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EFFECT OF INVESTMENT DECISIONS ON FINANCIAL PERFORMANCE OF MICROFINANCE FIRMS IN KENYA

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Abstract

The General objective of this research was to assess the effect of investment decisions on financial performance of microfinance firms in Kenya. The specific objectives of this project was to establish the effect of expansion decision and research and development decision on financial performance of microfinance firms in Kenya. The population was composed of all the registered 14 microfinance institutions in Kenya. Correlation and multiple regressions were employed as the analytical tools. The study was driven by the absence of laborious studies that address the dynamics of the financial performance in microfinance institutions in Kenya. The research was also motivated by the mixed results that various previous researchers got for the same types of the variables. The study also will help other researchers as a source of reference and as a stepping stone for those who want to make further study on the area afterwards. It will also contribute to the understanding and stabilization of the financial sector of the economy and the society as a whole. It will also give all stakeholders in the sector an opportunity to gain deep knowledge about the relationship of investment factors and financial performance of microfinance institutions in Kenya. The study found that expansion decision and investments in research and development had positive and a statistically significant effect on performance of microfinance banks. The study recommends that there should be development of policies around the activities of microfinance institutions to ensure that there is continuous renewal decision, replacement decision, expansion decision and research and development. There should also be an establishment of good microfinance institutions structures that will ensure that the activities of various microfinance institutions are focused towards expansion decision research and development. The study recommends that both the management and other interested players ensure that expansion decision, research and development are aligned with the long term goals of these institutions.

***Keywords**: Expansion decision, research and development decision, financial performance*

1.1 Introduction

Microfinance is a concept of financial service targeting upcoming entrepreneurs and small businesses lacking access to conventional banking and related services. Microfinance as a concept has been applied exclusively in attaining financial inclusion of parties earlier excluded from the formal financial system. Micro Finance Institutions (MFIs) therefore are institutions offering financial services for example banking and other related services targeting these entrepreneurs and small businesses. Some of the services offered include savings to the low income earners who in most cases do not meet the threshold or minimum account balance requirements

of commercial banks, small loans to facilitate startups and to propel them to the next level which ideally are not available from the traditional banks, fund transfer services and micro insurance (Imali, 2012)

Investment is defined as the process of mobilizing of resources to undertake a given activity with expectation of future returns (Donald, 2010). Literally the word investment means the action of putting something somewhere else in order to get a return. It involves the purchase of an asset or equivalently a deposit to a bank with the hope of getting a future return or interest from it (Prasanna, 2008). Investment decision making is an important part of the strategic decision-making in every enterprise because investment projects essentially affect future economic results and dramatically contributes to the growth of an enterprise. The quality of investment decision is affected by a large number of factors, while the most important is the selection of investment projects (Hana, 2010).

Investment decisions entail expansion decision, replacement decision, renewal decision and research and development decisions. The expansion decisions entail addition of new products and line of operation, and addition of capacity or diversification of operations (James and John, 2010). Replacement decisions on the other hand focus on improving operating efficiency and cost reduction by replacing obsolete products with new ones in respect to environmental changes (Pandey, 2008). Renewal decisions are aimed at a change in operations in terms of products offered, methods of delivery and efficiency of operations. Finally research and development decisions aim at creating new technology or information to improve the effectiveness of the products or make the production of the products more efficient. Investment decision functions are performed by the management level in a firm since they are financial management roles (James et al. 2010).

The firm's investment decisions would generally include expansion, acquisition, modernization and replacement of the long term asset. Sale of division or business is also as an investment decision. Decisions like the change in the methods of sales distribution, or an advertisement campaign or a research and development programmes have long term implications on the firm's expenditures and benefits, and therefore, they should also be evaluated as investment decisions. It is important to note that investment in the long term assets invariably requires large funds to be tied up in the current assets such as inventories and receivables. As such, investment in fixed and current assets is one single activity. A company may add capacity to its existing product lines to expand existing operation. For example, the Company Y may increase its plant capacity to manufacture more "X". It is an example of related diversification. A firm may expand its activities in a new business. Expansion of a new business requires investment in new products and a new kind of production activity within the firm. Sometimes a company acquires existing firms to expand its business (Machuki, 2011).

Investment in property is viewed as an engine of sustainable growth in developed nations (Ahn & Hemmings, 2000). However, in less developed countries (LDCs) the national level of savings is very low (Javorcik & Smarznska, 2004). Thus, there is a wide gap between the required rate of investment in property and the existing rate of such investments (Asiedu, 2006). Property investment is largely regarded as a potential basis of supporting growth and development of the developing and developed nations (Blomstrom & Kokko, 2003). According to the Global Property Guide (GPG) and the Global Housing Watch (IMF, 2015), strategies of attracting investment in the property market turned out to be a greatly used technique of many governments all over the world to advance their economies. As a result of this, several studies were dedicated to the techniques of how best to do it. One such studies is the United Nations (2000) millennium development goals (MDGs), a survey of property development in a number of countries with strategies to attract investments for the development of affordable housing for all citizens.

Further, the United Nations Industrial Development Organization (UNIDO) reported that the stream of foreign direct investment (FDI) internationally reached a towering level of USD 1.3 trillion in the year 2000. Investment promotion agencies (IPAs) in several parts of the globe, particularly in the well advanced economies of Europe and North America, and also the flourishing Asian economies of China, recorded great volumes of property market business and celebrated great triumph in attracting fresh investment to their countries. Generally this investment flow, however, was concentrated in the well-developed parts of the European Union, the United States and Japan which jointly accounted for 71% of global inflows from the Foreign Direct Investors (UNIDO, 2008).

1.1.1 Financial Performance

Financial performance measurement and reporting is now widespread across the private sector as well as public sector of many industrialized and industrializing countries (Williams, 2003). The common tool that is used for this process, key financial performance indicators, has been argued to provide intelligence in the form of useful information about a public and private agency's performance (Williams, 2003). Scholars like Modell (2004), Moynihan (2005), Vakkuri and Meklin (2006) have maintained that the implementation of financial performance measurement systems possess important symbolic value. Financial performance indicators are viewed as a good management device and a socially constructed tool that makes sense (DeKool, 2004). The fact that financial performance indicators tend to be quantitative has helped to promote their image of objectiveness and rationality. The image of financial performance indicators is further enhanced by their widespread application across the many sectors of many countries. The importance of financial performance measurement is noted by Ingraham (2005) that it is important to expect that citizen's see and understand the results of organizational programs.

Cicea and Hincu (2009) state that microfinance firms represent the core of the credit for any national economy. In turn, the credit is the engine that put in motion the financial flows that determine growth and economic development of a nation. As a result, any efficiency in the activities of microfinance firms has special implications on the entire economy. The management of every microfinance firms must establish a system for assessing investment performance which suits its circumstances and needs and this evaluation must be done at consecutive intervals to ensure the achievement of the microfinance firm's investment objectives and to know the general direction of the behavior of investment activity in the past and therefore predict the future.

Financial performance offers clues about the ability of the microfinance firms to undertake risks and to expand its activity. The main indicators used in the appreciation of the microfinance firms financial performance are: Return on equity, ROE (Net income / Average Equity), Return on Asset, ROA (Net income /Total assets) and the indicator of financial leverage or (Equity / Total Assets) (Dardac and Barbu, 2005). The indicators are submitted to observation along a period of time in order to detect the tendencies of financial performance. The analysis of the modification of the various indicators in time shows the changes of the policies and strategies of banks and/or of its business environment (Greuning and Bratanovic, 2004)

1.1.2 Micro finance institutions in Kenya

A micro finance is an emerging market particularly amongst the urban and peri-urban populations in Kenya. The growth of the sector is supported mainly by private micro finance institutions and government of Kenya initiatives as motivated by economic pillar enablers of the Kenya Vision 2030. Technically, micro finance is a business in which the person conducting the business holds himself out as accepting deposits on a day to day basis and any other activity of the business which is financed, wholly or to a material extent, by lending or

extending credit for the account and at the risk of the person accepting the deposit, including the provision of short term loans to small or micro enterprises or low income households and characterized by the use of collateral substitutes (GoK, 2006).

According to Waithera (2008), Micro Finance is way of supplying loans and small credits to finance small projects to help the poor have an income through forming their own small scale business to earn their daily bread and better their living. Micro finance is the provision of credit to the poor and low-income earners to enable engage them in productive activities. Kiiru (2006) asserts that the Kenyan micro-finance industry is relatively a new phenomenon having begun with a few agencies about 20 years ago. Since then there has been a gradual shift in interest and resources allocation towards assisting the informal sector in a variety of ways. In the 1970‟s the main organization providing credit to the informal sector was church based organizations. The programs point to innovations like group lending contracts as the keys to their success. Group lending effectively make a borrowers neighbors co-signers to loans mitigating problems created by information asymmetries between borrower and lender. Neighbours will then have incentives to monitor each other and to exclude risky borrowers from participation prompting repayments even in the absence of collateral requirements (Modurch, 1999). Group lending mechanism allows a group of individuals often called solidarity to provide collateral or loan guarantee through a group repayment pledge. The repayments are made daily, weekly, monthly, or after four weeks.

1.2 Statement of the Problem

The investment decision in microfinance firms is considered as one of the principles of concern for the stakeholders. This is because investment decisions determine the micro finances financial performance. Analysis of investment decisions made by microfinance firms in Kenya show that there have been challenges that have lowered their financial performance. Low return on real estate investment, inadequate product development, delay in loan processing, increased levies on withdrawal and deposit and loan default are some of the key challenges that have affected the financial performance of microfinance firms in Kenya (Sigei, 2016). Due to interest rate capping the operators have been forced to seek other means to increase income. According to CBK reports (2017) interest rate capping policy and the competing market has led to microfinance to post heavy losses in the last two years. The microfinance banks posted a loss of KSh 322.78 million in the period ended June 2017 compared to a loss of KSh 128.3 million in the period ended June 2016. The deterioration of the bottom line reflects increased funding costs. The total interest on deposits increased from KSh 0.9 billion for the period ended June 2016 to KSh 1.32 billion for the period ended June 2017. This was a 46.7 percent increase mainly attributable to an increase in customer deposits. The interest expense on borrowing increased from KSh 0.65 billion for the period ended June 2016 to KSh 0.86 billion for the period ended June 2017. This was attributable to increased borrowing by microfinance institutes to fund their lending activities (CBK Annual Report, 2017). Over the decades MFIs in Kenya have been experiencing deterred growth with a few number of MFIs being registered in the last five year. Studies and report from CBK (2017) have shown that Saccos and commercial banks growth rate is high as compared with that of MFIs. Stiff competition and lack of appropriate investment decisions has resulted into decreased profits and returns of the assets as well as total revenue. Hence some microfinance firms have been unable to mobilize savings for additional investment.

However, studies on the influence of investment decisions on financial performance of microfinance firms are rather scanty. Nyoike (2002), study on, financing capital investments by quoted companies in Kenya, analyzed data using, correlation between capital investments and new equity, long-term debt and short-term debt, these

revealed varied correlations among the industry sectors in the study. Mwangi and Kihiu (2012) established that the probability of a firm depends on the investment decision adopted by the firm. Muriuki (2016) analyzed factors influencing investment decisions of microfinance firms in Kenya and found that the level of financial literacy of the fund managers influenced their investment decision making. These studies concentrated on areas of financial literacy but not on investment decision in microfinance firms. Therefore, the influence of investment decisions on financial performance of microfinance firms in Kenya has not been established. The existing literature has failed to capture the aspect of renewal, replacement, expansion and research and development decisions as investment approaches by micro finance institutions to boost their financial performance. Therefore this study seek to bridge the existing knowledge gap by establishing the effect of investment decisions on financial performance of microfinance firms in Kenya.

1.3 General Objectives

The general objective of this study was to evaluate the effect of investment decisions on financial performance of microfinance firms in Kenya.

1.3.1 Specific Objectives

1. To examine the effect expansion decision on financial performance of microfinance firms in Kenya
2. To assess the effect of research and development decision on financial performance of microfinance firms in Kenya

1.4 Research Hypotheses

H_{01}. Expansion decision does not significantly affect financial performance of microfinance firms in Kenya.

H_{02}. Research and development decision does not significantly affect financial performance of microfinance firms in Kenya.

1.5 Scope of the Study

The scope of the study was restricted to the assessment of the effect of investment decisions on financial performance of microfinance firms in Kenya. As a result, it included only microfinance firms in Kenya. The scope of the study also included only the 14 registered microfinance firms in Kenya.

2.1 Theoretical Framework

Modern Portfolio Theory

Markowitz (1952), an American economist developed a theory of "portfolio choice," which allows investors to analyze risk relative to their expected return. Markowitz's theory is today known as the Modern Portfolio Theory, (MPT). The MPT is a theory of investment which attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets (Saleh (2012).

Although the MPT is widely used in practice in the financial industry, in recent years, the basic assumptions of the MPT have been widely challenged. The Modern Portfolio Theory, an improvement upon traditional investment models, is an important advance in the mathematical modeling of finance. The theory encourages asset diversification to hedge against market risk as well as risk that is unique to a specific company (Ambrose

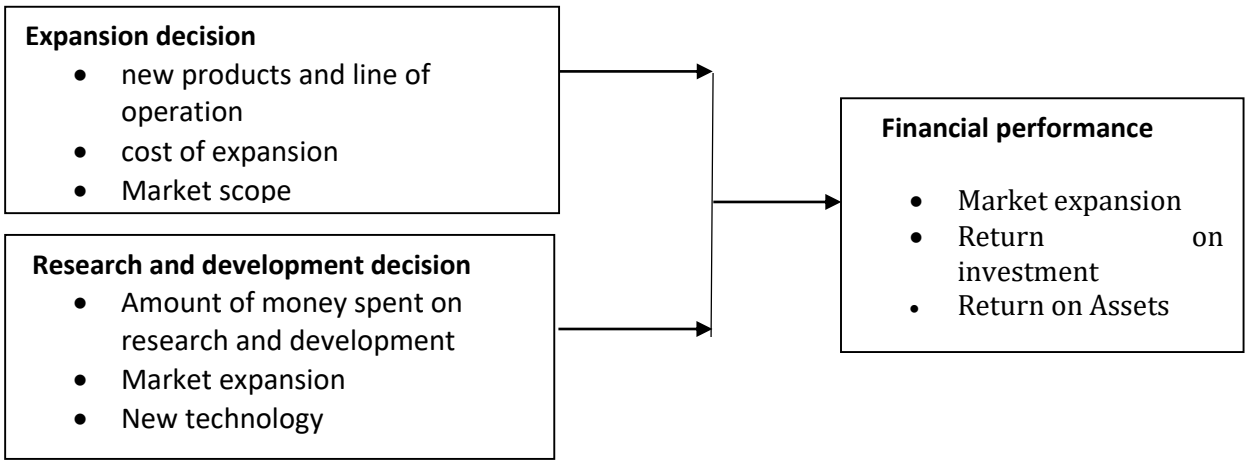
and Vincent, 2014). The theory (MPT) is a sophisticated investment decision approach that aids an investor to classify, estimate, and control both the kind and the amount of expected risk and return.

The Transaction Cost Theory

This theory was developed by Coase (1937). According to him, transaction cost refers to cost of providing for goods or services through the market rather than having it provided from within the firm. Coase explained that without taking into account transaction costs it is impossible to understand properly the working of the economic system and have a sound basis for establishing economic policy. According to transaction cost theory, firms seek to expand in a cost effective manner to insure profitability. A key challenge to transaction efficiencies is uncertainty about the future in the firm's environment. Uncertainty increases the firm's transaction costs, especially with regard to research, information processing, and adaptation (Inge et al, 2006).

Although previous research has accepted the positive relationship between innovative activity and firm performance (Zhao and Li, 1997), firms with higher R&D expenditure are expected to reap more than those that do not. This line of argument is anchored in transaction cost theory (Williamson, 1975; 1994). Under these conditions and rather reasonable behavior assumptions of bounded rationality, high-tech firms will invest in in-house R&D rather than out-sourcing R&D because technological innovation and market expansion are subject to the opportunistic behaviour of the parties involved. In general, R&D involves a high degree of uncertainty with respect to the nature (McCutchen et al., 2004) and the timing of the research outputs (Arrow, 1962). Taggart and Blaxter (1992) examine the uncertainty of R&D that is determined by two sets of actors in technology and the market. Technological uncertainty means that the R&D activity does not absolutely result in greater output; while market uncertainty means that demand is fluctuating and competition means that R&D investment cannot be recouped. Therefore, R&D activity often requires transaction specific investments in assets that are not easily redeployed (Choi and Williams, 2013).

2.2 Conceptual framework



Independent Variables **Dependent Variable**

2.3 Research gap

Empirical review done shows studies that have been carried out in Asia, United Arab Emirates, Africa and Europe. The studies have addressed different constructs ranging from renewal decision, replacement decision, expansion decision and research and development. The findings of these studies provide interesting positions

on how each indicator of investment decision influences financial performance. While some find that they do not significantly influence the same, some gaps have been identified and these gaps form the basis of this study. One key factor that informs this study is the fact that none of the above studies has used a combination of the four indicators of investment decision; renewal decision, replacement decision, expansion decision and research and development. The sectors surveyed range from banks, hospitals, schools but none of them has been carried out in the microfinance firms in Kenya.

3.0 RESEARCH METHODOLOGY

This study adopted descriptive design method and primary data analysis research design. Primary data are those collected afresh for the first time. Kothari (2004), note that, a research design appropriate must be flexible enough to provide opportunity for considering different aspects of a problem under study.

The target population for this study was all the 14 registered microfinance institutions in Kenya. Research conclusions and generalizations are only as good as the sample they are based on Kombo and Tromp (2011). Since the targeted population will be made of fourteen microfinance institutions, the researcher targeted all 14 microfinance institutions thus adopting a census technique. Intended data was collected from the finance persons from each microfinance institutions in the targeted population.

The study used questionnaire as data collection instrument. The questionnaire used close-ended.Bhattacherjee (2012), asserts that a questionnaire is a research instrument consisting of a set of questions intended to capture response from respondents in a standardized manner.

The questionnaire was also of Likert-scale type with five points. In a Likert-scale, the respondent is asked to respond to each of the statement in terms of several degrees, usually five degrees of agreement or disagreement. A total of 126 respondents in the managerial positions was served with the research questionnaires in all the firms selected for the study. According to Kothari (2004), quite often a questionnaire is considered as the heart of a survey operation.

The data analytical techniques that was used was quantitative techniques in nature. These are correlation analysis and multiple regression analysis. The data was analysed using the help of SPSS software. The study conducted a correlation analysis to assess the extent on collinearity between variables. The researcher further employed multiple regression model in the study to explain the relationship of the independent and the dependent variables.

$Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$

Where:

Y = Financial performance

β_0=Intercept term

β_1=coefficients of the independent variables

X_1= Expansion decision

X_2= Research and development decision

ε= error term

4.0 RESULTS AND DISCUSSIONS

4.1 Descriptive statistics

4.1.1 Expansion decision

Table 4.1 Expansion decision

Statement	Mean	Standard deviation
We have increased new products and line of operation in the last five years	4.39	1.305
Addition of capacity or diversification of operations	4.51	1.251
Expansion provides firms with market opportunities for greater growth	4.41	1.335
Expansion provides firms with Economies of scale	4.38	1.290
Due to expansion we have increased the number of branches hence new markets	4.28	1.282
Our number of customers have increased due to the expansion decision	4.35	1.26

We examined the respondent's level of agreement or disagreement on the various measures of financial performance. Table 4.1, presents the relevant results which show that on a scale of 1 to 5 (where 1= strongly disagree and strongly agree=5) the means were found to be; We have increased new products and line of operation in the last five years 4.39 Standard deviation 1.305, Addition of capacity or diversification of operations 4.51 Standard deviation 1.251, Expansion provides firms with market opportunities for greater growth 4.41 Standard deviation 1.335, Expansion provides firms with Economies of scale 4.38 Standard deviation 1.290, Due to expansion we have increased the number of branches hence new markets 4.28 Standard deviation 1.282 and Our number of customers have increased due to the expansion decision 4.35 Standard deviation 1.26. These results reveals that majority of the respondents agreed with the statements on Expansion decision. The conclusion from this was that Expansion decision are relevant in explaining financial performance among the microfinance institutions. This finding were in agreement with those of Boonstra (2003); Karanja (2012) and Gervais (2009) whose findings were in agreement on expansion decisions on financial performance of a firm,

4.1.2 Research and development

Table 1.2 Research and development

Statement	Mean	Standard deviation
Firm-specific resources are directed towards research	4.58	1.217
The accumulated internal capability of innovation exceed it cost	4.52	1.259
R&D has led to innovations in the institution	4.44	1.226
Market had grown as a result of R&D	4.48	1.297

The study was to measure the respondent's level of agreement or disagreement on the various measures of financial performance. Table 4.2, presents the relevant results which show that on a scale of 1 to 5 (where 1= strongly disagree and strongly agree=5) the means were found to be; Firm-specific resources are directed towards research 4.58 Standard deviation 1.217, The accumulated internal capability of innovation exceed it cost 4.52 Standard deviation 1.259, R&D has led to innovations in the institution 4.44 Standard deviation

1.226, Market had grown as a result of R&D 4.48 Standard deviation 1.297. These results reveals that majority of the respondents agreed with the statements on Research and development. The conclusion from this was that Research and development are relevant in explaining financial performance among the microfinance institutions. This findings were similar to those of Bialowolski (2013) and those of Karanja (2012) who found that R&D decision investment influenced financial performance of a firm.

4.1.3 Financial performance

Table 4.3 Financial performance

Statement	Mean	Standard deviation
Return on assets have increased over time	4.85	1.167
Returns on equity have increased over time	4.72	1.082
Earnings per share have increased over time	4.95	1.051
Sales of new loans growth have increased over time	4.88	1.041
New investments are profitable	4.79	1.251

The study sought to test the respondent's level of agreement or disagreement on the various measures of financial performance. Table 4.3, presents the relevant results which show that on a scale of 1 to 5 (where 1= strongly disagree and strongly agree=5) the means were found to be; Return on assets have increased over time 4.85 Standard deviation 1.167, Returns on equity have increased over time 4.72 Standard deviation 1.082, Earnings per share have increased over time 4.95 Standard deviation 1.051, Sales of new loans growth have increased over time 4.88 Standard deviation 1.041, New investments are profitable 4.79 Standard deviation 1.251. These results reveals that majority of the respondents agreed with the statements on financial performance. These findings were similar to those of Muli (2016) and those of Karanja (2012).

4.2 Factor Analysis

Table 4.4 Expansion decisions

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.819
Bartlett's Test of Sphericity	Approx. Chi-Square	1105.553
	df	6
	Sig.	0.000

Table 4.4 presents Kaiser-Meyer-Olkin and Bartlett's Test results for Expansion decisions. Kaiser-Meyer-Olkin test measurers the sampling adequacy which should be greater than 0.5 for satisfactory factor analysis to be executed. Since this value was found to be 0.819 the study proceeded to factor analysis level. Bartlett's Test of Sphericity test value of 1105.553, measures internal correlation of construct and the higher the value the better.

Table 4.5 Research and Development decisions

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.880
Bartlett's Test of Sphericity	Approx. Chi-Square	881.323
	df	6
	Sig.	0.000

Table 4.5 presents Kaiser-Meyer-Olkin and Bartlett's Test results for Research and Development decisions. Kaiser-Meyer-Olkin test measurers the sampling adequacy which should be greater than 0.5 for satisfactory factor analysis to be executed. Since this value was found to be 0.880 the study proceeded to factor analysis level. Bartlett's Test of Sphericity test value of 881.323, measures internal correlation of construct and the higher the value the better.

Table 4.6 Financial Performance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.801
Bartlett's Test of Sphericity	Approx. Chi-Square	853.512
	df	6
	Sig.	0.000

Table 4.6 presents Kaiser-Meyer-Olkin and Bartlett's Test results for Financial Performance. Kaiser-Meyer-Olkin test measurers the sampling adequacy which should be greater than 0.5 for satisfactory factor analysis to be executed. Since this value was found to be 0.801the study proceeded to factor analysis level. Bartlett's Test of Sphericity test value of 853.512, measures internal correlation of construct and the higher the value the better. If its associated probability is less than 0.05, then the variables have some correlation with each other. This is what we required to find an underlying factor that represent a grouping of variables.

The results in table 4.6 shows that the measures could be combined into one variable. This variable was labeled financial performance.

4.3 Correlation Analysis

Table 4.7 Correlation Analysis

			Financial performance	Expansion decisions	Research and development
Financial performance	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	103			
Expansion decisions	Pearson Correlation	0.760**		1	
	Sig. (2-tailed)	.000			.000
	N	103		103	103
Research and development	Pearson Correlation	0.827**		0.351**	1
	Sig. (2-tailed)	.000		.000	
	N	103		103	103

From table 4.7 it can be observed that the correlation between the independent variables and the dependent variable was high and positive at 0.760 and 0.827 for financial performance in regard to Expansion decisions Research and development respectively. Burns and Burns (2008), asserted that multi-collinearity is the presence of very high correlations between the independent variables and should be avoided. However the correlation among the independent variables was small with the highest being 0.351. This findings were similar to those of Bialowolski (2013); Karanja (2012) and Muli (2016) who found that renewal decision, replacement decision and expansion decision had positively influenced financial performance of a firm.

4.4 Regression results

Table 4.8 Test statistics

Model	R	R Square	Adjusted R Square
1	0.749	0.701	0.797

From table 4.8 the values of the findings were as follows R 0.749, R Square 0.701 and adjusted R square 0.797. These values clearly suggests that after adjusting for the degrees of freedom there is a strong relationship between, expansion decision and research and development and financial performance for all the models. This indicates that. Expansion decisions Research and development causes a variation of R 0.749, R Square 0.701 and adjusted R-square 0.797 on financial performance.

Table 4.9: Analysis Of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	79.802	2	19.951	222.860	0.000
	Residual	8.773	98	0.090		
	Total	88.575	102			

The results in Table 4.9 indicates that the overall models was a good fit since the value of F-statistic was found to be 222.860 and the p-values was found to be 0.000 which is less than the critical value of 0.05. This suggest that all the four variables considered were relevant in explaining the financial performance of microfinance banks.

Table 4.10 Coefficients Table

Model		Unstandardized Coefficients		t-statistics	p-value
		Beta	Std. Error		
(Constant)		0.028	0.032	0.898	0.371
	Expansion decision	0.191	0.042	4.580	0.000
	Research and development	0.249	0.047	5.298	0.000

The fitted regression model is

$$Y = 0.028+0.191X_1+0.249X_2 + \varepsilon$$

Standard Error	0.032	0.042	0.047
t-Statistics	0.898	4.580	5.298
p-value	0.371	0.000	0.000

Where; Y = Financial performance, X1 = Expansion decision, X2 = Research and development, ε = Error Term

4.4.1 Expansion decision

From table 4.10 the regression coefficient of expansion decision was found to be 0.191. This value shows that holding other variables in the model constant, an increase in expansion decision by one unit causes the financial performance to increase by 0.191 units. The value of the coefficient is also positive. The positive effect shows

that there is a positive relationship between expansion decision and financial performance. The coefficient was not just positive but also statistically significant with a t-statistic value of 4.580. A t-statistic value of 2.0 and above is normally accepted to be significant for inference analysis. The standard error was found to be 0.042 and the p-value was found to be 0.000. The results also shows that there is very low multicollinearity since the tolerance value was found to be 0.504 < 1 and the variance inflated factor was found to be 1.983 <5.00.

4.4.2 Research and development

From table 4.10 the regression coefficient of Research and development was found to be 0.249. This value shows that holding other variables in the model constant, an increase in research and development by one unit causes the financial performance to increase by 0.249 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between Renewal decision and financial performance. The coefficient was not just positive but also statistically significant with a t-statistic value of 5.298. A t-statistic value of 2.0 and above is normally accepted to be significant for inference analysis. The standard error was found to be .047 and the p-value was found to be 0.000. The results also shows that there is very low multicollinearity since the tolerance value was found to be 0.431< 1 and the variance inflated factor was found to be 2.320 <5.00.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of findings

The purpose of this study was to assess effect of investment decision on financial performance of micro finance institutions in Kenya. The study was guided by two research objectives. To establish the effect of expansion decision and research and development on financial performance of microfinance institutions in Kenya. The mean and standard deviation was first used to describe the response patterns of the respondent. It was revealed that majority of the respondents agreed that the various factors were very relevant in explaining the relevance of the expansion decision and research and development decisions. The correlation analysis revealed that there was low correlation between the two study variable and other explanatory variables. This permitted further analysis to include this variable as one of the explanatory variable. The regression analysis revealed that both expansion decision and research and extension as a variables has a positive effect on financial performance.

5.2 Conclusion

Based on the findings the study concluded that relationship between the microfinance institutions performance and expansion decisions in investment is very important for increasing profits. Thus the microfinance institutions should integrate expansion decision with the overall objectives and goals in which they intend to attain. Further, we concluded that proper expansion decision in microfinance institutions is important and could lead to transformation of these entities.

The concluded that relationship between the microfinance institutions performance and the research and development is very important. Thus the microfinance institutions should integrate research and development with the overall objectives and goals in which they intend to attain. Further, we concluded that proper research and development in microfinance institutions is important and could lead to transformation of these entities.

5.3 Recommendations

The study recommends that there management of various MIF to focus on renewal decisions for investment which have positive performance. There should also be an establishment of good microfinance institutions

structures that will ensure that the activities of various microfinance institutions are focused towards renewal decisions.

The study further recommended that considering financial implications on expansion decision of investment, the management can consider increasing their investment portfolios. The study recommends the management of MFIs to expand investment where necessary so that they can generate more income in the firm.

The study recommends that there should be development of policies to ensure that there is continuous research and development in terms of product and investments as well as innovations. The study recommends that both the management and other interested players ensure that research and development are aligned with the long term goals of these organizations.

5.4 Area for Further Research

The regression model for this study noted that the variables, expansion and research and development included were explained by R 74.9%, R Square 70.1 % and adjusted R square 79.7 % of the variation in the dependent variable. This study therefore recommends for further improvement of the model by including more variables that are relevant in explaining the variation included in 19.3 %. The study also recommends research be done in other organization in various industries to check whether the variables had similar effects on financial performance.

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