

**THE RELATIONSHIP BETWEEN INVESTMENT DECISIONS AND
CREDIT RATIONING EXPERIENCED BY MICRO AND SMALL
ENTERPRISES IN ROYSAMBU CONSTITUENCY, NAIROBI COUNTY**

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D61/76000/2012

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF
MASTER IN BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI**

JUNE 2014

DECLARATION

This project is my original work and has not been submitted for an award of a degree in any other university.

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ACKNOWLEDGEMENTS

I would like to commend my supervisor, Mr. Herick Ondigo for his guidance and patience that made this project a reality.

A special appreciation to the Nairobi County Council for enabling me to obtain the necessary data needed for the project.

May the Almighty bless you all abundantly.

Dedication

To my parents, Mr. and Mrs. Muthee Mwangi for having encouraged me to pursue education to the highest possible level.

To my siblings: Eric, Dan, Rose and Lynette; friends Florence and Teresia for their love, support, understanding and encouragement during the preparation of this project.

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LIST OF ABBREVIATIONS

CEO - Chief Executive Officer

MFIs - Micro Finance Institutions

MSEs- Micro and Small Enterprises

NFIB- National Federation of Independent Business

ABSTRACT

The MSE sector is very important in developing countries because it helps in wealth creation and reduction of unemployment. However, the MSEs face many challenges in obtaining credit to ensure continuity of the businesses into the future as their growth depends on amounts of funds availed to the enterprises to enable them make sound investment decisions. Many studies have shown that majority of the MSEs lack proper business records and some of the MSEs do not maintain bank accounts which leads to the MSEs not being considered credit worthy by finance providers. Thus, there is need to address the way MSEs make their investment decisions when they experience credit rationing from the finance providers. The objective of the study was to establish the relationship between investment decisions and credit rationing experienced by micro and small enterprises in Roysambu Constituency, Nairobi County. The population of the study was the MSEs located in Roysambu Constituency and the sampling frame included all the MSEs in the constituency licensed by the County Council. Stratified and random samplings were used while questionnaires were utilized for data collection. Descriptive research design was used and data analysis was done through regression while further analysis was done using descriptive analysis. The study found that the relationship existing between investment decisions and credit rationing experienced by MSEs is positive as there is a positive correlation between credit rationing experienced by the MSEs and investment decisions made by the MSEs. From the study the following policy recommendations were suggested; There is a need to train owners of MSEs on how to keep proper financial records and working capital management to ensure that they are granted full loans by the finance providers. The finance providers need to introduce loans targeting MSEs which should have flexible repayment schedules so that the MSEs are motivated

in expanding their businesses. There is also a need for the finance providers to educate MSE owners about their terms and conditions for lending so that the MSE owners are aware of the lending limits and securities required when obtaining loans from the finance providers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The MSE sector has been of great interest in developing countries because of its uniqueness in reduction of unemployment and wealth creation. According to the 1999 National MSE Baseline Survey, the MSE sector contributes to the Kenyan economy in terms of employment and income. The growth of micro and small enterprises depends on amount of funds availed to the enterprises to enable the enterprises make sound investment decisions. According to Pandey (2010), investment decisions are important to a firm as they determine its value by influencing its growth, profitability and risk. Sound investment decisions mean that the micro and small enterprises are able to achieve their objectives and also have a surety of continuing into the future. Pandey (2010) noted that wrong investment decisions can be disastrous for the continued survival of the firm as it would be difficult for the firm to compete successfully.

According to the 1999 National MSE Baseline Survey, about 70% of MSEs are sole proprietorships. Credit rationing of MSEs influences the way the MSEs make their investment decisions due to lack of credit. Casu, Girardone and Molyneux (2006) viewed credit rationing as a technique used by banks to limit the amount of credit available to a specific segment of customers. This study will define credit rationing as a situation where a borrower applies for credit from a finance provider and ends up getting an amount less than what he had initially applied for. Dean (1951) viewed investment decisions as the process of projecting investments

and selecting the most desirable ones. This study will define investment decisions as foregoing current consumption of resources now so that more resources can be consumed in the future.

Due to the importance of the MSE sector's contribution to the national economy, the way the MSEs make their investment decisions when they experience credit rationing from the finance providers needs to be addressed. The 1999 National MSE Baseline Survey found that 77% of the respondents did not maintain bank accounts and 64.1% did not keep any business records. Thus there is need for MSEs to be encouraged to keep business records and maintain bank accounts to enhance their credit worthiness. Therefore, this study aims to contribute to the literature on the relationship between investment decisions and credit rationing of micro and small enterprises.

1.1.1 Credit Rationing

Credit rationing refers to a situation where lenders limit the supply of credit to borrowers who demand funds. Jaffee and Modigliani (1969) defined credit rationing as a situation in which the demand for commercial loans exceeds the supply of the loans at the commercial loan rate quoted by the banks. It is a form of financial repression used as a way of imposing restrictions to encourage or discourage savings to certain sectors of the economy. It results from asymmetric information between borrowers and lenders. It can also be regulatory, that is, the maximum amount of credit that a financial institution can extend to a single borrower, often referred to as lending limits. Jaffee and Modigliani (1969) distinguished two forms of credit rationing depending on the status of the commercial loan interest rate.

Equilibrium rationing is the form of credit rationing that occurs when the loan rate is set at its long run equilibrium level. Dynamic rationing is the form of credit rationing which may occur in the short run when the loan rate has not been fully adjusted to the long run optimal level. According to Stiglitz and Weiss (1981), credit rationing is viewed as circumstances in which identifiable groups of individuals in the population who with a given supply of credit are unable to obtain loans at any interest rate even though with a larger supply of credit they would.

1.1.2 Investment Decisions

Investment decisions refer to foregoing present consumption of resources in order to increase the total amount of resources which can be consumed in the future. According to Pandey (2004), an investment decision is defined as a firm's decision to invest its current funds most efficiently in long term assets in anticipation of an expected flow of benefits over a series of years. Investment involves outflows (payments) of cash causing inflows (receipts) of cash. Selecting which investment opportunities to pursue and which to avoid is a vital matter to micro and small business enterprises because individual projects frequently involve relatively large and irreversible commitments of finance and they involve this commitment often for very long periods of time. Investment decisions are central ones because bad decisions usually cause major financial loss before collapse occurs. According to Dean (1951) only investment opportunities whose internal rates of return exceed market determined costs of capital should be accepted. The objective of an investment decision is to acquire an asset, real or financial for less than its value so that corporate or personal wealth can be increased.

Brealy and Myers (2003) observed that good investment decisions often required good information by establishing consistent forecasts, reducing forecast bias and eliminating conflicts of interest. Factors that motivate investment decisions are mainly: interest rate, that is, the higher the interest rate, the lower the level of investment since capital cannot be obtained, internal rate of return expected over the cost of new capital, availability of credit and higher stock returns. Gill et al. (2012) used CEO tenure, CEO duality, board size, total assets, business performance and industry dummy as variables potentially associated with the investment decision of the firm in their study regarding the relationship between corporate governance and investment decision of small business firms in India. The investment decision of small business firms was operationalized as the proportion of the small business firms' total portfolio that was allocated in the real estate market to earn higher rate of return and to diversify risk. This study will use total assets, business performance and CEO tenure as proxy variables for measuring investment decisions of micro and small enterprises. Investment decision in this study will be operationalized as the proportion of the small enterprise's total assets that is allocated to investment.

1.1.3 Relationship between Credit Rationing and Investment Decisions

Credit rationing affects investment decisions in that a firm is not able to commit resources into the future because of lack of capital. When credit rationing occurs, a firm does not have the adequate amount of resources to undertake investment decisions. Stiglitz and Weiss (1981) wanted to show that in equilibrium, a loan market may be characterized by credit rationing. This is because banks issuing loans are mainly concerned about the interest they receive on the loan and the riskiness of the loan. They found out that the interest rate that a bank charges may affect

the riskiness of loans by either sorting potential borrowers i.e. the adverse selection effect or affecting the actions of the borrowers i.e. the incentive effect. The adverse selection aspect of interest rate results from different borrowers having different probabilities of repaying their loan and therefore the bank has to use screening devices in order to identify good borrowers.

The interest rate that a borrower is willing to pay may act as a screening device and those borrowers willing to pay a high interest rate may be worse risks because they perceive their probability of repaying the loan to be low. Stiglitz and Weiss (1981) also showed that higher interest rates induced firms to undertake projects with lower probability of success but higher payoffs when successful. Dean (1951) observed that in capital budgeting, a firm should also determine the source of capital: either internal i.e. depreciation and retained earnings or external financing whereby a firm's cost of capital is considered. It is when firms seek external financing that credit rationing occurs whereby they end up receiving part of the credit they had initially applied for or no credit at all because of lack of information and strong banking relationships. This is to say that there exists an inverse relationship between credit rationing and investment decisions i.e. when credit rationing occurs there are no investment decisions to be made due to lack of working capital.

1.1.4 Micro and Small Enterprises in Roysambu Constituency

The Micro and Small Enterprise Act (MSE Act) defines a micro enterprise as a firm, trade, service industry or business activity whose annual turnover does not exceed five hundred thousand shillings and which employs less than ten people. The MSE Act defines a small enterprise as a firm, trade, service industry or business activity whose annual turnover ranges

between five hundred and five million shillings and which employs between ten and fifty people. In Kenya, micro and small enterprises play an important role in the economy in spurring socio-economic development. The 1999 National MSE Baseline Survey found that there were about 1.3 million MSEs employing about 2.3 million people. The contribution towards growth, job creation and social progress is valued highly and MSEs are regarded as an essential element in a successful formula for achieving economic growth. The Kenya Economic Survey Report 2013 showed that the informal sector contributed 89.7% to the total employment created in the year 2012/2013 by providing 591400 jobs.

Socially, entrepreneurship results in poverty eradication and improved standards of living. Credit rationing in Kenya has hindered investment by MSEs mainly due to lack of capital. The 1999 National MSE Baseline Survey found that about 88.3% of the MSEs were operating without registration and that 60.6% of the MSEs were operating without a license. This study will concentrate on MSEs that are licensed by the County Council as some of the MSEs are assumed to be operating without registration and licenses. Credit rationing normally occurs when a borrower receives partial credit because of having exceeded the credit limit spelt out by the lending entity and also when there are too many borrowers such that the lending entity has to categorize those borrowers who will be eligible to access credit and those who will not be able to access credit. Investment decisions of MSEs in Kenya face a lot of challenges due to inadequate education and skills of the managers, lack of access to long-term credit forces them to rely on high cost short-term finance as financial institutions find it hard to consider lending loans to them as no securities would warrant the repayment, technological change and insufficient

market information as many of the enterprises continue to rely heavily on private or even physical contacts for market related information.

1.2 Research Problem

Credit rationing in this study will mean when a borrower applies for credit from a financial institution and ends up getting an amount less than what he had initially applied for. Hodgman (1960) viewed credit rationing as a temporary necessity which lenders resort to only until they have made up their minds to raise the interest rates to a new equilibrium level following an increase in borrower demand or restrictive action by the monetary authority. Investment decisions in this study will mean foregoing current consumption of resources now so that more resources can be consumed in the future. Dean (1951) refers to investment decisions as the process of projecting investments and selecting the most desirable ones. Lack of access to credit and working capital leads to the MSEs borrowing from unlicensed money lenders e.g. loan sharks, closure of some of the MSEs thereby resulting to unemployment and a decline in economic growth.

Stiglitz and Weiss (1981) found that when there was excess demand for credit, unsatisfied borrowers would offer to borrow at a higher interest rate whereby the banks would not lend such individuals as they would end up undertaking riskier projects because of being faced with higher interest rates. They came up with a model whereby individuals who would undertake riskier projects would be punished through being charged higher interest rates or credit being withheld. Micro and small enterprises in Kenya play a vital role in the economy through provision of employment and economic growth. However MSEs face a lot of challenges in the course of

their operations namely competition, insecurity, debt collection, lack of working capital and power interruptions according to Bowen et al. (2009). Several studies have identified lack of working capital as a major problem affecting growth of MSEs in Kenya. The 1999 National MSE Baseline Survey found that proportion of loans from formal sources in 1999 was more i.e. 5.7% compared to 3.4% in 1995 and 4% in 1993 due to the increase in number of support organizations that provided credit to MSEs. Many MSEs lack information about the lenders, collateral and sufficient documentation e.g. valuation of underlying working capital assets i.e. accounts receivables and inventory in order to qualify in their loan applications.

Atieno (2001) investigated the role of institutional lending policies of formal and informal credit institutions in determining the access to and use of credit facilities by small scale entrepreneurs in rural Kenya. The study aimed at identifying main features of the lending policies of formal and informal credit institutions that determine the access to and use of credit by small scale entrepreneurs, the factors that determine the participation of entrepreneurs in credit markets and their choice of credit sources in Kenya and policy implications drawn for financial services to small scale enterprises in Kenya. The study found that most enterprises had not used credit and out of those that had, majority had used informal credit sources. The study concluded that informal credit sources provided easier access to their credit facilities for small micro enterprises and given the wide and established network of commercial banks, improving the lending rates and conditions in favor of small micro enterprises would significantly facilitate the accessibility of small scale enterprises to credit.

Rukwaro (2001) investigated credit rationing by microfinance institutions (MFIs) and its influence on the operations of small and micro enterprises. The main objective of the study was to determine how the MFIs allocated credit to MSEs which was achieved through determining the operations of MSEs, the criteria used by MFIs to ration credit and establishing the influence of credit rationing by MFIs on the MSEs operations. The study found that credit rationing did influence the operations of the MSEs, that is, the extent to which the entrepreneurs met the set rationing criteria determined the level of operations of their businesses in terms of business expansion. Danielson and Scott (2006) investigated capital budgeting decisions of small businesses. The objective of the study was to find out the capital budgeting practices of small firms. The study found that the small businesses used discounted cash flow analysis less frequently than gut feel and non-discounted cash flow techniques i.e. payback period and accounting rate of return thus the small businesses ended up analyzing potential investments using much less sophisticated methods than those recommended by the capital budgeting theory. Kirschenmann (2010) observed that credit rationing was most pronounced for new borrowers and in the beginning of bank relationships but was resolved with decreasing information asymmetry over bank relationships.

Given the importance of the MSE sector to the Kenyan economy, there is limited research about credit rationing and investment decisions in Kenya. This study therefore seeks to address the research question: is there a relationship between investment decisions and credit rationing experienced by micro and small enterprises in Roysambu Constituency, Nairobi County?

1.3 Research Objective

To establish the relationship between investment decisions and credit rationing experienced by micro and small enterprises in Roysambu Constituency, Nairobi County.

1.4 Value of the Study

The findings of this study will highlight how MSEs in Kenya are able to undertake investment decisions when they experience credit rationing to enable other potential micro and small business owners manage their enterprises efficiently.

The findings are also expected to induce the MSEs in improving their operations especially by focusing on working capital management to reduce their chances of being credit rationed by financial institutions.

The study findings also aim at improving the existing literature that was developed by previous studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on previous studies done by various authors in relation to credit rationing and investment. The chapter is divided into four sections. The first section discusses theories relating to credit rationing and investment decisions. The second section discusses determinants of investment decisions. The third section will cover the empirical review. This section also gives a brief description of the research methodologies used by previous studies in attaining their objectives. The fourth section will cover the summary of literature review.

2.2 Theoretical Review

The theoretical review describes theories relating to investment decisions and credit rationing. Credit rationing theories include the theory of equilibrium credit rationing and a theory of credit rationing which were developed by Hodgman (1960) and Jaffee and Modigliani (1969) respectively. The theory of capital budgeting was developed by Dean in 1951.

2.2.1 Theory of Equilibrium Credit Rationing

Hodgman (1960) developed the theory of equilibrium credit rationing based on default risk. He observed that whenever a borrower's demand curve intersects with a vertical portion of the relevant supply curve, the particular borrower will be unable to obtain additional borrowed funds by promising to pay additional interest. Furthermore as the supply curve shifts to the left and upward, the borrower will encounter more stringent restrictions on the supply of funds which he

will be unable to overcome by offering to pay more interest. However, Hodgman observed that another borrower with a good credit rating may continue to borrow as much as he wishes and may not be required to pay much additional interest to meet the qualifications imposed by the lender. Hodgman's definition of credit rationing is of a different phenomenon from that associated with a regulated ceiling price because the lender is not denying himself a higher interest rate that he seeks because he is behaving rationally in the face of risk and the supply curves of loanable funds remain interest elastic even after credit is rationed. The theory is important to this study because financial institutions normally classify MSEs as high risk borrowers thus leading to some obtaining credit while others are rationed or denied.

2.2.2 A Theory of Credit Rationing

Jaffee and Modigliani (1969) developed a theory of credit rationing and how it can be used to derive an operational credit rationing proxy. They started by looking at some propositions such as: the bank's optimal loan offer curve, the banker as a discriminating monopolist, the banker charging all customers at a uniform rate of interest and the generalization to separate customer classes. Jaffee and Modigliani (1969) showed that credit rationing was profitable even in the long run equilibrium as long as there is uncertainty of loan repayment and banks cannot discriminate perfectly between customers. They asserted that the volume of credit rationing should be measured by the difference between loan demand and bank supply for rationed customers. They concluded that equilibrium rationing was consistent with rational economic behavior.

2.2.3 The Theory of Capital Budgeting

Dean (1951) developed the theory of capital budgeting. Dean defined capital budgeting as the process of projecting investments and selecting the most desirable ones. He noted that capital budgeting led to a number of questions: How much money could be profitably invested in the company, availability of capital, how that capital could be rationed among rival investments and should investment be timed cyclically. Dean noted that it was necessary to budget capital expenditures over a two year planning period and that the main purpose for effective capital expenditure planning was the opportunity to invest money internally at high rates of return. He suggested that the first step in capital budgeting was to survey a company's capital requirements from the smallest operating unit.

The theory stated that the profitability of an investment is measured correctly by the discounted rate of return which takes into account the time schedule of outlays and receipts over the economic life of the project. He also noted that a firm must face the problems of determining where the capital will come from and distinguished two sources: internal and external. Internal sources of supply of funds for capital expenditures are depreciation and retained net profits. According to Dean, the main problem of internal sources is forecasting the amount of cash that will be generated and deciding how much of the earnings to pay out as dividends and how much to plough back into the capital expenditures. However, he noted that plow back policy was affected by many factors such as opportunity to invest inside the company rather than outside, regularity of stockholders income, reserve for contingencies and growth, and the effect of plowing back of cost of capital from outside.

The main consideration in external supply of funds is the cost of capital and its estimation involves determination of market values of securities, floatation costs and capital structure. When a company's demand for funds exceeds its supply, it is necessary to ration capital on the basis of the prospective rate of return. It was found that the essence of capital rationing is to rank the projects in order of profitability and find a rejection criterion by which to cut off projects that would not be sufficiently profitable. Dean noted that a firm's management must be governed by the effects of investment stabilization on profits by trying to estimate the prospective gains and costs of undertaking more capital expenditures during depression and less during prosperity. This theory is important to the study because most MSEs in Kenya are in a dilemma when it comes to investment decisions, because many MSEs are started for the owners to seek better alternatives and higher incomes according to the 1999 National MSE Baseline Survey. Therefore, the above theory poses the solution to the challenges that most MSEs face in capital budgeting.

2.3 Determinants of Investment Decisions

This study looked at four main determinants of investment decisions which are information symmetry, interest rates, lending limits and risk.

2.3.1 Information Symmetry

This refers to adequate, sufficient information, that is, where both parties have information regarding each other. In this context, the finance providers may have information about small business enterprises for example, the credit worthiness of individual entrepreneurs and historical information about their performance, and the small business enterprises may have information

regarding loan amounts, lending terms and conditions and the type of financial services provided by the financial institutions. According to Pandey (2004), investment decisions are among the firm's most difficult decisions as they are an assessment of future events which are difficult to predict therefore for the firms to correctly estimate future cash flows of an investment, they need to have adequate information regarding the investment decisions they want to make.

2.3.2 Interest Rates

Casu, Girardone and Molyneux (2006) defined an interest rate as the price that a borrower pays in order to be able to consume resources now rather at some point in future. Also, it is the price that a lender receives to forgo current consumption. Generally higher interest rates in an economy lead to low investment levels since cost of credit is expensive. However, central banks tend to lower interest rates when they wish to increase investment and consumption in a country's economy. According to Mugume and Obwoma (2001), to increase investment and economic growth, interest rates need to be low enough among lenders to encourage business borrowers.

2.3.3 Lending Limits

This refers to the maximum amount of credit that finance providers can lend to borrowers. Pandey (2004) noted that investment decisions generally involve large amounts of funds thus its necessary for firms to plan their investment programmes carefully and make arrangements for procuring finances both internally and externally. External financing would require an MSE to know the maximum amount that finance providers are authorized to lend in order to be able to proceed with the investment decisions successfully. Lending limits tend to be regulatory i.e. central bank regulates the minimum amount that finance providers should have in their reserves

and this could deter the amount of credit available for investment especially when the regulating authority sets a high minimum reserve requirement.

2.3.4 Risk

Risk refers to uncertainty, that is, the chance of some unfavorable event. Some borrowers tend to undertake some high risk projects and this may lead to them being granted less credit than the borrowers who undertake less risky projects. Investment decisions tend to be risk averse as the main aim is mainly to increase corporate and shareholder value and in order to assume more risk, the investment decision should guarantee a higher return. Brockington (1993) noted that it is the most risky projects which offer the greatest rewards if they are successful.

2.4 Empirical Review

Stiglitz and Weiss (1981) investigated credit rationing in markets with imperfect information. The objective of the study was to show that in equilibrium, a loan market may be characterized by credit rationing. They described a market equilibrium in which there were many banks and many potential borrowers. Borrowers seek to optimize their profits through the choice of their projects and banks through the interest rate they charge borrowers and the collateral they require of borrowers. They found that while using interest rate as an incentive mechanism, raising the interest rate may lead borrowers to take actions which are contrary to the interests of the lender thus providing another incentive for banks to ration credit rather than raise the interest rate when there is an excess demand for loanable funds. The study found that increasing the interest rates or increasing collateral requirements could increase the riskiness of the bank's loan portfolio either by discouraging safer investors or by inducing borrowers to invest in riskier projects and

therefore could decrease the bank's profits. They also noted that in a rationing equilibrium, it would affect the level of investment not through the interest rate mechanism but rather through the availability of credit and that the interest rate directly affects the quality of the loan in a manner that which matters to the bank.

Atieno (2001) investigated the role of institutional lending policies of formal and informal credit institutions in determining the access to and use of credit facilities by small scale entrepreneurs in rural Kenya. The study aimed at identifying main features of the lending policies of formal and informal credit institutions that determine the access to and use of credit by small scale entrepreneurs, the factors that determine the participation of entrepreneurs in credit markets and their choice of credit sources in Kenya and policy implications drawn for financial services to small scale enterprises in Kenya. The study was carried out between July and August 1998 in market centers in rural western Kenya. The study used primary data from individual entrepreneurs and farmers receiving credit from both formal and informal credit institutions as well as those who did not. Data was collected on all loans from different lenders available to the borrowers. Systematic random sampling was used to pick respondents and out of a sample size of initially targeted 540 respondents, only 334 were interviewed successfully. Descriptive and analytical methods e.g. cross tabulations; tests of differences between means and analysis of variance were used to achieve the study objectives. The study found that most enterprises had not used credit and out of those that had, majority had used informal credit sources. Atieno observed two types of credit rationing in the study whereby those borrowers who are credit constrained are discouraged from seeking credit due to the lending terms and conditions, and loan quantity rationing whereby those borrowers who apply for loans receive less than they applied for due to

the lenders limited resources. The study concluded that informal credit sources provided easier access to their credit facilities for small micro enterprises and given the wide and established network of commercial banks, improving the lending rates and conditions in favour of small micro enterprises would significantly facilitate the accessibility of small scale enterprises to credit. Atieno could have included a sample of urban centers small scale entrepreneurs in the study.

Rukwaro (2001) investigated credit rationing by microfinance institutions (MFIs) and its influence on the operations of small and micro enterprises. She wanted to establish how MFIs ration credit among micro and small enterprises (MSEs) and the influence of such rationing on the MSEs operations. The study used survey method of research design and a semi-structured questionnaire was used to collect primary data. The study population was all MFIs providing credit to MSEs in Kenya and all MSEs in Nairobi that had been financed by the MFIs between January 2000 and June 2001. The sampling frame was 44 MFIs that had a micro credit and a random sample of 30 MFIs was selected using random numbers. Cluster sampling was used to select the MSEs. The studied MFIs were clustered under church, bank, non-governmental organization, company and others. The study employed both primary and secondary data. Primary data was obtained from both MFIs and MSEs. Secondary data was obtained from literature and records available in libraries, government offices, and respective offices of the MFIs and MSEs. Data from the study was analyzed using descriptive statistics and inferential statistics. The study found that out of all the MFIs surveyed, all rationed credit in that 78% did not have sufficient funds, 63% wanted to reduce risk involved in lending, 52% wanted to introduce credit gradually, 37% did not have credible borrowers and 22% needed to review the

management capability of their clients(the MSEs).Rukwaro found that the important factors for rationing criteria were the nature of business, location of the business and savings which acted as security. She also identified three factors which determined the amount of credit granted to the MSEs as business profitability, ability to pay installments and interest and regular savings. The study also found that out of 43 loans given to the MSEs, only 17% of the loans (funds granted) were enough to carry on the operations intended and 83% of the loans were not enough. The study concluded that credit rationing had influence on the operations of the MSEs in the following ways: more savings meant more credit to finance the business, the repayment ability of the MSE meant that the more loans received and repaid, the more credit was received for financing the business and the more cohesive the MSE groups were, the more confidence the MFIs had on the groups and the more likely the individual group members received credit. This meant that the extent to which the MSEs met the set rationing criteria determined the level of operations of their businesses in terms of business expansion.

Mugume and Obwona (2001) investigated credit accessibility and investment decisions in Uganda's manufacturing sector: an empirical investigation. The study aimed at examining the impact of credit accessibility on investment decisions in Uganda's manufacturing sector. The study intended to investigate the nature of credit allocation policy and their consequences for growth of economic activities in Uganda's manufacturing sector. The study used two methodological approaches i.e. field survey and econometric analysis. Field survey entailed an in-depth interview and questionnaires were administered to obtain primary data from both entrepreneurs and lenders of investable funds. The survey methodology was based on random sampling of the firms through stratification approach. The study resulted to using survey data

obtained by the World Bank with the help of the private sector foundation after the questionnaires failed to obtain the required data. The study found that there were five sources of credit to the firms namely supplier credit which was found to be the major source of credit, loans and overdrafts which were the most widely used of the formal credit services provided by commercial banks, trade credit and credit from informal sources like relatives and friends. The study also found that approval of credit took a long time and this made credit risk higher due to the long waiting period from application to disbursement and this therefore demonstrated the importance of timing in allocating credit to customers to implement investment projects on time. Benchmark procedures by loan officers consistent with bank lending policies were found to be absent and this led to credit market accessibility being worse. The study also found that firm size, ownership, growth in sales, sector of operation, profit and risk variable to consistently affect obtaining of credit with sector of operation and firm size influencing credit accessibility.

Kagundu (2002) investigated factors influencing credit rationing by commercial banks in Kenya. The primary objective of the study was to determine how commercial banks in Kenya allocate credit to their borrowers. The study used the cross-sectional survey method of research design. The study population was 45 commercial banks that had been licensed to carry out banking business in Kenya and were operational as at 31st July 2002. A census of all the 45 banks was done hence no sampling was done in the study. The study used primary data. Semi-structured questionnaires were used in data collection and were administered by the researcher. Data analysis was through descriptive statistics and factor analysis was used to rank the factors in order of importance and Statistical Packages for Social Sciences (SPSS). The study found that 74% of the banks chose to ration credit even to creditworthy borrowers and the form of

rationing most commonly used was giving some borrowers full amount of credit while not giving any credit at all to all the other borrowers even when they indicated a willingness to repay at a higher interest rate. Out of the 26% of the banks that did not ration credit, majority said that they were concerned with the creditworthiness of the borrowers and they therefore issued full amount of credit to borrowers they assessed as being credit worthy. The study concluded that the main reason as to why banks rationed credit was traced to credit risk arising from lack of inadequate information needed to adequately determine the creditworthiness of borrowers, lack of profitable investment projects and balance sheet risk and that most commonly used form of rationing by commercial banks in Kenya was by refusing to lend to some borrowers even when they indicated a willingness to repay at a higher interest rate while issuing full credit to other borrowers.

Wairimu (2002) investigated the empirical relationship between dividend and investment decisions of firms quoted at the Nairobi Stock Exchange. The objective of the study was to establish whether there exists a relationship between dividend and investment decisions of Kenyan quoted firms and to develop predictive models to be used in determination of the amount of dividend to be paid and investments to be undertaken. The study population comprised of companies quoted at the NSE from 1981 to 2000. Secondary data was used in the study. Due to lack of data, the study used 26 companies and period of study was 17 years. The study used regression models in data analysis to determine whether the investment variable was significant in the dividend model or if the dividend variable was significant in the investment model. T statistic was used to measure the significance of the individual variables in the two models. The study found that the investment decisions affect the dividend decisions as the two decisions

compete for internal sources of funds given that the funds obtained by debt are very expensive and are not available to the companies.

Danielson and Scott (2006) investigated the capital budgeting decisions of small businesses. The study also sought to identify specific business reasons to explain why small firms do not exclusively use discounting cash flow analysis when evaluating projects. The study used survey as a method of data collection. The data for the study was collected for National Federation of Independent Business (NFIB) by the Gallup Organization. Interviews for the survey were conducted in April and May 2003 from a sample of small firms defined as a business employing at least one individual in addition to the owner but not more than 249. Sampling frame for the study was drawn at the NFIB's direction from the files of the Dun and Bradstreet Corporation. The study results found that firms with fewer than 250 employees analyzed potential investments using much less sophisticated methods than those recommended by the capital budgeting theory i.e. the small businesses used discounted cash flow analysis less frequently than gut feel and non-discounted cash flow techniques i.e. payback period and accounting rate of return. The study also found that small businesses do not operate in the perfect capital markets that capital budgeting theory assumes as the specific reasons as to why small firms do not exclusively use discounting cash flow analysis when evaluating projects. Also many investments that small firms make cannot be easily evaluated using the discounted cash flow techniques recommended by capital budgeting theory.

Kirschenmann (2010) investigated credit rationing in small business bank relationships. The study aimed at finding out how credit rationing develops over bank borrower relationships. The

study sought to analyze matched loan application and loan contract information to establish the actual degree of credit rationing by relating borrower requested loan amount to the bank's granted loan amount. The sample consisted of 99000 loans to small enterprises extended by one Bulgarian bank over the period April 2003 to September 2007. The study found that credit rationing due to informational asymmetries is considerable in lending to small businesses i.e. firms that are comparatively young or small when starting to borrow from the bank are more rationed than most transparent firms and that the degree of credit rationing decreases significantly over loan sequences. Also loan officer changes led to higher credit rationing due to loss of private information. The study also found that granted loan amounts increased significantly over time due to reduced credit rationing over bank borrower relationships.

Okurut, Olalekan and Mangadi (2012) carried out a study on credit rationing and SME development in Botswana. The main objective was to investigate factors affecting SMEs' access to bank credit in Botswana. Data was collected over an eight year period, that is, from 1993 to 2001. Descriptive and econometric techniques were used in data analysis. The study findings pointed out that the experience of SMEs reduced their probability of being credit rationed by banks through their ability to keep proper financial statements, performance of their bank accounts with banks and their ability to make profits. They called for capacity building of SMEs in areas of business management if they were to be rated as credit worthy by banks. From the SMEs perspective, the banks needed to improve on their efficiency in reduction of loan processing time and the cost of borrowing, that is, interest rates.

Gill et al. (2012) investigated the relationship between corporate governance and the investment decision of small business firms in India. The study had a set of proxy variables including seven factors namely the Chief Executive Officer (CEO) tenure, the CEO duality, board size, total assets, small business performance, industry dummy and investment decision. The study consisted of the population of Indian owners and members of board of directors of small business firms. Indian owners and members of board of directors of small business firms living in Punjab area of India were selected as the sampling frame. To avoid sampling bias, the data collection team chose participants who represented the target population as non-Indian small business firms were excluded. Data collection was done through survey by the use of questionnaires. The study used telephone, personal visits and mail as the sampling media. Data analysis was done using statistics that assumed scalar values and symmetric distributions to test their hypothesis. The study found that the CEO tenure, the CEO duality, total assets and small business performance positively influenced the investment decision of small business firms in India.

2.5 Summary of Literature Review

According to Kagondou (2002) and Okurut et al (2012), the main reasons as to why banks ration credit are to reduce credit risk that arises from lack of reliable information on creditworthiness of borrowers, lack of profitable investments and balance sheet mismatches. MSEs seem to have all these aspects and that is why most of them experience credit rationing. Rukwaro (2001) found that credit rationing influences the operations of MSEs through savings and repayment ability and Kirschenmann (2010) found that bank borrower relationships reduced credit rationing over

time. This shows that despite the studies reviewed, there still remains a research gap as to the relationship between investment decisions and credit rationing of micro and small enterprises.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the research design used in the study, population of the study, sample design, data collection methods, data analysis which includes: data validity and reliability, and finally the analytical model.

3.2 Research Design

Descriptive research design was used in this study. According to Kothari (2004), a descriptive research design includes surveys and fact finding enquiries of different kinds and its main purpose is to describe state of affairs as they exist. This study used a descriptive research design to describe the relationship existing between credit rationing and investment decisions.

3.3 Population

The population of the study was micro and small enterprises located in Roysambu Constituency. Nachmias and Nachmias (1996) defined a population as the entire set of relevant units with characteristics that one wishes to understand. The number of MSEs in the constituency is large and therefore the sampling frame was MSEs licensed by the County Council. This study focused on the constituency because of its cosmopolitan nature.

3.4 Sample Design

Due to the MSEs being widely spread, a sample of 100 enterprises was selected for the study through stratified random sampling. The study period was one month, that is, May 2014. Kothari (2004) defines stratified sampling as a sampling technique that is applied to obtain a representative sample when a population from which a sample is to be drawn from is not homogeneous. This study adopted stratified sampling because MSEs constitute a wide range of different business activities, that is, are heterogeneous. Stratification was done according to the nature of the business whereby businesses of the same nature were put in the same stratum. Selection from each stratum was done through simple random sampling.

3.5 Data Collection

Primary data was used in the study. The data was obtained through questionnaires given to the respondents over a given period of time. The respondents were the owners of the MSEs or people involved in the day to day management of the enterprises. The data collection was done by distributing questionnaires to business owners located in Roysambu Constituency through simple random sampling. The Nairobi County Council provided a sampling frame of 2371 MSEs from which 19 stratas were formed according to the activity of the business. A sample of 100 enterprises was selected through proportional allocation. According to Kothari (2004), proportional allocation occurs when the size of samples from different strata are kept proportional to the sizes of the strata.

3.5.1 Data Validity and Reliability

Data validity refers to the extent to which differences in scores reflect differences in the measured characteristics. Nachmias and Nachmias (1996) defined validity in research as measuring what you intend to measure. Data reliability refers to the extent to which a measurement is repeatable with the same results. Validity was determined by the return rate of the questionnaires administered to respondents, credibility and relevance of the responses given to the study while reliability was determined by the consistency of the responses obtained from the questionnaires.

3.6 Data Analysis

Core data analysis was done through regression analysis. Further analysis was done using descriptive analysis, that is, mean scores and percentages. Statistical Package for Social Sciences (SPSS) Version 20 was used to process primary data obtained.

3.6.1 Analytical Model

The analytical model was based on a simple regression model.

$$Y = \alpha + \beta_1 X_1 + \epsilon$$

Where

Y= investment decision as measured by percentage of total assets set aside for further

Investment

α = y intercept

β = regression co-efficients

X_1 = lending limits were used to measure credit rationing. Ratio scale was used as amount received/amount applied.

ϵ_e = error component that represents the deviation of the response from the true relation.

3.6.2 Test of Significance

Test of goodness of fit was done by co-efficient of determination, R^2 .

Test of significance was done by Pearson's product moment correlation co-efficient, r , and Analysis of Variance.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter gives the findings, analysis and interpretation of the results of the data collected for the study. The chapter commences with the questionnaire response rate, followed by the findings, then data analysis and presentation and finally the interpretation of findings.

4.2 Response Rate

Table 4.1 Response Rate

| Strata | No. Distributed | No. Returned | % Returned |
|-----------------------------|-----------------|--------------|------------|
| Salon/Barbershop | 16 | 12 | 75 |
| Bookshop | 1 | 1 | 100 |
| Computer Services | 6 | 4 | 66.67 |
| Furniture Shops | 1 | 1 | 100 |
| Tailors | 4 | 3 | 75 |
| Hardwares | 6 | 4 | 66.67 |
| Beauty Shops | 5 | 3 | 60 |
| Boutiques | 9 | 8 | 88.89 |
| Accessories and Electronics | 4 | 2 | 50 |

| | | | |
|-----------------------|------------|-----------|-------|
| Agents | 12 | 7 | 58.3 |
| Agrovets/Animal Feeds | 1 | 1 | 100 |
| Auto Spares | 2 | 2 | 100 |
| Assorted Goods | 6 | 3 | 50 |
| Chemist | 1 | 1 | 100 |
| Cleaning Services | 1 | 1 | 100 |
| Motor Vehicle Dealers | 1 | 1 | 100 |
| Grocery Shops | 11 | 5 | 45.45 |
| Gas Suppliers | 1 | 1 | 100 |
| Retail Shops | 12 | 6 | 50 |
| | 100 | 66 | |

Source: Research Findings

The questionnaire return rate was considered significant enough to enable the study establish the relationship between investment decisions and credit rationing experienced by micro and small enterprises.

4.3 Results

Table 4.2 Investment decisions and credit rationing findings

| | Frequency | Percent |
|--|-----------|---------|
| Rationed | 52 | 78.8 |
| Not Rationed | 14 | 21.2 |
| % of total assets set aside for further investment | | |
| 10 | 19 | 28.8 |
| 30 | 27 | 40.9 |
| 50 | 16 | 24.2 |
| 70 | 4 | 6.1 |

Source: Research Findings

The study found that out of the 66 MSEs, 78.8 % had experienced credit rationing while 21.2% had not experienced any credit rationing. The mean ratio scale on credit rationing, that is, amount received/amount applied was found to be 0.68 with a maximum value of 1 and a minimum value of 0.25.

40.9 % of the MSEs set aside 30% of their total assets for further investment, 28.8% of the MSEs set aside 10% of their total assets for further investment while those MSEs that set aside 50% and 70% of their total assets for further investment were 24.2% and 6.1% respectively. The mean

ratio scale on amount set aside for further investment was 0.315 with a maximum value of 0.7 and a minimum value of 0.1.

Table 4.3 Summary of Findings

| | Frequency | Percent |
|-------------------------|-----------|---------|
| Adequate | 11 | 16.7 |
| Inadequate | 55 | 83.3 |
| Personal Savings | 39 | 59.1 |
| Contributions | 12 | 18.2 |
| Other Finance Providers | 7 | 10.6 |
| No Other Fund Source | 8 | 12.1 |
| Once | 51 | 77.3 |
| Twice | 12 | 18.2 |
| Four Times | 1 | 1.5 |
| Rarely | 2 | 3.0 |
| Business Income | 59 | 89.4 |
| Personal Savings | 3 | 4.5 |
| Personal Income | 4 | 6.1 |
| 0-5 yrs | 33 | 50.0 |
| 5-10 yrs | 23 | 34.8 |

| | | |
|---------------|----|------|
| 10-15 yrs | 7 | 10.6 |
| 15-20 yrs | 2 | 3.0 |
| Over 20yrs | 1 | 1.5 |
| NP Increasing | 36 | 54.5 |
| NP Constant | 18 | 27.3 |
| NP Decreasing | 12 | 18.2 |

Source: Research Findings

16.7% of the respondents indicated that the funds borrowed from the finance providers were adequate while 83.3% of the respondents indicated that the funds were inadequate.

Personal savings was found to be the most preferred other source of funds at 59.1%, while contributions from friends and relatives and other finance providers were 18.2% and 10.6% respectively. 12.1% of the respondents did not indicate their other fund sources.

Majority of the respondents were found to apply for loans once at 77.3% with those who apply twice annually were 18.2%, 1.5% applied 4 times in a year and 3% applied rarely.

89.4% of the respondents repaid the loans through business income, 4.5% repaid loans through personal savings while 6.1% repaid the loans through personal income.

The most important criteria used by finance providers to lend to the MSEs were business viability and ability to pay interest and installments with savings and business type being

important while availability of funds and business location were found to be somewhat important.

50% of the MSEs were found to be young businesses which have been operating under 5 years, with 34.8% of the MSEs having been in operation between 5 and 10 years, 10.6% of the MSEs having been in operation between 10 and 15 years, 3% having been in operation between 15 and 20 years and only 1.5% of the MSEs having been in operation over 20 years.

54.5% of the MSEs indicated that the net profit had been increasing, 27.3% indicated that the net profit had been constant while 18.2% indicated that the net profit had been decreasing.

Majority of the respondents agreed that finance providers gave less loan amounts to MSEs due to lack of proper financial records and irregular returns from the businesses.

Most of the respondents agreed that they considered risk when evaluating investment decisions.

Many respondents remained neutral when asked whether they had enough information regarding investment decisions that they can undertake for their businesses.

Most of the respondents disagreed when asked whether the lending limits set by the finance providers favoured borrowing by the small business owners.

Most of the respondents disagreed that the interest rates charged on amounts borrowed from the finance providers favoured the investment decisions of MSEs.

4.4 Data Analysis and Presentation

Core data analysis was done through regression analysis. Statistical Package for Social Sciences (SPSS) Version 20 was used to process the primary data obtained. Data was analyzed and presented using descriptive analysis i.e. mean scores and percentages.

Table 4.4 Model Summary

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .722 ^a | .521 | .514 | 323607.949 | .521 | 69.640 | 1 | 64 | .000 |

a. Predictors: (Constant), amount received (x)

Source: Research Findings

The R and R- square values (0.722 and 0.521) revealed a strong relationship between investment decisions and credit rationing experienced by micro and small enterprises. Translated the R-Square value reveals that 52.1% of the change in amount set aside for further investment can be explained by the consequent regression equation which is significant enough to be considered. The analysis of variance (ANOVA) below further analysed the significance of this relationship.

Table 4.5 The ANOVA (Analysis of Variance) Table

The ANOVA table generated from running the data through a regression analysis is as shown below:

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|--------------------|----|-------------------|--------|-------------------|
| 1 Regression | 7292833637488.880 | 1 | 7292833637488.880 | 69.640 | .000 ^b |
| Residual | 6702214680692.930 | 64 | 104722104385.827 | | |
| Total | 13995048318181.800 | 65 | | | |

a. Dependent Variable: amount set aside(y)

b. Predictors: (Constant), amount received(x)

Source: Research Findings

The Significance of the F- Value (Fischer Value) =69.64 is small enough (Sig. F=0.000^b<<0.05)

to consider proceeding to model the regression equation.

Table 4.6 Regression Co-efficient Table

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|-----------------------------|-------------|---------------------------|------|--------|------|
| | B | Std. Error | Beta | | | |
| 1 | (Constant) | -176455.460 | 53001.483 | | -3.329 | .001 |
| | amount received x | 2.193 | .263 | .722 | 8.345 | .000 |

a Dependent Variable: amount set aside y

Source: Research Findings

Table 4.7 Investment Decisions /Credit Rationing Correlation rates

Correlations

| | | amount received(x) | amount set aside(y) |
|---------------------|---------------------|--------------------|---------------------|
| amount received(x) | Pearson Correlation | 1 | .722** |
| | Sig. (2-tailed) | | .000 |
| | N | 66 | 66 |
| amount set aside(y) | Pearson Correlation | .722** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 66 | 66 |

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

Source: Research Findings.

The Pearson’s product moment correlation co-efficient, $r = 0.722$ hence denoting a positive relationship between investment decisions (amount set aside) and credit rationing (amount received).

4.5 Interpretation of the Findings

The objective of the study was to find out the relationship between investment decisions and credit rationing experienced by micro and small enterprises. From the findings, the study found that there was a positive and direct relationship between investment decisions and credit rationing experienced by MSEs. This is because the Pearson's product moment correlation coefficient, $r = 0.722$ hence denoting a positive relationship between investment decisions and credit rationing.

The co-efficient of determination, $R^2 = 0.521$, meaning that credit rationing explains 52.1% of investment decisions, that is, the amounts the MSEs received as a result of being credit rationed explained 52.1% of the amounts the MSEs set aside for further investment.

According to the Analysis of Variance, ANOVA, there were significant differences between the means of the amounts set aside for further investment and amounts received by the MSEs, that is, $F(1,64) = 69.64$ $p < 0.05$.

The proposed analytical model after incorporating the findings became

$$Y = \alpha + \beta_1 X_1 + \epsilon$$

$$Y = -176455.460 + 2.193X_1 + 323607.949$$

The constant, $\alpha = -176455.46$ which is not affected by any changes made to the model. The estimate resulting from analysis carried out on credit rationing, that is, the independent variable, $\beta = 2.193$ with a standard error of 323607.949.

Therefore, the findings of the analytical model deem the relationship between investment decisions and credit rationing experienced by MSEs as being statistically significant.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter will focus on the summary, conclusion and recommendations based on the study.

5.2 Summary

The main objective of the study was to find out the relationship between investment decisions and credit rationing experienced by micro and small enterprises in Roysambu Constituency, Nairobi County. A descriptive research design was adopted in the study to describe the relationship existing between investment decisions and credit rationing experienced by MSEs. The population was all MSEs operating in Roysambu Constituency and the sampling frame was the MSEs licensed by the County Council. Stratified random sampling was used in the study. Data analysis was done using regression and descriptive analysis. The study found that majority of the MSEs interviewed had experienced credit rationing with the funds borrowed from the finance providers being rendered inadequate.

Most of the MSEs that had experienced credit rationing met the shortfall with personal savings as majority of the MSEs were found to apply for loans from finance providers once per year. Most MSEs were found to consider risk when evaluating their investment decisions and concurred that they obtained less loan amounts from the finance providers due to lack of proper financial records and irregular business returns. Lending limits and interest rates charged on

amounts borrowed from finance providers were found not to favour the investment decisions of the MSEs.

5.3 Conclusion

The study concludes that there exists a positive and direct relationship between investment decisions and credit rationing experienced by micro and small enterprises since the correlation co-efficient, $r = 0.721$, shows the extent to which investment decisions and credit rationing are linearly related to each other. Also the co-efficient of determination, $R^2 = 0.521$ which means that credit rationing explains 52.1% of the investment decisions undertaken by the MSEs.

5.4 Recommendations for Policy

Owners of MSEs need to be trained on how to keep proper financial records and working capital management to ensure that the finance providers grant them full loans.

There is need for finance providers to introduce loans targeting MSEs which should have flexible repayment schedules e.g. weekly or after a fortnight so that MSEs are motivated to borrow more so as to expand their businesses.

Finance providers need to educate owners of MSEs about their terms and conditions for lending such that when the MSE owners approach the lending institutions for loans, they are aware of the lending limits and securities needed to obtain the loans.

5.5 Limitations of the Study

Hostility from respondents despite disclosing purpose for the data.

The respondents were skeptical about confidentiality of their responses i.e. data gathered was not divulged to other parties.

The response rate was low due to respondents refusing to fill the questionnaires.

5.6 Areas for Further Research

The following are possible areas for further research:

The relationship between investment decisions and profitability of micro and small enterprises.

The relationship between profitability and credit rationing experienced by micro and small enterprises.

The effect of credit rationing of micro and small enterprises on economic growth in Kenya.

References

- Atieno, R. (2001). Formal and Informal Institutions' Lending Policies and Access to Credit by Small- Scale Enterprises in Kenya: An Empirical Assessment. Africa Economic Research Consortium Research Paper 111.
- Brealy, R.A. & Myers, S.C. (2003). Principles of Corporate Finance. McGraw - Hill/ Irwin.
- Brockington, R.B. (1993). Financial Management. 6th Edition. DP Publications.
- Casu, B., Girardone, C. & Molyneux, P. (2006). Introduction to Banking. Prentice Hall Financial Times.
- Danielson, M.G., & Scott, J.A. (2006). The Capital Budgeting Decisions of Small Businesses.
- Dean, J. (1951). The Concept and Economic Significance of Regularization of Business Investment. National Bureau of Economic Research.
- Freixas, X. & Rochet, J.C. (2008). Microeconomics of Banking. 2nd Edition.
- Gill, A., Sharma, S.P., Mand, H.S., & Mathur, N. (2012). The Relationship Between Corporate Governance and the Investment Decision of Small Business Firms in India. *Journal of Finance and Investment Analysis*, 1(2), 41-59.

Hodgman, D.R. (1960).Credit Risk and Credit Rationing. *The Quarterly Journal of Economics*, 74(2), 258-278.

Jaffee D.M. & Modigliani, F. (1969).A Theory and Test of Credit Rationing. *The American Economic Review*.59 (5), 850-872.

Kagundu, G.M. (2002).Factors Influencing Credit Rationing by Commercial Banks in Kenya. MBA Student. University of Nairobi.

Kirschenmann, K. (2010).Credit Rationing in Small Business Bank Relationships.

Kothari, C.R. (2004).Research Methodology: Methods and Techniques.2nd Revised Edition. New Age International.

McMenamin, J. (1999).Financial Management. An Introduction. Routledge.

Mishkin, F.S. (2007).The Economics of Money, Banking and Financial Institutions. Pearson International Edition.

Mugume, A. & Obwona, M. (2001).Credit Accessibility and Investment Decisions in Uganda's Manufacturing Sector: An Empirical Investigation. Research Series No.27.

Nachmias, D. & Nachmias, C.F. (1996).Research Methods in the Social Sciences.5th Edition.

National Micro and Small Enterprise Baseline Survey, 1999

Okurut, F.N., Olalekan, Y., & Mangadi, K. (2012).Credit Rationing and SME Development in Botswana: Implications for Economic Diversification. *Botswana Journal of Economics*.

Pandey, I.M. (2004).Financial Management.9th Edition. Vikas Publishing House.

Pandey, I.M. (2010).Financial Management.10th Edition. Vikas Publishing House.

Rukwaro, M.W. (2001).Credit Rationing by Microfinance Institutions and Its Influence on the Operations of Small and Microenterprises. MBA Student. University of Nairobi.

Stiglitz, E.J., & Weiss, A. (1981).Credit Rationing in Markets with Imperfect Information. *The American Economic Review*, 71(3), 393-410.

The Micro and Small Enterprises Act, 2012.Kenya Gazette Supplement.

The Kenya Economic Survey Report 2013.

Wairimu, S.M. (2002).The Empirical Relationship between Dividend and Investment
Decisions of Firms Quoted at the Nairobi Stock Exchange. MBA Student.
University of Nairobi

Appendix 1

Letter to County Council

Mary Njeri Muthee

P.O. Box 67663-00200

Nairobi

30th April 2014

County Director, Trade Licensing,

Nairobi County Council

P.O. Box 30075-00100

Nairobi

Dear Sir/Madam,

REF: **REQUEST FOR ROYSAMBU CONSTITUENCY LICENSED**

MSEs DATA

I am an MBA student at University of Nairobi. I am currently undertaking a research project titled “The relationship between investment decisions and credit rationing experienced by micro and small enterprises in Roysambu Constituency, Nairobi County”. The sampling frame that I intend to use in the research project is all the licensed micro and small enterprises located in Roysambu Constituency. I would be grateful if I am availed the requested data and should it be availed to me, it will be used solely for academic purposes.

I look forward to hearing from you and any assistance will be highly appreciated.

Yours Faithfully

Mary Njeri Muthee

Appendix 2

Questionnaire

Background information on micro and small enterprises

Name:

Nature:

Employees:

Ownership:

Location:

Date of Incorporation:

A. Credit rationing on MSEs.

1. Have you ever applied for a loan from a finance provider since you started your business?

2. How much had you applied?

3. How much did you receive?

4. How much were the funds granted by the finance provider in relation to your business financial requirements?

A. Adequate

B. Inadequate

5. If inadequate, what other sources of funds were available to meet the shortfall?

A. Personal Savings

B. Contributions from friends and relatives

C. Other finance providers

6. If no other sources were available, how did you deal with the shortfall?

7. How many times do you apply for a loan every year?

8. Do you think that finance providers give less loan amounts to micro and small enterprises due to lack of proper financial records and irregular returns from the businesses?

A. Strongly agree

B. Agree

C. Neither agree nor disagree

D. Disagree

E. Strongly disagree

9. How do you repay loans granted by the finance providers?

A. Business income

B. Personal savings

C. Personal income

D. Any other, specify.....

10. Tick the criteria the finance provider used to lend to you in order of importance.

1. Very important
2. Important
3. Somewhat important
4. Not important at all

A. Savings

B. Ability to pay interest and installments

C. Availability of funds

D. Location of business

E. Type of business

F. Business viability i.e. sound financial records, profitable business and no outstanding debts

B. Investment decisions of MSEs

1. How long have you been running this business?

A. 0-5 years

B. 5-10 years

C. 10-15 years

D. 15-20 years

E. Over 20 years

2. How has the business been performing over the past five years?

A. Net profit has been increasing

B. Net profit has been constant

C. Net profit has been decreasing

3. To what extent have you invested in assets?

4. What percentage of your total assets do you set aside for further investment?

A.0-20%

B.20-40%

C.40-60%

D.60-80%

E.80-100%

5. Do you consider risk when evaluating an investment decision?

A. Strongly agree

B. Agree

C.Neither agree nor disagree

D.Disagree

E.Strongly disagree

6. Do you always have enough information regarding investment decisions that you can undertake for your business?

A. Strongly agree

B. Agree

C.Neither agree nor disagree

D.Disagree

E.Strongly disagree

7. Do you think that the lending limits set by the finance providers favour borrowing by the small business owners?

A. Strongly agree

B. Agree

C.Neither agree nor disagree

D.Disagree

E.Strongly disagree

8. Do you think that the interest rates charged on amounts borrowed from the finance providers favour the investment decisions of micro and small businesses?

A. Strongly agree

B. Agree

C.Neither agree nor disagree

D.Disagree

E.Strongly disagree

Thank You