firm size on profitability of small manufacturing firm in Europe. A positive correlation between smaller firms and profitability was found to exist.

Kithuka (2013) did a study on the relationship between firm size and financial innovation of firms listed at the Nairobi Securities Exchange. The study found that the firm size influenced financial innovation. Mahfoudh (2013) studied the effect of selected firm characteristics on financial performance of firms listed in the agricultural sector at the Nairobi securities exchange. The results of the study revealed

that there was a statistically significant relationship between firm characteristics: size, firm age and financial performance. Tale (2013) investigated the relationship between capital structure and performance of non-financial firms. The results of the control variable: the size of the firm showed a positive relationship with financial performance of non-financial firms.

From the above studies, little focus has been laid in relation to the effect of firm size and financial performance of microfinance banks in Kenya. This study therefore sought to fill this gap by finding an answer to the following research question: what is the effect of the size of the firm and financial performance of microfinance banks in Kenya?

1.3 Research Objective

To determine the relationship between firm size and financial performance of microfinance banks in Kenya.

1.4 Value of the Study

The banking industry will benefit from this study since they will understand how the size of the firm improves financial performance in the microfinance sector. In addition, it will provide more information on the risks involved and the benefits of having large sized firms.

Policy industry: central bank of Kenya is a partner in policy setting. The findings of this study will be used by the government in policy setting and regulation. This will ensure that microfinance banks engage in activities that can assist them to grow and expand their business to improve their size and achieve financial stability.

Researchers will also benefit from the findings of the study. It will provide more knowledge on the advantages of large firms over smaller firms. In addition, future students will learn more about the theories that support the study, their relevance and application in the field of finance. The findings of this study may be used as a platform for further researcher.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides the theoretical foundation, the determinants of financial performance, the empirical review and the summary of the literature review.

2.2 Theoretical Framework

This section covers the theories that support the relationship between size of the firm and financial performance. The theories include: Trade off theory, pecking order theory and institutional theory.

2.2.1 Trade off Theory

Jensen and Meckling (1976), in this theory say that every firm has an optimal debt to equity ratio that maximizes its value. The theory affirms that firms have optimal capital structure, which they determine by trading off the costs against the benefits of the use of debt and equity. Jensen (2006) stated that the benefits from debt tax shield are adjusted against cost of financial distress. Agency cost, informational asymmetry and transaction cost are some of the other costs to be mitigated.

The theory predicts that an optimal target financial debt ratio exists, which maximizes the value of the firm (James and Van, 2002). The optimal point can be attained when the marginal value of the benefits associated with debt issues exactly offsets the increase in the present value of the costs associated with issuing more debt (Myers 2001). The cost of holding cash includes low rate of return of these assets because of liquidity premium and possibly tax disadvantage. The benefits of holding cash are in two fold (Eljelly, 2004). The firms save transaction costs to raise funds

and do not need to liquidate assets to make payments and the firm can use liquid assets to finance its activities and investment if other source of funding is not available or are extremely expensive (Jose, Lancaster and Stevens, 1996).

Thus, trade-off theory implies that company's capital structure decision involves a trade-off between the tax benefits of debt financing and the costs of financial distress. When firms adjust their capital structure, they tend to move toward a target debt ratio that is consistent with theories based on tradeoffs between the costs and benefits of debt. Hovakimian, Opler, and Titman (2001) empirical work, explicitly account for the fact that firms may face impediments to movements toward their target ratio, and that the target ratio may change over time as the firm's profitability (P) and stock price change.

2.2.2 Pecking Order Theory

Ross (1996) propagated that this theory emerged as a result of asymmetric information existing in the financial markets, that is, corporate managers often have better information about the health of their companies than outside investors. Apart from the transaction costs of issuing new securities, companies have to accept the information costs arising from asymmetric information. In this way, new securities issued on the financial market could be infra-valued because of informational asymmetries, and this is especially true in the case of new equities.

Myers & Majluf (1984) introduced very influential pecking order theory saying; manager prefers to finance deficit of capital by issuing safe security. The theory states that, in the event where retained earnings and other internal source of financing will be low to invest then manager will issue debt and only issue new equity with possibility of issuing junk debt (Financial distress possibility). An important survey of

Myers (2003) documented the following findings on the pecking order theory of corporate financing: firms prefer to use internal source of fund as their first choice. Dividend payout ratio has separate determinants. A change in dividend payout ratio does not facilitate capital expenditure.

A determinant of cash holding from the perspective of pecking order theory has been supported by other researchers more than trade off theory. Sebastian (2010) examines Dutch firm's liquidity and solvency and their effect on financial decision. He discovers that, corporate liquidity and solvency interact through information, hedging, and leverage channels. The information and hedging channels increase equity- value of firms which helps to pay regular dividend and most importantly reduce volatility in cash flow. Frank & Goyal (2003) Studied US firms (1971-1998) and came up with evidence that bigger firms are more organized to take decision followed by this theory. Smaller firms were not following this theory and being traded publicly during that time which also supports trade-off theory. As the smaller firms moved away from pecking order theory so, overall average moves further from the pecking order.

Soku (2008) tested US firms (1971-2006) and found different security issues pattern by small, medium and large industry. While testing financial flexibility and capital structure of the firms the author observed that, large mature firms prefer using internal funds and safe debt in order to recharge financial flexibility rather than issuing equity. In case of small firms though they have low leverage, in order to cope with lack of cash at hand, they prefer to issue equity and increase cash holdings. However he ends up with Financial flexibility hypothesis which refers firms hold cash and expect future cash flow, and that characterize their future investment plan and current ability to sort out financial constraints.

2.2.3 Institutional Theory

According to North (1991) Institutionists focus mainly on financial sustainability of microfinance institutions. According to these theorists, a large firm is more likely to be sustainable compared to a smaller firm. Woller et al (1999) indicates that the institutionists view financial deepening as the main objective of microfinance institutions. Financial deepening refers to creating a sustainable financial intermediation for the poor or the lower end so that they can gain access to financial services. Most large firms are can gain easily gain access to credit compared to smaller firms this improves their chances of performing well since they stand to benefit from tax deductions.

Institutionists assert that the financial sustainability as measured by financial self-sufficiency (profitability) should be given higher priority by all MFIs (Brau and Woller, 2004). Their argument comes from the fact that in most cases donor dependence is not certain and thus, unless an MFI is able to sustain itself financially it will not be able to serve the poor in the long run. Contrary to promoting financial sustainability, there is a potential tension that over emphasis on financial self-sustainability may lead an MFI into moving away from its poverty reduction objective (Drake and Rhyne, 2002). A close examination of the arguments put forward by institutionists can reveal that it is a financing issue (Brusov et al., 2013). However, large firms are more easily access finances compared to smaller firms. This is because on one hand, the institutionists would like to see MFIs meeting all their costs from self-generated funds with a possibility of making profit without using any external funds. This is what they would call a sustainable MFI. Provided the MFIs can continue with operations and thereby meet their social objectives they have attained sustainability. Their focus is on targeted depth of outreach rather than scale (breadth

of outreach) or financial self-sufficiency (Brau and Woller, 2004). Thus, as Woller et al (1999) have argued, what matters is how subsidies are used and not whether they are used or not.

The relevance of this theory is that large firms perform better than smaller firms. This is because they take advantage of their size to enjoy privileges for example: tax deduction, discounts economies of scale to achieve financial performance. Thus, they are able to mitigate costs and improve financial performance. Most large firms are reliable; they deliver goods and services on time since they create good relationships with their suppliers. This helps them create a good corporate reputation and thus build trust with their customers (North, 1991).

2.3 Determinants of Financial Performance

This study will discuss the following determinants of financial performance namely: the size of the firm, growth, market share, management competence index.

Lee (2008) indicates that a positive relationship exists between size and financial performance of a firm due to operating costs efficiencies through increasing and economizing on unit of cost. Large firms enable insurers to effectively diversify their assumed risks and respond quickly to changes in market condition. Industrialization economists argue that large firms possess monopoly power that allows them to set policies above the economic costs involved in the production of the products resulting in additional profit for the larger firms.

Liargovas (2008) points out those large firms are able to diversify their investment portfolios and this could reduce their business risks. Liargovas and Skandalis (2008) suggest that large firms generally outperform smaller ones because they manage to utilize economies of scale and have the resources to attract and retain managerial

talent. Therefore, it is expected that performance is positively related with size of company.

Lumpkin and Dess (1999) point out that inflation may have direct effects on the rise in the price of labor and indirect effects on the changes in interest rates and assets prices on the financial performance of banks. According to Majumdar (1997), the effect of inflation on bank performance depends on whether the inflation is anticipated or unanticipated (Adams and Buckle, 2000).

In the anticipated inflation the interest rates are adjusted accordingly resulting in revenues, which increase faster than costs, with a positive impact on profitability. In the unanticipated inflation the banks may be slow in adjusting their interest rates, which results in a faster increase of bank costs than bank revenues that consequently have a negative impact on bank's financial performance (Lumpkin and Dess, 1999).

Another determinant for financial performance is liquidity management. The bank is charged with the responsibility of providing financial needs of its customers. That is loans and deposits. The ratio of bank's loans divided by customers plus short-term funding is used as a measure of liquidity. A large firm can easily hold a lot of cash since it is able to borrow compared to a smaller firm (Kakani et al., 2001).

This makes large firms more liquid than smaller firms since they can be able to pay short term debts and thus build a good reputation with its suppliers. This makes it possible for these firms to provide quality services to their customers leading to increased customer satisfaction. This leads to increased sales thus improved financial performance. According to Kakani & Reddy (2001) higher figures denote lower liquidity. Without the required liquidity and funding to meet obligations, a bank may fail. Thus, in order to avoid insolvency problems, bank often hold liquid assets, which

can be easily converted to cash. However, liquid assets are usually associated with lower rates of return. It would be therefore expected that higher liquidity would be associated with lower profitability.

Growth in the market share highly contributes to the profitability of a firm. The connection between market share and financial performance has been recognized by corporate executives and consultants. This is because firms that have a higher market share record high financial performance in most cases. This is because these firms have high sales turnover. Adams and Buckle (2000) explains that economies of scale is one of the most obvious rationale for the high rate of return enjoyed by large-scale businesses such that they have achieved economies of scale in procurement, manufacturing, marketing, and other cost components (Liargovas and Skandalis, 2008).

Majumdar (1997) notes that with regard to product quality the price of getting market share, in analogy to the prices in perfect markets for investment goods must be expected to adjust so that one does make a long term profit on investment in market share. This means that higher returns from a high market share leads to a higher price paid earlier to get the market share.

According to Adams and Buckle (2000) larger firms have been shown to have higher survival rates, since size and economies of scale are related. And growth is necessary to achieve size, then growth could be argued to be a positive indicator of future profitability. Firms that exhibit high growth in a new market may also have profitability advantages, as early access to distribution channels and exclusive contracts with suppliers and buyers might create a favorable cost structure.

The term competence is used to explain certain traits and behavior of the top management. It could be skills, knowledge, social role or trait that the management of the firm uses or demonstrates when executing their roles in the firm. A competent management team is efficient in its role since it's able to make accurate decisions that direct the firm towards achieving financial performance (Athanasoglou et al. 2008).

Lee (2008) points out that the level of management competence is determined through performance. Firms that have competent staff record high results this is because the firm is able to cut down on operational costs. This is achieved through hiring competent staff and employing the right technology for improved operational costs. The top level management should demonstrate competence through making the right investment decisions. This helps to improve financial performance since they firm is able to project and invest in profitable ventures that promise higher returns.

2.4 Empirical Review

This part consists of international and local studies in relation to firm size and financial performance of firms.

2.4.1 International Studies

Velnamby and Nimalathan (2010) studied the effect of firm size and profitability of Bank of Ceylon (BOC) and Commercial Bank of Ceylon Ltd (CBC). A longitudinal study was conducted and the study was conducted within a period of ten years. Correlation analysis was conducted on the secondary data indices. The results revealed that there was a positive relationship between firm size and profitability of commercial banks.

A study by Symeou (2012) examined the relationship between the firm size and financial performance. A descriptive survey was used to establish the relationship

between firm size and performance. The study used secondary data for a period of five years. Data was analyzed using a regression model and the results of the analysis revealed that there was a statistically significant relationship between firm size and financial performance.

Pouraghajan and Bagheri (2012) investigated on the impact of capital structure on the financial performance of companies listed in the Tehran Stock Exchange. The study tested a sample of 40 firms among the companies listed in the Tehran Stock Exchange. Results suggest that there is a significant negative relationship between debt ratio and financial performance of companies, and a significant positive relationship between asset turnover, firm size, asset tangibility ratio, and growth opportunities with financial performance measures.

Memon, Bhutto and Abbas (2012) investigated the impact of capital structure on firm financial performance in textile sector of Pakistan. A longitudinal study was conducted in 141 textile firms from 2004-2013. A regression model was used for analysis. The results of the analysis confirmed that there was a positive relationship between the determinants of capital structure (size, tangibility, debt to equity ratio) and financial performance of firms in the textile sector.

Chandrapala and Knapkova (2013) did a study on the impact of specific factors on company financial performance of 974 firms in the Czech Republic. The study covered the period between 2005 to 2008; using data in the Albertina database. The results of the study found that there was a significant relationship between the firm size, sales growth and financial performance of firms.

2.4.2 Local Studies

Kithuka (2013) did a study on the relationship between firm size and financial innovation of firms listed at the Nairobi Securities Exchange. The study used a descriptive survey research design. The study did a sample of 40 firms which were chosen using stratified random sampling. A regression model was used for analysis and the results showed that there was a positive relationship between the firm size and financial innovation of firms listed at the Nairobi Stock Exchange.

Mahfoudh (2013) studied the effect of selected firm characteristics on financial performance of firms listed in the agricultural sector at the Nairobi securities exchange. The study used a descriptive survey to find out the relationship between the variables. The study used sampled firms and a regression model was adopted for data analysis. The results of the analysis showed that there was a positive relationship between firm characteristics: size, age and growth with financial performance.

Mwangi (2014) investigated effect of capital expenditure on financial performance of firms listed at the Nairobi securities exchange. The study did a census study comprising of a total of 53 listed companies. A five year period was used (2009-2013) by way of a desk review of published company annual financial statements. A linear regression model was used to establish the relationship between capital expenditure and financial performance. The study concluded that capital expenditure, leverage and size of the firm positively and significantly affect financial performance.

Njoroge (2014) studied the effect of firm size on financial performance of pension schemes in Kenya. The study did a descriptive survey between the variables under investigation. The target population for this study was 30 occupational pension schemes in Kenya. The research was carried out using secondary data. The data was

collected from annual reports and financial statements. The analysis showed that there was a positive relationship between the firm size and financial performance. Further the results indicated that there was significant market volatility as evident from the NSE index, Treasury bill rate movement and offshore indices.

A study by Tale (2014) investigated on the relationship between capital structure and financial performance of non-financial firms listed at the Nairobi securities exchange in Kenya. The study used a descriptive survey. The population of the study consisted of all the 40 nonfinancial firms listed and duly registered with capital market authority of Kenya. Secondary data used was obtained mainly from the annual audited and published books of accounts, financial statements and the NSE. Data analysis was done by use of regression analysis model. However, the results showed that there was a negative relationship between financial performance and the size and growth of the firm.

2.5 Summary of the Literature Review

Although the empirical evidence has shown a mix up of the relationship between the size of the firm and financial performance, most empirical studies show that there exists a positive relationship between the size of the firm and financial performance. This is consistent with the hypothesis of the study which predicts a positive relationship between the size of the firm and financial performance of microfinance banks in Kenya.

The hypothesis is also supported by the theories of the study. The theories support the hypothesis that there is a positive relationship between the size of the firm and financial performance. This is particularly among large firms that enjoy economies of scale, access to credit and good relationships with its suppliers.

Although, studies have been done on the relationship between the size of the firm and financial performance; little focus has been laid on microfinance banks in Kenya. This necessitates the need to find answer to the following research question: what is the effect of the size of the firm and financial performance of microfinance banks in Kenya?

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section provides the research methodology that was used for this study. It constitutes the research design, study population, data collection and data analysis.

3.2 Research Design

The study used a descriptive survey. This is because it was used in explaining the relationship between size of the firm and financial performance of microfinance banks in Kenya. According to Reis and Judd (2000) descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. It is used to show the relationship between variables in a given phenomenon.

3.3 Study Population

The population for this study consisted of microfinance banks that are licensed to work and operate in Kenya. According to (CBK, 2015) there are ten (10) microfinance banks (See Appendix II). However, the study only considered the nine (9) microfinance banks that had been in operation for five years which was the data collection period that the study sought to investigate.

3.4 Data Collection

The study used secondary data. The data was collected from secondary sources since the nature of the data to be collected is quantitative. The secondary data was obtained from the association of microfinance institutions in Kenya (AMFIK); financial reports were used to achieve the objective of the study. This helped in obtaining quantified data that was useful for drawing conclusions. The study used secondary data sources

for a period of 5 years from (2010-2014) based on the availability and accessibility of data.

3.5 Data Analysis

Secondary data from the association of microfinance institutions in Kenya was reviewed for completeness and consistency in order to carry out statistical analysis. According to Mugenda and Mugenda (2003) data must be cleaned, coded and properly analyzed in order to obtain a meaningful report. The data collected was sorted and organized before capturing the same in Statistical Packages for Social Sciences (SPSS) for analysis.

3.5.1 Analytical Model

Below is the regression model that was used in analyzing the relationship between size of the firm and financial performance of microfinance banks in Kenya. The model of the study was as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

a = Y-intercept

b₁, b₂, b₃ b₄ are regression coefficients

Y is the dependent variable which is financial performance that was measured using (ROA) which is computed using net income divided by total assets.

X₁ is the independent variable which is firm size that was measured using natural logarithm of total assets (fixed assets plus current assets).

X₂ is a control variable which represents asset quality and provisions which was computed using net non-performing loans divided by gross loans and advances

X₃ is a control variable which represents customer deposits

X_4 is Operating Efficiency Ratio (OER) which was measured using total expenses divided by total income

b is the slope of the regression model which measures the unit change in y associated with a unit change in x

ϵ is the error term

3.6 Tests of Significance

The hypothesis of the study is that there exists a positive relationship between size of the firm and financial performance of microfinance banks in Kenya. In a one tail test, the level of significance was expressed using the tests of coefficients. If the p-value(s) is more than 5% then the null hypothesis is true since this will mean that there is no statistically significant relationship between the size of the firm and financial performance of microfinance banks in Kenya. Similarly, if the p-value is less than 5% then the alternative hypothesis is true since this will mean that there is a statistically positive relationship between the size of the firm and financial performance of microfinance banks in Kenya.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section gives an outline of data analysis and findings as per the objective of this study which was to determine the relationship between firm size and financial performance of microfinance banks in Kenya.

4.2 Descriptive Statistics

The descriptive statistics provides a summary of the variables under investigation. It gives the mean, standard deviation, maximum and minimum values as per the trend in a period of five years (2010-2014). Below are the results of the findings in the table 4.1 below.

Table 4.1 Descriptive Statistics

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	45	-.16	.05	-.0099	.04477
Asset Quality	45	-.11	7.86	.4585	1.15948
Operating Efficiency	45	.00	3.71	.7784	.76385
Logarithm of Assets	45	.00	10.43	5.9932	4.34714
Customer Deposits	45	.00	17119.00	1490.4444	3431.32793
Valid N (listwise)	45				

Source: Research Findings

From the above findings in table 4.1, the findings depict that most microfinance banks attained 1% of their financial performance. This means that the income generated from assets was relatively low. However, the level of income generated from assets increased over time from -.16 to .05. . Further, asset quality had a mean value of .4585. This was an indication that most microfinance banks sustained higher amounts of gross loans and advances which contributed to high amounts of non-performing loans. The level of operating efficiency was found to have a mean score of 0.7784 which

was an indication that most microfinance banks used more of operating expenses as compared to the amount of income that they generated. The mean score of logarithm of assets of microfinance banks was found to be 5.5%, this is an indication that most microfinance banks were small and hence they their asset base was unstable.

Further, the results observed that the mean value for customer deposits of microfinance banks grew from .00 which is the minimum value to 17119.00 which is the maximum value. The mean value for customer deposit is 1490.4444. This implies that there has been a tremendously growth in customer deposits over the years (2010-2014). This could be attributed to adoption and use of modern technologies.

4.3 Pearson Product-Moment Correlation Coefficient

The study used Pearson correlation coefficient to measure linear correlation between two variables X and Y, giving a value between +1 and -1 inclusive, where 1 is total positive correlation, 0 is no correlation, and -1 is the total negative correlation. The correlation results have been presented in the table 4.2 below as follows:

Table 4.2 Pearson’s Correlation Coefficient

	ROA	Asset Quality	Operating Efficient	Log of Assets	Customer Deposits
ROA	1				
Asset Quality	.046	1			
Operating Efficient	.776	.118	1		
Log of Assets	-.208	.314	.696	1	
Customer Deposits	-.207	.098	.069	.435	1

Source: Research findings

From the above results in table 4.2 above, the findings observed that there was no correlation between asset quality, log of assets and customer deposits with financial performance of microfinance banks in Kenya. The correlation scores were as follows: 0.46,-.208, -.207. On the other-hand there was a strong correlation between operating efficiency and financial performance of microfinance banks in Kenya. The correlation score is .776. These findings are consistent with a study by Kithuka (2013) who found that operating efficiency was strongly positively correlated with financial performance due to huge investment in financial innovations of listed firms.

4.4 Regression Analysis and Hypothesis Testing

The study sought to determine the relationship between firm size and financial performance of microfinance banks in Kenya. This was meant to confirm the hypothesis for this study which had predicted a positive relationship between firm size and financial performance of microfinance banks in Kenya. The findings are presented in the table 4.3 below:

Table 4.3 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908 ^a	.824	.808	.01882

a. Predictors: (Constant), Customer deposits, Operating Efficiency, Asset Quality, Log of Assets

From the above findings in table 4.3 above, the study found that the coefficient of determination (R^2) explained 82.4% variance in the dependent variable which is financial performance (ROA). This means that the model is a good predictor.

4.4.1 Analysis of Variance

The carried analysis of variance to test the goodness of fit for the data, a regression model was used for this purpose and the results are provided in the table 4.4 below.

Table 4.4 Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.073	4	.018	47.349	.000 ^b
Residual	.015	40	.000		
Total	.088	44			

a. Dependent Variable: ROA

b. Predictors: (Constant), Customer Deposits, Operating Efficiency, Asset Quality, Logarithm of Assets

From the above results in table 4.4, the probability value was found to be 0.000; this is an indication that the regression model is significant in predicting the relationship between firm size and financial performance of microfinance banks in Kenya.

4.4.2 Model Coefficients

The study tested the model coefficients to know the direction of the variables under investigation. Below are the results of the findings in table 4.5 below:

Table 4.5 Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.006	.004		1.463	.151
1 Asset Quality	-.001	.003	-.013	-.196	.845
Operating Efficiency	-.069	.005	-1.228	-12.789	.000
Log of Assets	.006	.001	.646	5.825	.000
Customer deposits	1.610E-007	.000	.012	.164	.871

a. Dependent Variable: ROA

The study conducted a regression model to examine the relationship that exists between the firm size and financial performance of microfinance banks in Kenya. The following regression equation was derived:

$$ROA = 0.006 - .001X_1 - .069X_2 + 0.006X_3 + 1.610E-007X_4 + \epsilon$$

From the regression model obtained above, holding all the other factors constant, a unit increase in log of assets holding all the other factors constant will lead to a unit increase in ROA by 0.006. A unit increase in asset quality and operating efficiency will lead to a corresponding decrease in ROA holding all the other factors constant. This means that there exists an inverse relationship between asset quality and operating efficiency with ROA. On the other-hand a unit increase in customer deposits will result into a corresponding increase in ROA with 1.610E-007. This is an indication that there is a direct relationship between customer deposits and ROA of microfinance banks in Kenya.

The regression analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the corresponding probability value obtained and $\alpha=0.05$. If the probability value was less than α , then the predictor variable was significant. From the above analysis it was revealed that the operating efficiency and logarithm of assets were statistically significant since their p-values were less than 5% , the results were as follows $p=0.000, p=0.000$. These findings are consistent to Mahfoudh (2013) and Mwangi (2014) who concluded that there was a statistically significant relationship between firm size and financial performance of listed firms at NSE. On the other-hand, asset quality and customer deposits were found to be statistically insignificant since their p-values were more than 5% as follows, $p=.845$ and $p=.871$. These findings are consistent with a study by Tale (2014) who investigated on the

relationship between capital structure and financial performance of non-financial firms listed at the Nairobi securities exchange in Kenya. The study concluded that asset quality was negatively related to financial performance of listed firms.

4.5 Chapter Summary and Discussion

Descriptive results found that most microfinance banks attained 1% of their financial performance. This means that the income generated from assets was relatively low. Further, asset quality had a mean value of .4585. This was an indication that most microfinance banks sustained higher amounts of gross loans and advances which contributed to high amounts of non-performing loans. The level of operating efficiency was found to have a mean score of 0.7784 which was an indication that most microfinance banks used more of operating expenses as compared to the amount of income that they generated. The mean score of logarithm of assets of microfinance banks was found to be 5.5%, this is an indication that most microfinance banks were small and hence their asset base was unstable. The mean value for customer deposits of microfinance banks grew from .00 which is the minimum value to 17119.00 which is the maximum value which implied that there has been a tremendously growth in customer deposits over the years (2010-2014). This could be attributed to adoption and use of modern technologies.

Pearson's correlation results found that there was no correlation between asset quality, log of assets and customer deposits with financial performance of microfinance banks in Kenya. The correlation scores were as follows: 0.46, -.208, -.207. On the other-hand there was a strong correlation between operating efficiency and financial performance of microfinance banks in Kenya. The correlation score is .776.

The regression analysis was undertaken at 5% level of significance. The criteria for comparing whether the predictor variables were significant in the model was through

comparing the corresponding probability value obtained and $\alpha=0.05$. Further, it was revealed that the operating efficiency and logarithm of assets were statistically significant since their p-values were less than 5% , the results were as follows $p=0.000, p=0.000..$ On the other-hand, asset quality and customer deposits were found to be statistically insignificant since their p-values were more than 5% as follows, $p=.845$ and $=p=.871$.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings as per the objective of the study based on the various analyses that were carried out which were: descriptive statistics, Pearson's correlation and regression analysis. The chapter consists of the summary of findings, conclusion, recommendation, limitations and areas for further research.

5.2 Summary of Findings

Most microfinance banks attained 1% of their financial performance. This means that the income generated from assets was relatively low. Further, asset quality had a mean value of .4585. This was an indication that most microfinance banks sustained higher amounts of gross loans and advances which contributed to high amounts of non-performing loans. The level of operating efficiency was found to have a mean score of 0.7784 which was an indication that most microfinance banks used more of operating expenses as compared to the amount of income that they generated. The mean score of logarithm of assets of microfinance banks was found to be 5.5%, this is an indication that most microfinance banks were small and hence they their asset base was unstable. The mean value for customer deposits of microfinance banks grew from .00 which is the minimum value to 17119.00 which is the maximum value which implied that there has been a tremendously growth in customer deposits over the years (2010-2014). This could be attributed to adoption and use of modern technologies.

Pearson's correlation results found that there was no correlation between asset quality, log of assets and customer deposits with financial performance of microfinance banks

in Kenya. The correlation scores were as follows: 0.46, -.208, -.207. On the other-hand there was a strong correlation between operating efficiency and financial performance of microfinance banks in Kenya. The correlation score is .776. These findings are consistent with a study by Kithuka (2013) who found that operating efficiency was strongly positively correlated with financial performance due to huge investment in financial innovations of listed firms.

The regression analysis was undertaken at 5% level of significance. The criteria for comparing whether the predictor variables were significant in the model was through comparing the corresponding probability value obtained and $\alpha=0.05$. Further, it was revealed that the operating efficiency and logarithm of assets were statistically significant since their p-values were less than 5% , the results were as follows $p=0.000, p=0.000$. These findings are consistent to Mahfoudh (2013) and Mwangi (2014) who concluded that there was a statistically significant relationship between firm size and financial performance of listed firms at NSE. On the other-hand, asset quality and customer deposits were found to be statistically insignificant since their p-values were more than 5% as follows, $p=.845$ and $=p=.871$. These findings are consistent with a study by Tale (2014) who investigated on the relationship between capital structure and financial performance of non-financial firms listed at the Nairobi securities exchange in Kenya. The study concluded that asset quality was negatively related to financial performance of listed firms.

5.3 Conclusion

The study concludes that most microfinance banks are small in size and however most of them have experienced high growth over the years in terms of customer deposits and operating efficiency. This could be attributable to improved financial performance and growth in asset base in the period of study.

Pearson's correlation results found that there was no correlation between asset quality, log of assets and customer deposits with financial performance of microfinance banks in Kenya apart from operating efficiency and financial performance which was found to have a strong correlation. This is an indication of reduced cost of operation which could be as a result of adoption of modern technologies for example information communication technologies (ICT).

The study also concludes that operating efficiency and logarithm of assets had a statistically significant relationship with financial performance of microfinance banks in Kenya. This kind of relationship could be as a result of improved stability that have contributed to investment in ICT and thus improved efficiency of microfinance banks in Kenya.

5.4 Recommendation

The study was limited to four variables only these are: financial performance, logarithm of assets, asset quality and customer deposits. Financial performance is affected by a myriad of factors other than the ones discussed in this study and therefore it is important for future researchers to consider other factors that influences financial performance in microfinance banks in order to obtain more conclusive results.

5.5 Limitations of the Study

The study faced significant funding and costs constraints which limited the scope of the study to microfinance banks. These findings obtained in this study cannot therefore be used to make generalization on the banking sector in Kenya.

The other limitation that faced the researcher is that the study used secondary data sources which is historical in nature and might not necessarily reflect the exact needs

of the study. This might negatively affect the accuracy and reliability of the results and impacted negatively on the findings drawn in this study.

5.6 Areas for Further Study

A comparative study should be conducted in other sectors like manufacturing firms, insurance companies or investment firms to find out which kind of relationship that exists between firm size and financial performance then findings can be compared and plausible conclusions drawn.

REFERENCES

- Adams, M. & Buckle, M. (2000). The determinants of operational performance in the Bermuda insurance market, *Applied Financial Economics*, 13, 133-143.
- Alvarez, S.A. & Barney, J.B. (2001). How can entrepreneurial firms really benefit from alliances with large firms, *Academy of Management Executive*, 15, 139-48.
- AMFI (2015). <http://www.amfikenya.com/>
- Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability, *International Financial Markets Institutions & Money*, 18 (2008), 121-136
- Boyd, J.H. & Runkle, D.E. (1993). Size and performance of banking firms: testing the predictions of theory, *Journal of Monetary Economics*, 31, 47-67.
- Brau T. & Woller, W. (2004). *A New Capital Regulation for Large Financial Institutions*, Working Paper.
- Brewer, E. III. & Jagtiani, J. (2013). How much did banks pay to become too-big-to-fail and to become systemically important, *Journal of Financial Services Research*, 43, 1, 1-35.
- Brusov, P., Filatova, T. & Orekhova, N. (2013). Absence of an Optimal Capital Structure in the Famous Trade-off Theory, *Journal of Reviews on Global Economics*, 2, 94-116
- CBK (2015). <https://www.centralbank.go.ke/>
- Chandrapala, P. & Knapkova, A. (2013). Firm-specific factors and financial performance of firms in the Czech Republic, *Acta Universitatis Agriculturae Silviculturae Mendelianae Brunensis*, 7: 2183–2190
- Chell, E. & Baines, S. (2000). Networking, entrepreneurship and microbusiness between small and large firms' behavior, *Entrepreneurship & Regional Development*, 12, 195-206.

- Chell, E. & Baines, S. (2004). Networking, entrepreneurship and microbusiness between small and large firms' behavior, *Entrepreneurship & Regional Development*, 12, 195-206.
- Eljelly, A. (2004). Liquidity-Profitability Tradeoff: An empirical Investigation in An Emerging Market, *International Journal of Commerce & Management*, 14(2), 48-61
- Frank, Z., & Goyal, K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 6(7), 217-248
- Freel, M. (2000). External linkages and product innovation in small manufacturing firms, *Entrepreneurship & Regional Development*, 12, 245-66.
- Hall, M. & Weiss, L. (1967). Firm Size and Profitability, *the Review of Economics and Statistics*, 49, 319-331
- Hovakimian, A., T. Opler, & S. Titman. (2001). The debt-equity choice. *The Journal of Financial and Quantitative Analysis* 36(1),1-24.
- James, C. & Van, H. (2002). *Financial Management and policy, prentice hall of india private limited*, New Delhi, 343.
- Jensen, M .C. & Meckling, W.H.(1976). Theory of firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*:1(2), 305-60.
- Jensen, M. C. (2006). Agency cost of free cash flow, corporate finance and takeovers. *The American Economic Review*, 76 (2), 323-329.
- Jose, M. L., Lancaster, C. & Stevens, J. L. (1996). Corporate returns and cash conversion cycles, *Journal of Economics and Finance*, 20(1):33-46.
- Kakani, R., Saha, B., & Reddy, V. (2001). Determinants of Financial Performance of Indian Corporate Sector in the Post-Liberalization Era: An Exploratory Study. *NSE Research Initiative Paper*, 5, 12-30
- Keister, L. A. (2001). Engineering growth: business group structure and firm performance in China's transition economy; *American Journal of Sociology*; 104(2), 404-440.

- Kithuka, A. (2013) did a study on the relationship between firm size and financial innovation of firms listed at the Nairobi Securities Exchange, *Unpublished MBA Project*, University of Nairobi
- Kithuka, M. (2013). The relationship between firm size and financial innovation of firms listed at the Nairobi Securities Exchange, *Unpublished MBA Project*, University of Nairobi
- Lee, S. (2008). Ownership Structure and Financial Performance: Evidence from Panel Data of South Korea, *Corporate Ownership and Control*, 6(2), 1-30.
- Liargovas, P. & Skandalis, K. (2008). *Factor affecting firms financial performance The Case of Greece*, University of Peloponnese.
- Lumpkin, G., & Dess, G. (1999). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment, firm age, and industry life cycle, *Journal of Business Venturing*; Forthcoming.
- Mahfoudh, O. (2013). Effect of Selected Firm Characteristics on Financial Performance of Firms Listed in the Agricultural Sector at the Nairobi Securities Exchange, *Unpublished MBA Project*, University of Nairobi
- Mainelli, M. & Giffords, B. (2010). Size matters: risk and scale, *The Journal of Risk Finance*, 11, 344-348.
- Majumdar, S. (1997). The Impact of Size and Age on Firm-Level Performance: *Some Evidence from India Review of Industrial Organization*, 12, 231–241.
- Memon, F., Bhutto, N. A. & Abbas, G. (2012). Capital Structure and Firm Performance: A Case of Textile Sector of Pakistan, *Asian Journal of Business and Management Sciences*, 1(9): 9-15
- Mugenda, O. & Mugenda, A. (2005). Research methods: *Quantitative and qualitative approaches*. 2nd. Rev. Ed. Nairobi: Act press
- Mwangi, W. (2014). The effect of capital expenditure on financial performance of firms listed at the Nairobi securities exchange, *Unpublished MBA Project*, University of Nairobi

- Myers, S. C. (2003). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13,187- 221.
- Myers, S. C. (2003). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13,187- 221.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13,187- 221.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13,187- 221.
- Njoroge, N. (2014). The effect of firm size on financial performance of pension schemes in Kenya, *Unpublished MBA Project*, University of Nairobi.
- North, D. (1990). *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- North, D. (1991). *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge
- Osborn, R. C. (1997). Concentration and Profitability of Small Manufacturing Corporations, *Quarterly Review of Economics and Business* 10, 15-26.
- Pais, A. & Stork, P.A. (2011). Bank size and systemic risk, *European Financial Management*, 1-22.
- Pandy, I.M. (2005). *Financial Management, New Delhi*, India, Vikas Publishing House. Pass, L.C.,
- Penman, S. H. (2007). *Financial Statement Analysis. 3rd international edition*, McGraw Hill, Singapore.

- Pouraghajan, A., & Bagheri, M. (2012). The Relationship between Capital Structure and Firm Performance Evaluation Measures: Evidence from the Tehran Stock Exchange, *International Journal of Business and Commerce*, 1(9): 166-181.
- Rajan, R. & Zingales, L. (2000). The effect of size of the firm on profitability: A, *NBER Working Paper*, W7546.
- Rao, P.K., (2001). *Sustainable Development: Economics and policy*, Blackwell Publishers Inc., Malden, Massachusetts, USA.
- Reis, H. T., & Judd, C. M. (2000). *Handbook of Research Methods in Social and Personality Psychology*. Cambridge University Press.
- Robinson ,M. S.(2002): *The microfinance Revolution ,volume 2:LESSONS FROM Indonesia*.Washington,D.C., The world bank.
- Ross, S., (1976). The arbitrage theory of capital asset pricing. *Journal of Economic Theory*, 13, 341–60
- Schmalensee, R. (2001). Intra-Industry Profitability Differences in US Manufacturing: 1953-1983, *Journal of Industrial Economics*, 37, 337-357.
- Sharma, S. R. & Nepal, V. (1997). *Strengthening of credit institutions programs for rural poverty alleviation in Nepal*, United Nations, Economic and social council (ECOSOC) for Asia and pacific, Bangkok, Thailand
- Soku, B. (2011). *Financial Flexibility and Capital Structure Decision*. April 2, 2012. <http://ssrn.com/abstract=1108850>
- Symeou, P.C. (2012). *The firm size performance relationship: an empirical examination of the role of the firm's growth potential*, Institute for Communication Economics, Department of Management, University of Munich (LMU); Judge Business School, University of Cambridge.
- Tale, W. (2014). Relationship between capital structure and performance of non-financial firms listed at the Nairobi securities exchange, *Unpublished MBA Project*, University of Nairobi

- Tale, W. (2014). Relationship between capital structure and performance of non-financial firms listed at the Nairobi securities exchange, *Unpublished MBA Project*, University of Nairobi
- Velnampy, T. & Nimalathan, B. (2010). Firm Size on Profitability: A Comparative Study of Bank of Ceylon and Commercial Bank of Ceylon Ltd in Srilanka, *Global Journal of management and Business Research*, 10(2): 96-103.
- Woller, N. & Gary M. (1999). A Comprehensive Review of the Existing Literature, *Journal of Entrepreneurial Finance and Business Ventures*, 9(1):126

**APPENDIX I: SECONDARY DATA EXTRACTED FROM
AUDITED FINANCIAL STATEMENTS OF MCIROFINANCE
BANKS IN KENYA**

		ROA	Asset Quality	Operating Efficiency	Ln of Assets	Customer Deposits shs. M
FAULU	2014	0.017565314	0.63	0.823	10.43112242	17119
KWFT		0.014714567	0.567657	0.807	10.3079237	12646
SMEP		0.003514644	0.752443	0.885	9.77633791	2873
REMU		-0.04079058	-0.10757	1.1147	8.596597096	1325
RAFIKI		0.007594937	0.608696	0.942	8.596597096	166
UWEZO		0.01025641	0.630435	0.888	8.591064607	128
CENTURY		-0.147186147	0.15	2.219	8.36361198	127
SUMAC		0.00625	0.65625	0.9459	8.204119983	64
U&I		0.01459854	0.285714	0.852	8.136720567	36
FAULU	2013	0.013270066	0.41	0.8074	10.09461086	7198
KWFT		0.017975359	0.5427	0.774	10.33749919	5456
SMEP		0.002409639	0.219178	0.851	9.396199347	1253
REMU		-0.017804154	0.727273	1.174	8.527629901	174
		0.002446317	7.860963	0.8252	9.565729788	1412
UWEZO		-0.018691589	0.636364	1.125	8.029383778	24
CENTURY		-0.164634146	0.1666667	3.714	8.214843848	55
SUMAC		-0.035830619	0.285714	1.0125	7.903089987	99
U&I		0.0125	0.333333	0.875	7.903089987	34
FAULU	2012	0.007593611	0.33	0.7855	9.882979654	2,949
KWFT		0.008487049	0.33	0.747	10.30928941	2,493
SMEP		0.023580786	0.56	0.7195	9.359835482	1,014
REMU		-0.038674033	0.53	1.4615	8.257678575	61
RAFIKI		0.002720348	0.58	0.9646	9.264345507	468
UWEZO		-0.025641026	0.71	1.08333	7.892094603	18
CENTURY		N/A	0.13	N/A	N/A	N/A
SUMAC		N/A	N/A	N/A	N/A	N/A
U&I		N/A	N/A	N/A	N/A	N/A
FAULU	2011	0.000389029	0.46	0.8295	9.711047604	1955
KWFT		0.017727166	0.574194	0.9376	10.23136763	7011
SMEP		0.013013013	0.34507	0.7769	9.300595484	792
REMU		-0.10483871	0.333333	1.9286	8.093421685	14
RAFIKI		-0.034013605	0	2.05	8.644438589	98
UWEZO		-0.13559322	0.333333	2.111	7.770852012	8
CENTURY		N/A	N/A	N/A	N/A	N/A
SUMAC		N/A	N/A	N/A	N/A	N/A
U&I		N/A	N/A	N/A	N/A	N/A
FAULU	2010	0.03	0.063	N/A	N/A	N/A

KWFT		0.01	N/A	N/A	N/A	N/A
SMEP		0.03	N/A	N/A	N/A	N/A
REMU		N/A	N/A	N/A	N/A	N/A
RAFIKI		N/A	N/A	N/A	N/A	N/A
UWEZO		N/A	N/A	N/A	N/A	N/A
CENTURY		N/A	N/A	N/A	N/A	N/A
SUMAC		0.053	N/A	N/A	N/A	N/A
U&I		N/A	N/A	N/A	N/A	N/A

Source: (CBK, 2014)

APPENDIX II: LIST OF MICROFINANCE BANKS IN KENYA

Faulu Microfinance Bank Ltd

Postal Address: P. O. Box 60240 – 00200, Nairobi

Telephone: +254-20- 3877290 -3/7, 38721883/4

Fax: +254-20-3867504, 3874875

Email: info@faulukenya.com, customercare@faulukenya.com

Website: www.faulukenya.com

Physical Address: Faulu Kenya House, Ngong Lane -Off Ngong Road

Date Licenced: 21st May 2009

Branches: 27

Kenya Women Microfinance Bank Ltd

Postal Address: P. O. Box 4179-00506, Nairobi

Telephone: +254-20- 2470272-5, 2715334/5, 2755340/42

Pilot Line: 070 - 3067000

Email: info@kwftdtm.com

Website: www.kwftdtm.com

Physical Address: Akira House, Kiambere Road, Upper Hill,

Date Licenced: 31st March 2010

Branches: 24

SMEP Microfinance Bank Ltd

Postal Address: P. O. Box 64063-00620 Nairobi

Telephone: 020-3572799 / 26733127 / 3870162 / 3861972 / 2055761

Fax: +254-20-3870191

Email: info@smep.co.ke info@smep.co.ke info@smep.co.ke

Website: www.smep.co.ke

Physical Address: SMEP Building - Kirichwa Road, Off Argwings Kodhek Road

Date Licensed: 14th December 2010

Branches: 6

Remu Microfinance Bank Ltd

Postal Address: P. O. Box 20833-00100 Nairobi

Telephone: 2214483/2215384/ 2215387/8/9, 0733-554555

Email: info@remultd.co.ke info@remultd.co.ke info@remultd.co.ke

Physical Address: Finance House, 14th Floor, Loita Street

Date Licensed: 31st December 2010

Branches: 3

Rafiki Microfinance Bank Ltd

Postal Address: 12755-00400 Nairobi

Telephone: 020-216 6401

Cell - phone: : 0719 804 370/0734 000 323

Email: info@rafiki.co.ke

Website: www.rafiki.co.ke

Physical Address: : 2nd Floor, El-roi Plaza, Tom Mboya Street

Date Licensed: 14th June 2011

Branches: 3

Uwezo Microfinance Bank Ltd

Postal Address: 1654-00100 Nairobi

Telephone: 2212917 / 9

Email: info@uwezodtm.com

Website: www.uwezodtm.com

Physical Address: Park Plaza Building, Ground Floor, Moktar Daddah Street

Date Licensed: 08 November 2010

Branches: 2

Century Microfinance Bank Ltd

Postal Address: P. O. Box 38319 – 00623, Nairobi

Telephone: +254-20- 2664282, 20 6768326, 0722 168721, 0733 155652

Email: info@century.co.ke

Physical Address: KK Plaza 1st Floor, New Pumwani Road, Gikomba

Date Licensed: 17th September 2012

Branches: 1

Sumac Microfinance Bank Ltd

Postal Address: P. O. Box 11687-00100, Nairobi

Telephone: (254) 20 2212587, 20 2210440

Fax: (254) 2210430

Email: info@sumacdtm.co.ke

Website: www.sumacdtm.co.ke

Physical Address: Consolidated Bank House 2nd Floor, Koinange Street

Date Licensed: 29th October 2012

Branches: 1

U&I Microfinance Bank Ltd

Postal Address: P.O. Box 15825 – 00100, Nairobi

Telephone: (254) 020 2367288, Mobile: 0713 112 791

Fax: (254) 2210430

Email: info@uni-microfinance.co.ke

Website: <http://uni-microfinance.co.ke/uni-microfinance/>

Physical Address: Asili Complex Building 1st Floor, River Road

Date Licensed: 8th April 2013

Branches: 2

Daraja Microfinance Bank Ltd

Postal Address: P.O. Box 100854 – 00101, Jamia, Nairobi

Telephone: 020-3879995 / 0733 988888/0707 444888 / 0718 444888

Email: daraja@darajabank.co.ke

Website: www.darajabank.co.ke

Physical Address: Karandini Road, off Naivasha Road

Date Licensed: 12th January 2015

Branches: 1

Source: Quarterly Report (CBK, 2015)