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EFFECT OF FIRM SIZE ON FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA; A CASE OF MOMBASA COUNTY

Cherono, H., & Kavale, S.

EFFECT OF FIRM SIZE ON FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA; A CASE OF MOMBASA COUNTY

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ABSTRACT

This study was carried out with the aim of examining the effects of firm size on financial performance of microfinance institutions in Kenya. The study was guided by four objectives that included: to determine the effect of customer deposits, capital base, loans and number of branches on financial performance of microfinance institutions in Mombasa. The study adopted a descriptive survey research design. The study targeted 91 respondents who included top management and middle management of selected MFIs in Mombasa County. The study adopted Yamane formula to choose a sample size of 74 respondents. Primary data was gathered by use of questionnaires which were semi structured to ensure that all areas were captured. The questionnaires were administered to respondents through drop and pick later method. The data collected was checked for completeness, uniformity, accuracy, errors elimination and consistency checks. A coding scheme was developed to classify responses into meaningful categories to enable the analysis of data. SPSS version 25.0 was used for quantitative analysis and presented in frequency tables. Results established that deposits in the MFIs are influenced by the customers' occupation and that nature of deposits has a bearing on the MFIs performance. The account type opened by the customer and frequency of deposit activities in those accounts affect the financial performance of MFIs. The study concluded that capital base leads to improved financial performance of MFIs. The amount of capital controlled by the MFIs and liquidity ratio has a significant effect on financial performance of MFIs. The nature of capital and the source of capital as well as its relevance affects the MFIs financial performance. The study concluded that loans affects financial performance of MFIs. This can be explained by the regression results which denote a positive and statistical significant effect of loans on financial performance. The amount of money loaned and the nature of loans affect financial performance of MFIs. Also frequency of loans to customers and repayment frequency has a significant effect on MFIs financial performance. The study recommended that in order for microfinance banks to increase their performance (profitability) there is need from microfinance banks to increase size by increasing various aspects of customer base, net assets, deposit liabilities and market share.

Key Words: Customer Deposits, Capital Base, Loans, Number of Branches

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INTRODUCTION

A number of studies across the globe have indicated that small scale financial institutions are facing stiff competition due to a number of issues among them being technology and economies of scale availed to large scale financial institutions (World Bank, 2019). According to a study by Muhindi & Ngaba (2018) there is a very urgent need to examine the influence of the size of a firm and its perceived outputs/performance. According to him, the issue of firm size is crucial to ensuring stability of financial sector in an economy and it has always been at the center of discussions. Avkiran (2015) argues that small firms face stiff competitions from well-established firms and from time to time fail to make significant profits, fail to expand their market share/customer bases, fail to reduce their risks and eventually crumble as compared to well established big firms that can share their risks, increase their outputs through increased capital shares and many more.

From the global perspective, firm size and organizational performance was prominent in the 2007/2008 global financial turmoil. It was evident that large banks accounted for large proportion of damage to the economy. After the turmoil, the discussion of the optimum firm size has flourished (Gul, Irshad & Zaman, 2018). This discussion has increased against the changes of financial set up that has developed markedly over the past few years, caused by financial regulation (Laeven, Ratnovski, and Tong, 2019). Generally, a study done by Lindsey (2017) in the Philippines has indicated that the size of the a financial institution determines its ability to have a competitive advantage over the other firms offering similar services, it determines the ability of the firm to increase its market share, capital base, profits and human resources ability.

Across Africa, Aduralere (2019) examined the impact of firm size on firm's performance in Nigeria and found out a very significant relationship. The indicators of performance in this study that sampled 54 managers from 54 commercial banks

were both return on assets (ROA) and return on equity (ROE). It was noted that when a firm expanded, the returns on assets and return on equity was achieved to a given optimal level, after which the return stagnated and even dropped; depending on the strategic management of the firm. This is confirmed by Jacobo et al. (2016) in a study they carried out in Abuja and Lagos. In this study that focused on Firm Size and Financial Performance, it was noted that indebtedness leverages the effect of size on financial performance. That is to say, indebtedness can enhance the realization of the potential benefits of a larger organizational size.

In Kenya, a number of studies have been carried out to examine the effects of firm size and financial performance of financial institutions and found significant relations (Muhindi & Ngaba, 2018; Omar, 2015; Kithuka, 2018 etc). For example, Omar (2015) did a study on the relationship between firm size and financial performance of microfinance banks in Kenya. 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. Generally it can argue that the size of the firm has a significant or rather noticeable influence on the performance. Performance can be measured in relation to the market share, capital base, return on equity, and return on assets, labor base and quality among others.

A number of scholars have come up with different definitions of a firm and linked the same to a firm size. According to Business Dictionary (2019), a firm is a commercial organization that operates on a for-profit basis and participates in selling goods or services to consumers. Amato and Amato (2018) define a firm as a commercial enterprise, a company that buys and sells products and/or services to consumers with the aim of making a profit. In the world of commerce, the term is usually synonymous with 'company', or 'businesses as in "She runs a forex trading business." Further, they define a firm as a business entity such as a corporation, Limited Liability Company, public limited company, sole proprietorship, or partnership that has products or services for sale is a firm.

According to Dhawan (2016), financial performance measures are used to evaluate how well a company is using its resources to make profits. In this study that was carried out in 42 firms in Illinois State, it was noted that the basic examples of financial performance include operating income, earnings before interest and taxes, and net asset value. Conclusively, this study has indicated that the definition of financial performance should not look at profits and losses only or be limited to one measure of financial performance like return on equity but should look at the whole measures of financial performance.

The CBK (2013) report has outlined a number of policies, rules and ACTs that were put in place to govern the micro financial institutions after realizing their importance in Kenya. For example, the microfinance Act, 2006 and Regulations 2008 was operationalized to an enabling environment for microfinance banks to grow and increase their size. 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 (GoK, 2017).

According to KAM (2018) Mombasa County alone, by the year 2018 December, there were 13 registered and regulated microfinance banks. Example includes:- SMEP Microfinance Bank Ltd, Uwezo Microfinance Bank Ltd, Rafiki Microfinance Bank Ltd, Choice Microfinance Bank Limited, Faulu Kenya, SMEP Microfinance Bank, KWFT: Kenya Women Microfinance Bank, Musoni Microfinance Institution, Uwezo Microfinance Bank Ltd, Rafiki Microfinance Bank Ltd, Century Microfinance Bank Ltd, Momentum Credit, Remu Microfinance Bank Ltd, Sumac Microfinance Bank Ltd, U&I Microfinance Bank Ltd Caritas and Microfinance Bank Ltd. This means that the number of microfinance institutions is significantly increasing; a need for this study.

Statement of the Problem

A number of studies across the globe have linked financial institutions' performance to the size and found out that the size of an institutions significantly influence their performance (Aduralere, 2019; Amato and Amato, 2018 etc). For example, Amato and Amato (2018) in their study on firm size, strategic advantage, and profit rates in US retailing have indicated that large firms enjoy a number privileges due to economies of scale which make them post high profits and outputs as compared to small disadvantaged firms. This is confirmed by Aduralere (2019) who has confirmed that the size of firms has a significant influence on the profitability and its general performance. This is due to the fact that large firms tend to be monopolistic or can easily swallow the poorly structured small firms or can easily merge other firms for increased performance. From such studies, it is evident that the size of a firm has a significant influence on its performance; a need for such a study.

Despite the fact that the size of a firm has a direct influence on its performance, measures of performance among the studies carried in Kenya have always been contradicting with some scholars measuring performance based on the return on

equity and returns on assets while others have been measuring performance from the profitability angle; making such study area of great interest in research. Further, a number of studies carried out by various scholars across the country have not focused their efforts in the microfinance institutions as opposed to the commercial banks. This is despite the fact that microfinance institutions play a very significant role in economic development as witnessed between the years 2004-2013 (CBK, 2015).

Despite the fact that studies have outlined the influence of firm sizes on the performance of commercial banks in Kenya, still there exists very significant gaps that need to be addressed; a need for this study. For example, Muhindi & Ngaba (2018) did a study on the effect of firm size on financial performance on banks; case of commercial banks in Kenya. The variables entailed; the number of branches, capital base, number of customer deposit and the loan and advances. The study found a significant relationship between the firm size indicators and the financial performance of commercial banks. However this study has a shortfall since it just used a report published by the CBK which at times relies on the information given by banks or projections. Further the study hasn't indicated the extent of influence through any parametric tests unlike our study that is going to carry out a multiple regression analysis. This is observed in other studies by Mehrjardi (2017); Agiomirgiannakis et al (2016), Gichura (2017) among others who have indicated a significant relationship between the size of a firm and financial performance but majority of the studies have focused their efforts on commercial banks. Majority of these commercial banks enjoy a monopoly of given products while some have powerful protection from the laws in the land with others being accorded incentives that don't match the challenges the MFIs undergo in Kenya.

In a cross examination of a number of documented literature, it has been observed there is no or there is little literature that has examined the effects of

firm size and the performance of microfinance institutions in Mombasa County; leaving fertile grounds for this study. This study therefore shall be carried out with the aim of examining the effects of firm size on financial performance of microfinance institutions in Kenya; A case of Mombasa County.

Objectives of the Study

The general objective of this study was to examine the effects of firm size on financial performance of microfinance institutions in Kenya; a case of Mombasa county. The specific objectives were:

- To determine the effect of customer deposits on financial performance of microfinance institutions in Kenya.
- To evaluate the effect of capital base on financial performance of microfinance institutions in Kenya.
- To determine the effect of loans on financial performance of microfinance institutions in Kenya.
- To evaluate the effect of number of branches on financial performance of microfinance institutions in Kenya.

This study was guided by the following hypotheses:-

- **HO₁**: customer deposits don't have a significant effect on financial performance of microfinance institutions in Kenya.
- **HO₂**: capital base doesn't have a significant effect on financial performance of microfinance institutions in Kenya.
- **HO₃**: loans don't have a significant effect on financial performance microfinance institutions in Kenya.
- **HO₄**: Numbers of branches don't have a significant effect on financial performance of microfinance institutions in Kenya.

LITERATURE REVIEW

Modern Portfolio Theory

According to Dybvig & Ross (2015) the theory of modern portfolio was developed by Professor Harry Markowitz in 1952. It is based on the concept that there is a risk averse investor who can construct portfolios to maximize on expected returns based on a given level of market risk. He emphasized that

risk is an inherent part of higher rewards. He advanced the idea that it is possible to make an efficient frontier of optimal portfolios, resulting into the maximum return at a certain level of risk. It is not enough to concentrate on the risk and return of particular stock. Investors ought to invest and diversify their portfolios. It will lead stable returns and help in risk reduction. It quantifies the benefits of diversification; never put your investment in one basket (Fonjong and Endeley, 2017). The theory demonstrates a clear way where investors are able to estimate expected risks and returns. Fonjong and Endeley (2017) continue to note that professor's suggestions that the risk of a portfolio should be decreased and the returns expected increased, when stock or assets with different price movements are combined. They therefore argue that professor recommended that diversification was the way forward as it reduces risks when assets and stocks are put together whose prices role inversely to each other.

A further research was done in 1970 by Caumnitz. It recommended that portfolios should be evaluated on basis of market price risk, combining risk and return into one measure but not on risk alone. The rank of performance of the mutual funds under consideration was done using the treynor index, Sharpe Index and the Jensen Index Since the three risk-adjusted performance measures are derived from the CAPM and Capital Market Line (CML), they are consistent with the capital market theory as developed in a mean-variance context (Sears and Trennepohl, 2008). Further research indicates that the performance rankings as a result of three indexes are inconsistent.

The Agency Theory of a Firm

The correlation of firm size and financial performance is well explained in the agency theory of the firm. It states that firm managers make decisions that are normally skewed towards their objectives and goals. Increasing the firm size is normally intended to boost their ambitious empire building. The assumption is very simple firm

managers increase size of the firm in order to receive large payments and rewards to enjoy private benefits from the prestige of running a large firm. This theory, by extrapolation, predicts a negative relationship between bank size and bank stability. If managers are left alone then they will pursue expansive market strategy for their own benefits, such as prestige, better perks, salaries and employee share options. There is need for separation of ownership and management of the firm. Shareholders hire managers who are serious professionals who have the requisite skills. Managers might take actions, which are not in the best interest of shareholders. This is usually so when managers are not owners of the firm (Jensen & Meckling, 1976).

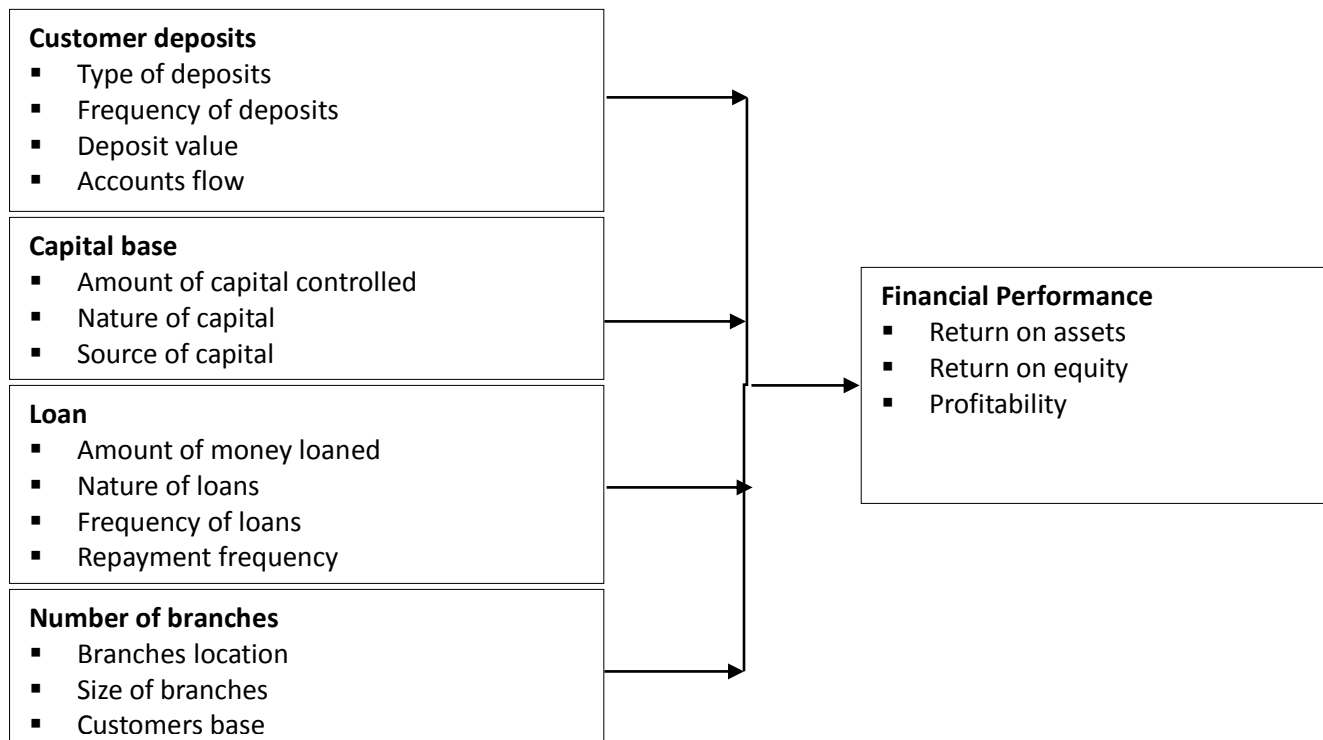
This theory is relevant to the number of branches specific variable. Microfinance bank managers will do an expensive branch network expansion due to their nature of managerial empire building. Branch network expansion is expensive and needs a lot of funding from the shareholders capital. To sustain this expensive strategy the capital base variable has to be touched, more funds will need to be raised.

Arbitrage Pricing Theory

The arbitrage pricing theory consents to the idea that expected returns of financial assets can be expressed in linear function of macro-economic factors where sensitivity to changes in each factor is represented by a factor specific beta coefficient. The model derived rate of return will then be used to price the asset correctly the asset price should equal the expected end of period price discounted at the rate implied by the model. If the price diverges, arbitrage should bring it back into line. In the APT context, arbitrage consists of trading in at least two assets, with at least one being not its true market value. The arbitrageur sells the asset which is relatively too expensive and uses the proceeds to buy one which is relatively too cheap. Under the APT, an asset is said to be under or overvalued if its current price deviates from the price predicted by the model. Ross further argued that each investor

will hold a unique portfolio with its own particular array of betas, as opposed to the identical market

portfolio (Ross, 1976).



Independent Variables

Dependent Variable

Figure 1: Conceptual framework

Empirical Review

Amato and Amato (2018) carried out an examination in US’s retailing firm and examined the firm size, strategic advantage, and financial performance. The study was descriptive in nature and it comprised of a study population of 109 small scale retailing firms. The study established that there is a significant relationship between firm size, strategic advantage and the financial performance of retailing firms. In the study, financial performance was measured by looking at profit margins of firms or the losses made or the financial muscles they controlled.

In another study that was carried out in Manila Philippines by Jacob (2016), it was observed that firm size has a strong and significant relationship with the financial performance of commercial banks. The study was a cross sectional in nature and examined three indicators of firm size that included cash deposits by the customers, number of bank’s

branches and capital base. When a regression analysis was carried out, it was established that holding other factors constant, a unit change of amount of cash deposits was associated with 65% increase in financial performance, a unit change in number of branches was associated with 42% change in financial performance and a unit change in capital base was associated with 78% change in financial performance.

As noted by Barrios, Juan and Blanco (2017) in their study that examined the effectiveness of bank capital adequacy regulation in Venezuela found out that the capital base of any organization is directly associated with its performance. The study that examined the capital controlled by various microfinance institutions and did a chi-square test, the chi-square value of 28.992 that was greater than the critical chi-square value of 9.48 indicated that there is a significant and positive influence of capital base and the financial performance of

microfinance institutions. The study concluded that firms which have big and functional capital stand to gain significantly from a number of business enabling factors like access to large number of customers, access to best and most effective technology, reduced risks and many more.

Gul, Irshad & Zaman (2017) did a study on factors affecting bank profitability in Pakistan. The study was descriptive in nature and gathered information from 120 bank managers across the country. In the study, a number of factors were found to influence bank's profits among them being the bank size. The indicators of bank size measured included: number of customers' deposits, capital base, loans and advances controlled and number of branches a bank controls. These findings are similar to those arrived at by Sinduja (2018) who carried out a study in Pakistani and did agree that financial performance of an organization is influenced by its size among other factors. The study was ridden on three sub-variables of organization size that include the capital base, the customer opening the bank accounts and the number of branches of such organizations.

Almazari (2018) did a study on the impact of internal factors on bank profitability: comparative study between Saudi Arabia and Jordan. Profitability in this study was the dependent variable and was actually the central measure of financial performance. Among the independent internal factors identified included the bank size and the strategic practices. The study identified a very significant and positive relationship between the bank size and profitability. Bank size was measured by looking at issues like: number of customer deposits; capital base; loan and advances; and number of branches. However, the study noted that as the bank becomes big, its profitability increases proportionally only if managers are very committed and honest as opposed to the cases where managers seek to control power and prestige associated with big banks.

Across Africa, Chinedu and Chinedu (2018) did a study on macroeconomic factors, firm characteristics and financial performance; a study of selected quoted manufacturing firms in Nigeria. Specifically, the study investigated the effect of interest rate, inflation rate, exchange rate and the gross domestic product (GDP) growth rate, while the firm characteristics were size, leverage and liquidity. The dependent variable financial performance was measured as return on assets (ROA). The study used the ex post facto research design. The population comprised all quoted manufacturing firms on the Nigerian Stock Exchange. The sample was restricted to companies in the consumer goods sector, selected using non-probability sampling method. The study used multiple linear regressions as the method of validating the hypotheses. The study found no significant effect for interest rate and exchange rate, but a significant effect for inflation rate and GDP growth rate on ROA. Second, the firm characteristics showed that firm size, leverage and liquidity were significant.

Similarly, Aduralere (2019) did a study on the impact of firm size on firms performance in Nigeria; a comparative study of selected firms in the building industry in Nigeria. The technique used in the research work was panel analysis. Based on the financial measurement of performance using both return on assets (ROA) and return on equity (ROE), two out of the four variables used as an indicators of size were statistically significant in determining return on assets which are total sales and age of firm since incorporated and total sale has positive effect on return on assets while age of firm since incorporated has a negative effect on return on assets. Furthermore, it was observed that only leverage that was significant in determine return on equity. Based on productivity measurement of performance of the selected firms in the building industry in Nigeria using both output per labour and output per capital, also two out of the four variables used as an indicators of size were statistically significant in determine output per

labour which are total sales and age of firm since incorporated and both have positive effect output per labour and total number of employee and leverage has a negative significant impact on output per labour.

Babirye, Niringiye and Katerega (2017) did a study on the firm size and rate of growth of Ugandan manufacturing firms. The descriptive results showed that medium firms grow faster than the small and large firms. The regression results also confirmed that medium firms significantly grow faster than the small firms and large firms, contradicting the Porters "stuck in the middle" hypothesis. Regression results also showed no significant difference between the growth of small and large firms, a finding that is consistent with Gibrats law. To promote growth of firms Ugandan the study recommended that there is need to formulate policies that promote growth of small firms such as tax holidays that are currently being enjoyed only by medium and large firms.

Nzioka (2018) did a study on the relationship between firm size and financial performance of commercial banks in Kenya. This research was carried out using a correlational design. The target population of this study was all the 43 commercial banks in Kenya as at 31st December 2012. The panel data to be used was data from 1998 to 2012. This study used secondary data which was collected from Central Bank of Kenya and bank themselves. Firm size was measured using net assets, total loans, total deposits (measured in Kenya shillings) and number of employees. Financial performance was measured using Return on Assets (ROA). Data which was collected was analyzed using correlation and regression statistics. Analyzed data was presented in tables. Study findings indicate that there is moderate correlation between three of the studied factors of bank size which include total deposits, total loans and total assets. The relationship between three of the independent variables, namely, total loans, total deposits, and total assets and the dependent variable (financial

performance- ROA) of commercial banks were all found to be statistically significant. Total deposits and total loans had relatively stronger effects on financial performance compared to total assets. There was no significant relationship between number of employees and financial performance for commercial banks in Kenya. The study recommended that in order for commercial banks to increase their performance (profitability) there is need from commercial banks to increase size by increasing various aspects of customer base, net assets, deposit liabilities and market share.

Muhindi & Ngaba (2018) did a study on the effect of firm size on financial performance on banks; case of commercial banks in Kenya. To obtain this objective, the study used a descriptive survey. The variables entailed; the number of branches, capital base, number of customer deposit and the loan and advances. The population of the study constituted all the 42 registered commercial banks in Kenya classified in to large, medium and small banks. During the fiscal year ended June 30, 2016, there were 42 commercial banks and mortgage finance company. The data was gathered from the bank's financial reports and central bank supervision reports for 5 years period from 2012-2016. This research was limited by the operating environment as it was characterized by risks and uncertainties due to its tumultuous nature of banking sector. The study found a significant relationship between firm size and financial performance.

Mehrjardi (2017) did a study about size and profitability of banks in Kenya. From the findings, the study found that there was positive relationship between profitability of banks varied with customer base, number of branches, deposit liabilities and market share as there was high positive correlation coefficient. The study further revealed that there was greater variation of profitability of commercial banks as results of change with customer base, number of branches, deposit liabilities and market share in all tiers.

METHODOLOGY

This study adopted descriptive research design. The research targeted all top level managers and middle level managers of microfinance institutions operating in Mombasa County. This study targeted employees at the various MFBs at the various managerial positions. This study used primary data and secondary data. Primary data was collected by use of structured questionnaire. Secondary data was collected from Central Bank of Kenya which is the major regulatory authority for banks in Kenya. SPSS version 25.0 was used for quantitative analysis. Correlation coefficient was used to analyze the strength of the relations between variables, and correlation coefficients calculated to observe the strength of the association of the variables- customer deposits, Capital base, Loan, and Number of branches. Analysis of variance (ANOVA) was used to test the significance of the model. The following regression model was adopted to examine the effects of firm size on financial performance of microfinance banks in Mombasa County.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where: Y= Financial Performance

X₁= Customer deposits

X₂= Capital base

X₃= Loan

X₄= Number of branches

β₀= constant term

β₁; β₂; β₃; β₄ = coefficients ε= Error term/Stochastic term

FINDINGS

Descriptive Analysis

In this section, the researcher sought to determine the standard deviation and mean of the various statements on the study objectives.

Customer Deposits

The respondents were asked to indicate the extent in which they agree with the various statements on customer deposits. The following scale was used: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Table 1: Customer Deposits

Statements	Mean	Std. Dev
Customers' occupation has a significant influence on the deposits made in this bank and affects the amount of money in the bank	4.1795	.82308
Nature of the deposits made by customers influences financial performance of this bank	4.1538	.93298
Type of account run by the customer influences the financial performance of this institution	3.8718	1.00471
Frequency of deposits by customers influences financial performance of the bank	3.7949	1.39886
Amount of deposits made by the customers influences the financial performance of the bank	3.7692	1.06281

The respondents strongly agreed that customers' occupation has a significant influence on the deposits made in this bank and affects the amount of money in the bank (M=4.1795; SD=0.82308) and they strongly agreed nature of the deposits made by customers influences financial performance of this bank (M=4.1538; SD=0.93298). They further agreed type of account run by the customer influences the financial performance of this institution (M=3.8718; SD=1.00471) and they agreed that frequency of deposits by customers influences financial performance of the bank

(M=3.7949; SD=1.39886). They finally agreed that Amount of deposits made by the customers influences the financial performance of the bank (M=3.7692; SD=1.06281).

Capital Base

The respondents were further asked to indicate the extent in which they agree with the various statements on capital base. The following scale was used: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Table 2: Capital base

Statements	Mean	Std. Dev
Amount of capital controlled by the bank/branch influences its financial performance	3.9231	1.17842
Liquidly ratio has a significant influence on financial performance of this institution	3.9231	1.22226
Nature of capital has a significant influence on financial performance of this institution	3.8718	1.23926
Source of capital has a significant influence on financial performance of this institution	3.6154	1.28995
Relevance of capital has a significant influence on financial performance of this institution	3.5897	1.40896

The respondents agreed that amount of capital controlled by the bank/branch influences its financial performance (M=3.9231; SD=1.17842) and they agreed that liquidly ratio has a significant influence on financial performance of this institution (M=3.8718; SD=1.23926). They further agreed that nature of capital has a significant influence on financial performance of this institution (M=3.6154; SD=1.28995) and they agreed that source of capital has a significant influence on financial performance of this

institution (M=3.6154; SD=1.28995). They finally agreed that relevance of capital has a significant influence on financial performance of this institution (M=3.5897; SD=1.40896).

Loans

Further respondents were asked to indicate the extent in which they agree with the various statements on loans. The following scale was used: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Table 3: Loans

Statements	Mean	Std. Dev
Amount of money loaned has a significant influence on financial performance of this institution	4.0769	1.01007
Nature of loans have a significant influence on financial performance of this institution	4.0256	1.03840
Frequency of loans have a significant influence on financial performance of this institution	3.8462	1.06471
Conditions for loaning has a significant influence on financial performance of this institution	3.7949	1.36072
Repayment frequency has a significant influence on financial performance of this institution	3.7179	1.33670

Based on the analysis it was evident that the respondents strongly agreed that amount of money loaned has a significant influence on financial performance of this institution (M=4.0769; SD=1.01007) and they strongly agreed that nature of loans have a significant influence on financial performance of this institution (M=4.0256; SD=1.03840). They further agreed that frequency of loans have a significant influence on financial performance of this institution (M=3.8462; SD=1.06471) and they agreed conditions for loaning

has a significant influence on financial performance of this institution (M=3.7949; SD=1.36072). They finally agreed that repayment frequency has a significant influence on financial performance of this institution (M=3.7179; SD=1.33670).

Number of Bank Branches

Respondents were asked to indicate the extent in which they agree with the various statements on number of bank branches. The following scale was used: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Table 4: Number of bank branches

Statements	Mean	Std. Dev
Branch location has a significant influence on financial performance of this firm	4.0769	1.01007
Assets control has a significant influence on financial performance of this firm	4.0256	1.03840
Customer's characteristics has a significant influence on financial performance of this firm	3.8462	1.06471
Nature of control/management of each branch has a significant influence on financial performance of this firm	3.7949	1.36072
Facilities and equipment available in a given branch have a significant influence on financial performance of this firm	3.7179	1.33670

Based on the analysis it was evident that the respondents strongly agreed that branch location has a significant influence on financial performance of this firm (M=4.0769; SD=1.01007) and they strongly agreed that assets control has a significant influence on financial performance of this firm (M=4.0256; SD=1.03840). They further agreed that customer's characteristics has a significant influence on financial performance of this firm (M=3.8462; SD=1.06471) and they agreed nature of control/management of each branch has a significant influence on financial performance of

this firm (M=3.7949; SD=1.36072). They finally agreed that facilities and equipment available in a given branch have a significant influence on financial performance of this firm (M=3.7179; SD=1.33670).

Financial Performance

On the dependent variable, the respondents were further asked to indicate the extent in which they agree with the various statements on financial performance. The following scale was used: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Table 5: Financial performance

Statements	Mean	Std. Dev
The MFIs return on assets has improved	4.0769	.92863
The profitability of the MFI has improved	4.0513	.99865
The market share of the MFI in the industry has improved	3.6410	.86907

The respondents strongly agreed that return on assets of the MFIs has improved over time (M=4.0769; SD=0.92863). Also respondents agreed that the MFIs profitability has increased (M=4.0513; SD=0.99865) and the MFIs market share in the industry has improved as shown by a mean of 3.64 and standard deviation of 0.869.

Inferential Statistics

Data was then subjected to inferential statistics to establish relationships between variables.

Hypothesis was tested using the multiple regression model in order to link the relationships between firm size and financial performance (Kraus, Harms & Schwarz, 2016).

Correlation Coefficients

In order to establish the strength and significance of the relationship between tax education and tax compliance, Pearson correlation was determined.

Table 6: Pearson correlation coefficient

		Customer deposits	Capital base	Loans	Bank branches	Financial performance
Customer deposits	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	69				
Capital base	Pearson Correlation	.679**	1			
	Sig. (2-tailed)	.000				
	N	69		69		
Loans	Pearson Correlation	.605**	.716**	1		
	Sig. (2-tailed)	.000	.000			
	N	69	69		60	
Bank branches	Pearson Correlation	.609**	.499**	.518**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	69	69	69		69
Financial performance	Pearson Correlation	.552**	.561**	.586**	.338	1
	Sig. (2-tailed)	.000	.000	.000	.042	

** . Correlation is significant at the 0.01 level (2-tailed).

Source; Researcher (2020)

Table 6 indicated that there was a moderate positive significant correlation of ($r=0.552$, $P=0.000$) between customer deposits and financial performance. Further, correlation results showed the relationship between capital base and financial performance to be positively moderate and significant ($r=0.561$, $P=0.000$) and correlation between loans and financial performance was shown to be moderately positive and significant ($r=0.586$, $P=0.000$). Finally, the correlation between

bank branches and financial performance was found to be positive and significant ($r=0.338$, $P=0.042$). All the variables were moderately correlated.

Model Summary

To determine the percentage of financial performance which can be explained using the firm size the coefficient of determination was determined.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.634 ^a	.402	.375	2.36037

a. Predictors: (Constant), Customer deposits, Capital base, Loans, Bank branches

The analysis indicated a correlation between the firm size (customer deposits, capital base, loans and bank branches) as ($r=0.634$), which implied that there existed a moderate positive relationship between independent variables adopted in the study. The analysis further showed R^2 of 0.402, which implied that customer deposits, capital base,

loans and bank branches explains 40.2% of financial performance.

Analysis of Variance

To test the significance predictors of commitment to work used in the study, the study used ANOVA analysis, to establish the significance of the variables.

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	316.279	4	79.069	10.738	.000 ^b
	Residual	471.284	64	7.363		
	Total	787.563	68			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Customer deposits, Capital base, Loans, Bank branches

On the model the ANOVA showed ($F_{4,68} = 10.738$; $P = 0.000$), the analysis indicated that the model was statistically significant since $p\text{-value} < 0.05$. Hence the firm size indicators incorporated in this study significantly predicts financial performance and also

indicates that there was a significant relationship between the firm tax and financial performance.

Regression Coefficients

A regression analysis was carried out in order to explain the nature and relationship between independent variables and dependent variables.

Table 9: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7.032	.903		7.785	.000
	Customer deposits	.371	.068	.445	5.500	.000
	Capital base	.133	.062	.182	2.139	.034
	Loans	.236	.046	.413	5.171	.000
	Bank branches	.407	.064	.438	6.334	.000

a. Dependent Variable: Financial performance

$$Y = 7.032 + 0.371X_1 + 0.133X_2 + 0.236X_3 + 0.407X_4$$

To determine the effect of firm size and financial performance: customer deposits, Capital base, loans and bank branches were regressed against financial performance. The resulting coefficients and the corresponding P-values were used to test hypothesis and consequently answer research questions.

Hypotheses Testing Results

The first null hypothesis, H_{01} stated that customer deposit has no statistically significant relationship with financial performance. The results indicated that ($\beta_{01} = 0.371$; $p < 0.05$), hence the study rejects H_{01} leading to the conclusion that the coefficient of customer deposit is positive and statistically significant at 5% level of significance and thus customer deposits are an important variable that explains financial performance of MFIs in Mombasa County.

The second null hypothesis, H_{02} stated that capital base has no statistically significant relationship with financial performance. The results indicated that ($\beta_{01} = 0.133$; $p < 0.05$), hence the H_{02} was rejected leading to the conclusion that the coefficient of Capital base is statistically significant at 5% level of significance and thus Capital base is an important variable that explains financial performance of MFIs in Mombasa County. The one unit increase in capital base would lead to an increase in financial performance by 0.371.

The third null hypothesis, H_{03} stated that loan has no statistically significant relationship with financial performance of MFIs in Mombasa County. The results indicated that ($\beta_{03} = 0.236$; $p < 0.05$), hence the H_{03} was rejected leading to the conclusion that the coefficient of loan is statistically significant at 5% level of significance and thus loan is an important variable that explains financial performance of MFIs in Mombasa County.

The fourth null hypothesis, H_{04} stated that number of bank branches has no statistically significant relationship with financial performance on MFIs in Mombasa County. The results indicated that ($\beta_{04}=0.407$; $p < 0.05$), hence the H_{04} was rejected leading to the conclusion that the coefficient of number of bank branches is statistically significant at 5% level of significance and thus number of bank branches is an important variable that explains financial performance of MFIs in Mombasa County. Based on the unstandardized coefficients (beta), it can be concluded that: bank branches number has the strongest effect on financial performance among the study variables followed by Customer deposits, loans and capital base had the least effect.

CONCLUSIONS AND RECOMMENDATIONS

On customer deposits, it was concluded that the deposits in the MFIs are influenced by the customers' occupation and that nature of deposits has a bearing on the MFIs performance. The account type opened by the customer and frequency of deposit activities in those accounts affect the financial performance of MFIs.

The study concluded that capital base leads to improved financial performance of MFIs. The amount of capital controlled by the MFIs and liquidity ratio has a significant effect on financial performance of MFIs. The nature of capital and the source of capital as well as its relevance affects the MFIs financial performance.

The study concluded that loans affect financial performance of MFIs. This can be explained by the regression results which denote a positive and statistically significant effect of loans on financial performance. The amount of money loaned and the nature of loans affect financial performance of MFIs. Also frequency of loans to customers and repayment frequency has a significant effect on MFIs financial performance.

The study concluded that the location of MFI branches and the MFIs asset control has a significant effect on financial performance of MFIs. Also facilities and equipment available in a given

branch have a significant influence on financial performance of MFIs. Also it is concluded that customer's characteristics and the nature of management of each branch has a significant effect on financial performance.

The study recommended that in order for microfinance banks to increase their performance (profitability) there is need from microfinance banks to increase size by increasing various aspects of customer base, net assets, deposit liabilities and market share. The recommendations from the study include the need for bank policies that give greater importance to the determination and monitoring of their loan portfolio, customer deposits and asset quality. The study further recommends that for commercial banks to remain profitable they should have good portfolio management which will help in making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing deposits and loans against performance.

Areas of Further Research

This study focused on the effect of size on financial performance. The size variables used in the study included net assets, total loans, total deposits and number of employees. Another study that incorporates other size variables such as branch network, number of deposit accounts and number of loan accounts is suggested. This would shed more light on how these size variables are related to performance.

Another study is also recommended that could factor in other bank performance measures such as asset quality, Tobin Q, Capital adequacy ratio and return on equity in addition to the performance measure utilized in this study. The current study was conducted on microfinance banks operating in Mombasa. There is therefore need for a similar study to be carried out in other sectors of the economy. The sectors that may be considered for study include the manufacturing sector or telecom sector to establish whether size variables affect financial performance.

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