EFFECTS OF FINANCING CONSTRAINTS ON OPERATION, PROFITABILITY AND GROWTH OF SMALL AND MICRO ENTERPRISES: A SURVEY OF MAU – NAROK DIVISION

BY KARANGA MWOHE GMB/NE/0427/5/10

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN
PARTIAL FULFILMENT OF THE AWARD OF MASTERS DEGREE IN BUSINESS
ADMINISTRATION OF KABARAK UNIVERSITY

AUGUST, 2013

DECLARATION AND APPROVAL

Declaration

I declare that this research project is my original work and has not been presented for award		
of a degree in any other university/institution or for any other purpose.		
••••••	••••••	
Karanga Mwohe	Date	
Approval		
This research project has been submitted for exa	mination with our approval as the University	
Supervisors		
TO . TZ . I' . A . N. 4 . I	D. 4	
Dr. Kalio A. Mutuku.	Date	
School of Business		
••••••	***************************************	
Dr. Nzioki Paul Muoki.	Date	
School of Business		

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to the Kabarak fraternity with special emphasis to my supervisors, Dr. Kalio A. M and Dr. Nzioki P. M, who fine-tuned my focus towards the achievement of the objective of this study. I express my sincere gratitude to the classmates for their support in academics in order to carry out my study. I also pass my gratitude to my parents who have always been supportive. God bless you all.

DEDICATION

This study is dedicated to my loving wife Margaret Waithira, my children Peris, Mwohe and Jossy. My loving dad Johana Mwohe, my sisters Wanjiku and Wangui, brothers Githaiga and Kamau, for their endless love and support.

ABSTRACT

Small and Micro Enterprises (SMEs) play an important role in the Kenyan Economy. The sector contributes approximately 80.6 percent of new jobs created in the country every year. Despite their significance, SMEs are faced with threat of failures with past statistics indicating that three out of five fail within the first few months. Although the role of factors such as access to funds and culture have been widely studied, influence of financing constraints on operation, profitability and growth have not received much emphasises. To bridge the gap, this research investigated the influence of financing constraints on operation, profitability and growth of SMEs. Survey research design was used because it involves interaction between the researcher and the respondent. Stratified random sampling was applied to select a sample size of 246 SMEs from a population of 677. Primary data was collected through use of questionnaires while secondary data was collected through documentary analysis of past sales records. The data was analysed by use of descriptive statistics. Inferential statistics which include Pearson's Correlation coefficients, Regression and chi-square test were also applied. The results show that majority of the interest rates between 15% and 31% charged by financial institutions were high but businesses could survive so long as loan availability was not a challenge. Better financial skills had an influence on the SMEs' growth, operation and profitability. Access to finance was a major constraint to business growth since majority of the respondents (36.3%) cited lack of bank financing as a major problem. This study recommends that the government ought to provide conducive institutional environment in formal banking and non-banking set up, providing regulatory frameworks and fostering competition so that the rates of interest provided by the institutions can reduce to a reasonable market rate. It should revise its regulatory framework in order to create and encourage an environment that encourages more financial institutions in the study area. Since majority of small enterprises lack finance, government should establish friendly small loaning system.

Key words; financing constraints, operation, profitability, growth, small and micro enterprises.

TABLE OF CONTENTS

DECLARATION AND APPROVAL	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background Information	1
1.2 Statement of the Problem	3
1.3 Objectives of Study	4
1.3.1 General Objective	4
1.3.2 Specific Objective	4
1.4 Research Questions	4
1.5 Significance of the Study	4
1.6 Scope of the Study	5
1.7 Assumption and Limitation of the Study	5
1.8 Operational Definition of Terms	6
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Introduction	7
2.2 Theoretical Literature Review	7
2.2.1Performance in SMEs	7
2.2.2 Financing Decisions	8
2.2.3 Liquidity Decision	9
2.2.4	
2.2.5 Modern Financial Management Theories and Small Business	
2.2.6 Risk and Return Theory	
2.2.7 Dynamic Entrepreneurial Theories	
2.2.8 Kenya's Financial Market	
	, 1 J

2.2.9	Recent Reforms
	14
2.2.10 Evidence of Credit Constraints	16
2.2.11 Microfinance Model	17
2.3 Empirical Literature Review	18
2.3.1 Access to Capital	18
2.3.2 Growth and Profitability	20
2.3.3 Financial Management in SMEs	21
2.3.4 Characteristics of Credit Markets in Africa	21
2.3.5 Loan Screening, Monitoring and Contract Enforcement	22
2.3.6 Characteristics of Credit Market in Kenya	22
2.4 Conceptual Framework	23
CHAPTER THREE	25
RESEARCH METHODOLOGY	
3.1 Introduction	
3.2 Research Design	
3.3 Target Population	
3.4 Sampling and Sample Size	
3.5 Data Collection Instrument and Procedures	
3.6 Data Analysis and Presentation	
Sio Buta i maryoto una i resemunom	
CHAPTER FOUR	20
DATA ANALYSIS AND DISCUSSIONS	
4.1 Introduction	
4.2 Demographic Characteristics of the Respondents	
4.2.1 Gender of Respondents	
4.2.2 Age Distribution of Respondents	
4.2.3 Marital Status of Respondents	
4.2.4 Occupation of Respondents	
4.2.5 Education Level of Respondents	
4.2.6 Types of Businesses Operated by the Respondents	
4.2.7 Type of Business Undertaken	
4.2.8 Location of the Business Studied	
4.3 Influence of Credit Facilities on Operation, Growth and Profitability of Small and	
Enterprises	35

4.3.1 Summary of the Data on Operation, Growth and Profitability of the Sampled Businesses39
4.3.2 Influence of Credit Facilities on Operation, Growth and Profitability of SMEs: Ordered Logit
Results41
4.4 Influence of Interest Rates on SMEs Growth, Operation And Profitability
4.4.1 Change in Number of Employees
4.4.2 Change in Business Capital Base
4.4.3 Change in Gross Income from the Business
4.4.4 Regression Analysis for the Influence of Interest Rates Charged by Financial Institutions on
Operation, Profitability and Growth of SMEs47
4.5 Restrictions by Financial Institutions and Their Effect on SMEs Growth, Operation and
Profitability
4.5.1 Regression Analysis for the Influence of Selected Problems on Operation, Profitability and
Growth of SMEs50
4.5.2 Impact of Restrictions by Financial Institutions on the Growth of Small and Micro Enterprise.51
4.5.3 Influence of Restriction by Financial Institutions on SMEs Operation, Growth and
Profitability52
4.6 Influence of Financial Management Skills on Operation, Growth and Profitability of Small and
Micro Enterprise
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS
5.1 Introduction
5.2 Summary of Findings
5.3 Conclusion
5.4 Recommendations
5.5 Suggestions for Further Research
REFERENCES
APPENDICES70
Appendix I: Questionnaire for Small and Micro Businesses
Appendix II: Letter of Introduction 76

LIST OF FIGURES

Figure 1: Conceptual Framework	24
Figure 2: Gender of Respondents	28
Figure 3: Types of Activities Undertaken by the Businesses	34
Figure 4: Loan Aquisition from Financial Institutions	38

LIST OF TABLES

Table 1: Number of Enterprises	25
Table 2: Sample Size Per Centre	26
Table 3: Age Distribution of Respondents	29
Table 4: Marital Status of Respondents	30
Table 5: Occupation of Respondents	31
Table 6: Education Level of Respondents	32
Table 7: Type of Business Operated	33
Table 8: Location of the Business	35
Table 9: How the Respondent Finance the Business	36
Table 10: Presence of Financial Institutions in the Study Area	36
Table 11: Application of Loan by the Respondents from the Financial Institutions	37
Table 12: Amount of Loan Given by the Financial Institution	37
Table 13: Amount of Time Taken to Repay the Loan	38
Table 14: Paired Samples T-Test Results for the Change in Employee Number	39
Table 15: Paired Samples T-Test Results for the Change in Capital Base in the Business	39
Table 16: Paired Samples T-Test Results for the Change in Gross Income in the Business.	40
Table 17: Growth of SMEs in the Area.	40
Table 18: Influence of Credit Facilities on Operation, Growth and Profitability of SMEs	42
Table 19: Rate of Interest Rate that the Financial Institutions Charge on Loans	43
Table 20: Influence of Interest Rates on Operation, Growth and Profitability of SMEs	44
Table 21: Interest Rates and Changes in Number of Employees in the Business	45
Table 22: Interest Rates and Changes in Capital Base	46
Table 23: Interest Rates and the Changes in Gross Incomes	47
Table 24: Influence of Interest Rates on Operation, Profitability and Growth of SMEs	48
Table 25: Presence of Problems that Affect SMEs	49
Table 26: Specific Problems Cited to Affect Small and Micro Enterprise	49
Table 27: Problems Affecting Operation, Profitability and Growth of SMEs	50
Table 28: How the Business Could Grow If Given Financial Support by the Government	51
Table 29: Influence of restriction by financial institutions on SMEs	52
Table 30: Summary Statistics on Financial Management Skills of the Sample	54
Table 31: Financial Management Scores	55
Table 32: Financial Management Skills and Business Growth, Operation and Profitability	56
Table 33: Financial Management Skills and SMEs Growth, Operation and Profitability	59

LIST OF ABBREVIATIONS

CBK - Central Bank of Kenya
 GDP - Gross Domestic Product
 GOK - Government of Kenya

KIPPRA - Kenya Institute for Public Policy Research and Analysis

MFI - Microfinance Institutions

NBFI - Non-Bank Financial Institution

NGO - Non-Governmental Organizations

ROSCA - Rotating Saving and Credit Association

SACCOS - Saving and Credit Co-Operative Society

SME - Small and Micro Enterprises

SPSS - Statistical Package for Social Sciences

UNIDO - United Nation Industrial Development Organisation

WACC - Weighted Average Cost of Capital

CHAPTER ONE

INTRODUCTION

1.1 Background Information

The Small and Micro Enterprises (SMEs) play an important role in the Kenyan economy. According to the Economic Survey (GOK, 2011), the sector contributed 80.6 percent of new jobs created in the year 2011. Despite their significance, past statistics indicate that three out of five businesses fail within the first few months of operation (GOK, 2007). According to Bowen, Morara and Muriithi (2009), of the most significant challenges is the negative perception towards SMEs. Potential clients perceive small businesses as lacking ability to provide quality services and are unable to satisfy more than one critical project simultaneously. Often larger companies are selected and given business for their clout in the industry and name recognition alone.

Starting and operating small and micro enterprises includes a possibility of success as well as failure. Due to their small size, a simple management mistake is likely to lead to collapse of a small and micro enterprise hence no opportunity to learn from past mistakes. Lack of planning, improper financing and poor management have been pointed out as the main causes of failure of small enterprises (Longenecker, et.al, 2006). Lack of credit has also been identified as one of the most serious constraints facing SMEs and hindering their development (Aleke, 1994; Kiiru, 1991; Oketch, 2000; Tomeko, 1992).

The average productivity of SMEs could be increased substantially with access to appropriate institutional savings and credit service delivered locally. Since the benefit of financial services would also extend to dependence of micro finance clients, the economic activities and the quality of life of more than 1.8 million people could be improved by providing them with local access to formal commercial micro finance (Aleke, 1994).

Since 1990s, Kenya has improved its macro-economic management. However, the formal sector population have typically grown larger on one hand, failing state enterprises were closed, people retrenched and government tightened spending. On the other hand, demand for low cost goods and services provided by the informal sector increased and agricultural technologies and policies changed and urban income increased. In this context therefore, policy makers re-examined their approach to informal enterprises viewing them not as a problem for the economy both in the short and medium terms but rather as an important

solution to or crucial aspects of current problems that are caused by poverty and multiplied by massive rural urban migration (Daniels, et.al., 1995).

It is under this condition in 1980s that attention began to be paid to improve the legality, security and financing of informal enterprises. If the formal economy cannot absorb labour force, then why not help the informal enterprises that provide employment at least to the extent of removing the obstacle they face. If micro entrepreneurs did not have to face routine removal from their business locations, confiscation of their goods, constant demand for bribes, detention and other form of harassment, they would be more likely to invest in their enterprises which could then raise their income and increase employment (Hossain, 1988).

Furthermore, most of the public policies in Kenya in recent times have been focussed towards poverty reduction, finding way to improve household productivity and thereby income. Since 1960s and 1970s, there have been policies on role of microfinance in rural development process. These policies focussed on the provision of agricultural credit as a necessary support to introduction of new, more production agricultural technologies that could have ensured that farmers improve their incomes and feed the nation. Later, this approach broadened to include individuals involved in both small and micro-enterprises like handcraftsmanship, agro-business, and small and micro scale enterprises operating in urban areas (Aleke, 1994)

Small and micro enterprises are one of the most rapidly growing sectors and constitute the largest part of the private sector in developing countries especially in terms of employment. Majority of the population in developing countries get employment from the small and micro enterprises, for example, entrepreneurs as equal partners in business or as employees by business owners. Thus development of small firms is thought to be important for economic growth, poverty alleviation and promotion of pluralist societies. The sector has of late become a major focus for the government and donor countries as it is considered as a significant avenue towards economic industrialisation. These sections have been neglected for a long time by major stakeholders in the formulation of economic policies and its significance have not been exhaustively addressed (Hallberg, 2000).

In Britain, small and medium sized business is defined as that industry with an annual turnover of 2 million pounds or less with fewer than 200 paid employees. In Japan, small-scale industry is defined according to the type of industry paid up capital and number of paid

employees. Consequently, small and micro enterprises are defined as those in manufacturing with 100 million yen paid up capital and 300 employees and those in the retail and services trades with 10 million yen paid-up capital and 50 employees. Different countries define SMEs differently. In Kenya "small enterprises have from 11 to 50 worker and medium enterprises have from 51 to 100 workers". Census indicates that SME comprises the lion share of enterprises in Kenya while there are a few medium sized enterprises. Some well known examples of SMEs in Kenya include Jua kali Vendors, retail shops, matatu industry, open air market retailers, fishermen, small scale farmers and private schools. Small and micro sized enterprises are generally undercapitalised suggesting many operational difficulties. The 1999 SMEs baseline survey showed that only 6% of SMEs successfully apply and use credit. Among those that are able to access credit, very few get sufficient amounts to guarantee a constant growth (Parker and Torres, 1994).

In most economics including Kenya, small and micro- enterprises comprise approximately 99% percent of the work force. Small and Micro enterprises cut across all sectors of the country's economy and provide one of the most prolific sources of employment. A well functioning policy on small and micro enterprise is critical for attracting and spreading investment in both urban and rural areas in order to enhance the capacity of small and micro enterprise to create durable and decent jobs. The government in consultation with key stakeholder has reviewed policies and strategies on SMEs (GOK, 1992).

1.2 Statement of the Problem

SMEs are the major agents of economic growth and employment. In Kenya, over 60% of small businesses are estimated to fail each year (Kenya bureau of statistics, 2007). Mead (1998) observes that the health of the economy as a whole has a strong relationship with health and nature of SMEs. Despite government effort to promote SMEs activity, not much has been achieved. The sector is characterized by dilapidated infrastructure, low adoption of technology, poor market access and continued harassment from government institution due to lack of necessary documents for their establishment. Since Mau-Narok is an agricultural area, many people engage themselves in farming which has many challenges brought about by weather changes. These weather changes accompanied with unemployment have forced many people to start small and micro enterprises to supplement their earnings derived from farming. These businesses do not survive for a long period before they are shutdown while

many that survive do not grow. The study was therefore intended to unearth the influence of financing constraints on operation, profitability and growth of SMEs.

1.3 Objectives of Study

1.3.1 General Objective

The general objective was to find out the effects of financing constraints on operation, profitability and growth of small and micro enterprises.

1.3.2 Specific Objective

- i. To determine the effects of credit facilities on operation, growth and profitability of SMEs.
- ii. To find out how the interest rates charged by financial institution affect SME growth, operation and profitability.
- iii. To establish the restrictions by financial institutions and their effects on operation, growth and profitability of SMEs.
- iv. To examine the influence of financial management skills on operation, growth and profitability of SMEs.

1.4 Research Questions

- i) What are the effects of credit facilities on operation, profitability and growth of SMEs?
- ii) To what extents does interest rates charged by financial institutions influence operation, profitability and growth of SMEs?
- iii) Do restrictions set by financial institutions influence operation, growth and profitability of SMEs?
- iv) To what extent do financial management skills influence operation, profitability and growth of SMEs?

1.5 Significance of the Study

Small and micro enterprises comprise the largest proportion of business in most economies. They offer greatest potential for job creation and contribute to the growth in GDP of a country. The study will help MFIs in identifying the problem affecting their loan disbursement. It will also help small entrepreneurs understand various sources of finance and how they can utilise the scarce resource to make ends meet. The small and micro

entrepreneurs will also be able to handle various effects due to the constraints. The government can also use the findings to add up policies that favour SMEs since they contribute to employment, GDP and poverty reduction. NGOs can also get information on how they can support SMEs

1.6 Scope of the Study

The study covered the small and micro enterprises in Mau-Narok Division, Njoro District, due to the fact that there are many small scale entrepreneurs. The study was a cross-sectional survey.

1.7 Assumption and Limitation of the Study

The research study was limited by certain factors such as movement to some areas which are in accessible and information obtained largely depended on cooperation from respondents owing to the institutional weaknesses in data collection and presentation by the study. The assumption was that all respondents provided information as requested in the questionnaire. It was also assumed that all the data collected and used was a representative of the study area.

1.8 Operational Definition of Terms

Finance –means capital structure; methods of raising capital: capital expenditure: levels of profit distribution and retention: working capital and liquidity level (van, 2002).

Operation- means to perform a function for example organising workers, raising capital and looking at the investment to attain a positive change (lowson, 2007).

Growth- change in a firm's size or expansion of a firm in terms of size (Hashi and Krasnigi, 2011).

Profitability - a relative measure of success for a business realised as a result of change in a firm's income or profit. It is used to determine performance and growth of an enterprise (Harber and Reichel, 2005).

Performance- means doing today what will lead to measured value outcomes tomorrow. It is measured relative to some benchmark, be it a competitors performance or preset target such as employees, profitability or change in capital (Lebas and Euske, 2002).

Credit facilities- a loan or collection of loans taken by a business to meet its financing needs(Obonyo,2005).

Microfinance institutions - Are non-bank financial institution provide financial services to micro entrepreneurs and small businesses which lack access to banking and related services due to the high transaction costs associated with serving these categories(Yunus, 2008).

Small enterprises - Are businesses are that employs 11-50 workers (Ronge, Ndirangu, & Nyangito, 2002).

Micro enterprises- Are businesses that employs 10 or fewer workers (Ronge et al., 2002).

Financing constraints-financial problems that prevent a business from achieving its objectives (Modighliani, and Miller, 1958)

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The focus of this chapter is to capture various issues and theories that relate to finance. Small and micro enterprises are started using small amounts capital that are raised from various sources which may include the owners personal savings and borrowing from friends. These amounts of funds should be invested in the business and the owner expects some returns and growth of the business. Many small businesses are faced with many challenges meaning that the owners should make proper financing and investment decisions for the businesses to overcome them and yield the required returns.

2.2 Theoretical Literature Review

2.2.1 Performance in SMEs

Performance is often defined simply in terms of output such as quantified objectives or profitability. Armstrong (2006) defines performance as both behavior and results. This definition covers the achievement of expected levels as well as objective setting and review .If the behavior of management is right, the expected levels of output will be achieved and vice versa.

There are three levels of performance within organizations. They are distinguished as financial performance, business (firm) performance and organization effectiveness. Performance is the key interest of every business manager or owner. The overall performance of the organization depends on proper management at the three levels of management (Terziovski and Samson, 2000).

Firm's performance measurement and control systems are information based on routines and procedures that managers use to maintain or alter patterns in organization activities. A typical performance measurement helps business in periodically setting business goals and then provides feedback to the managers on the progress toward those goals (Simmon, 2000).

Business performance measurement is concerned with measuring this performance relative to some benchmarks, be it a competitor's performance or preset. Many business performance measures a value that promotes comparison not with itself but also with other measures.

Performance in SMEs may be classified as financial or non-financial. Financial measures are derived from or directly related to chart of accounts found in a firm's profit and loss accounts or the balance sheet such as inventory levels or cash in hand .Non-financial measures are not found in the charts of accounts such as customer satisfaction score or product quality measures (Simmon, 2000).

Firms use financial performance developed by accountants to support decision. For example the historical revenue and cost information can be used for budgeting decision. The marketing manager can use sales information to evaluate the impact of a particular promotion strategy while the same sales information can be used by production manager to determine the future production levels. Income Statement is very useful in measuring financial performance where many kinds of ratios analysis can be calculated (Madura, 2007).

Pushpakumari and Wijewickrama (2008) used both financial and non financial measures such as annual sales, annual profits, and number of employees, market share and reinvestment in the business to measure the business performance of SMEs.

2.2.2 Financing Decisions

Investor must decide where and how to acquire funds to meet the firm investment needs. The main issue is to determine the proportion of equity and debt which makes up the capital structure of a firm. The structure is optimum when the market value of shares is maximized. The debt affects the returns and risk of the shareholders. It may increase the returns on equity funds but always increases risks. There should be a balance between return and risks. When shareholders return is maximized with minimum risks, the market value per share will be maximized and the firm's capital will be considered optimum.

According to Modigliani and Miller's (1958) theory of capital structure, firms selects the mix of debts and equity that minimizes their weighted average cost of capital (WACC), thereby maximizing the value of the firm. Because interest expenses is tax deductible, debt tends to be favoured over equity as a source of capital. It therefore follows that firms, in principle, act to minimize the cost of capital and maximize the value of the firm by financing exclusively with debts. This view assumes that there are no real resources costs associated with the issuance of exchange of securities, financial distress or even bankruptcy and financial

reorganization. In case of privately held businesses, however, the decision to finance with debt rather than equity may be driven by necessity rather than by choice because small firms do not have the same access to capital, particularly equity capital that larger public firms have. Small firms are not able to issue publicly held debts or equity or even commercial papers because of their size and the high cost of issuing securities. As a result they tend to heavily rely on debt in form of bank financing and trade credit.

Small firms, because of their tendency to rely on debt capital are also particularly susceptible to the problem of financial distress and failure. Failure rates in the range of 50 to70% are commonly cited making it difficult for small firms to raise external capital from either debt or equity providers. Due to lack of publicly available information and higher risk of failure, monitoring costs are relatively higher for supplier of capital to small firms than for those dealing with larger established firms. Thus capital may be unavailable to small firms or it may be available only at relatively high rates of interest. Frequently lenders may try to mitigate the risks of lending to small firms by demanding collateral or personal guarantees. Since there is often no fine lines separating the finances of the business owners in case of small firms, such requirements tend to add to the risks faced by small and micro enterprises as well as limit their flexibility (Bates and Nucci, 1989)

2.2.3 Liquidity Decision

Current assets should be managed efficiently for safeguarding the firm against the danger of illiquidity and insolvency. Investment in current assets affects the firm's profitability, liquidity and risk. A conflict exists between profitability and liquidity while managing currents assets. If the firm does not invest sufficient funds in current assets, it may become illiquid but it would lose profitability as idle current assets would not earn anything.

In order to ensure that either insufficient or unnecessary funds are invested in current assets, the financial manager would develop sound techniques of managing currents assets. He should estimate firms needs for current assets and make sure that funds would be made available when needed. Growing small firms faces the problem of liquidity. Even though it makes good profits, it needs funds for expanding activities and permanent working capital. Because of insufficient cash or pressures on liquidity, small firms' management may not be able to declare high dividend. The owners of small business should be able to compute the

liquidity ratios to measure the firm's ability to meet its current obligations as they fall due. Current ratio and quick ratio are computed to measure the liquidity of the firm. Current ratio is arrived at by dividing current assets by current liabilities. Quick ratio is found by dividing current assets less inventories by current liabilities (Brealey et al., 2007)

2.2.4 Financial Ratios

Financial ratios take information from the company's financial statement and break them down to performance percentages. These percentages are then compared to competitors or the industry standard, indicating the strength of a company. Management will improve operation that have weak financial ratios; improving the ratios will help the company maintain strong ties with investors. Profitability ratios are able to estimate the growth of the company. They are calculated to measure the operating efficiency of the firm. Creditors and owners are interested in the profitability of the firm. The creditors want to get interest and repayment of principal regularly and owners want to get a required rate of return on their investment. The profitability ratios calculated includes profitability in relation to sale and profitability in relation to investment. Activity ratios are also employed to evaluate the efficiency with which the firm manages and utilizes its assets. Rate of stock turnover and debtor turnover are computed to measure the efficiency. Leverage ratios are applied to indicate the mix of the funds provided by the owner and lenders. They provide the capital structure of the firm. These ratios are debt ratio, debt-equity ratio and capital employed to net worth ratio (Pandey, 2004).

2.2.5 Modern Financial Management Theories and Small Business

This covers modern financial theories formulated on principles as 'a set of fundamental that form basis for financial theory and decision making in finance'.

Agency Theory

It deals with people who own a business enterprise and all others who have interest in it, for example managers, banks, creditors, family members and employees. It postulates that the day to day running of a business enterprise is carried out by managers as agents who have been engaged by the owners of the business as principals who are also known as shareholders. The theory provides useful knowledge into many matters in SMEs financial management and shows considerable avenues how SMEs financial management should be

practiced and perceived. The manager should be guided by morals and provide the right information about the operation or financial position of the firm. Lack of transparency leads to collapse of small and micro enterprises. The owner should therefore be able to estimate the financial position of the business with certainty to ensure that the business grows. Failure of the owner to uphold morals and divert finances for personal benefit without consideration of the survival of the business will lead to business failure (Emery et al., 2007).

Pecking Order Theory or Framework (POF)

It is a theory related to SMEs financial management. It suggests that management prefers to finance first from retained earnings, then with debt, followed by hybrid forms of finance such as convertible loans, and last of all by using externally issued equity, with bankruptcy costs, agency costs, and information asymmetries playing little role in affecting the capital structure policy. Norton (1991) found out that 75% of SMEs used seemed to make financial structures decisions within pecking order framework which is consistent with small and micro enterprises sector because they are owner-managed and do not want to dilute their ownership. Owner-managed businesses usually prefer retained profits because they want to maintain the control of assets and the business. Financing, from equity minimize financial distress because there are no outsiders who can force the business into liquidation and therefore the business will grow at a slow rate but the owner is sure of survival with little profits and no interest paid to the outsiders (Norton, 1991).

2.2.6 Risk and Return Theory

Risk involves uncertainty about the future outcomes. Small and Micro Enterprises are faced with various risks which affects their return and growth. Among the risks includes, risk due to changes in interests rates, political risks arising from non-predictability of political forces which affects the outcome, purchasing power risks arising from fall in real value of investment outcomes due to unanticipated increase in the rate of inflation, profit risks arising from SMEs inability to make sufficient profits to cover costs and maintain capital adequacy and reputation risk which involves risk problem in SMEs which cause potential investors to lose confidence. Investments are risky because they may not return the average return that one expects each and every year. Although the return may be more than one expect in some years, the enterprise may have less and negative returns in other years. Even if the total returns were guaranteed, changing inflation rates would cause the real rate of return to vary

thus creating risk. Risk is measured by the volatility of total return. Rate of return is calculated by subtracting amount invested from amount received and dividing by amount invested (Wilbur, 1995).

2.2.7 Dynamic Entrepreneurial Theories

The Kihlstrom and Laffont Model

This theory was developed by Kihlstrom and Laffont. It argues that entrepreneurs are risk takers and that risk preference rather than business ability management are the major determinants of business formations, growth and collapse. Alternatively, as they proposed, the major determinant of business growth is differing tastes for risk among individuals. They assumed that production technology is risky and that entrepreneurs who have the ability to take risks in the face of uncertainty will produce more output. Firm size is therefore limited by the entrepreneur willingness to take risks (Kihlstroms and Laffont, 1978).

The Jovanovic Model

This model was developed by Jovanovic. It argues that risk arises because individuals are unaware of their management abilities. He assumes that these abilities are better evaluated by engaging in the rough and tumble business world and then observing equal management abilities. Entrepreneur then observe their profit/losses over the first year and from this they can appraise their management abilities since profit and losses reflect management abilities, the entrepreneur adjust only partially to this new idea. The firm that revises their management abilities estimates an upward growth while those that down grade their estimates will contract or even exit. With time the surviving entrepreneur gain through experience, a more precise estimate of their managerial abilities. Jovanovic, in his model of entrepreneur and risk, asserts that production technology is risky partly because individuals are uncertain about their abilities and partly because production is inherently risky. His model also assumes that individuals learn about their abilities over time by observing how well they perform in a tough business world. Individuals who find out that they have underestimated their abilities in one period will expand output in the next, while those that overestimated their abilities will dissolve their business (Jovanovic, 1982).

Lucas Model

This theory was developed by Lucas in 1978 and it postulates that individuals are not equally endowed with business acumen, a major determinant of business formation, growth and collapse. Some are risk averse, an attitude which makes them remain small. According to Lucas theory, the variation in the level business acumen is the major determinant of business growth as well as business formation and dissolution. Lucas equates the firm with an entrepreneur or manager and assumes that the firm's output is a function of managerial ability as well as capital and labour. He postulates therefore one production technology subject to constant returns to scale and a separate managerial technology with diminishing returns to scale. Manager with higher ability will have low marginal costs and therefore will produce large outputs. However expansion will be limited due to decreasing effectiveness of the manager as the scale of the firm increases. An implication of Lucas model is that for small firm to grow the owner must be willing and able to relinquish many of the day to day control and delegate those tasks to specialised management team (Lucas, 1978).

2.2.8 Kenya's Financial Market

The formal segments of Kenyan financial market are dominated by a few commercial banks. Some of the banks have root in the colonial period and were historically oriented towards meeting the financial needs of the external trade and large scale commerce. These banks do not have a track record of lending to small enterprises and small agricultural holders. In the recognition of this shortfall, the government of Kenya backed initiative such as small Enterprise Finance Company, the Kenya Industrial Estate and other alternatives to formal banks to fill the financing gap. However these government backed schemes and development finance initiative performed unsatisfactorily and in retrospect may have distorted the evaluation of financial markets. Previous studies show that when credit is advocated as a primary remedy for low level of productivity or when loans are used to stimulate growth, these strategies often lack mechanisms for excluding risky borrowers. This results in many borrowers failing to repay and the collapse of credit programmes (Von, 1993).

These phenomenon, referred to as the exit problem of credit programmes, have been evident in Kenya. In 1980s, saving and credit co-operatives Societies (SACCOs) and other Non-Bank Finance Institutions (NBFIs) expanded rapidly to fill the gap created by commercial banks, but were only useful for salaried employees for whom the lending and borrowing entitlement were clearer. Then the continued gap in SME sector attracted the attention of non-

governmental organizations (NGOs) including the Kenya rural enterprise programme (K-Rep), the Kenya Women Finance Trust (KWFT), Faulu and Pride Africa among others. These entire programmes attracted support from the donor community and are potentially exposed to the exit problem. Kenya also boosts a wide spread range of informal institutions that extends financial services to different segments of the community. The most wide spread are the Rotating Saving and Credit Associations (ROSCA) which are found almost everywhere in the country (Kiiru, 1991).

However, Kenya has in the recent past seen tremendous growth and deepening of financial sector. It has had a well developed financial system by 1996, made up of 51 commercial banks, 23 non-bank financial institutions, 1capital market authority,20 securities and equities brokerage firms 1 stock exchange, 12 investment advisory firms, 57 hire purchase companies, several pension funds, 13 foreign exchange bureaus and 2670 Saving and Credit Co-operative societies (Central Bank of Kenya,2009).

According to a World Bank study, there are many SMEs in Kenya which despite their high potential, have been unable to access financing from the existing institutions in the financial sector. Such situations may be due to the inability of the SMEs to offer sufficient loan collateral or to operational issues within SMEs requiring more hands-on assistances than commercial banks and leasing companies, for example are normally able to provide (World Bank, 2008).

2.2.9 Recent Reforms

There has been both local and international support to bring about change in SME sub-sector. Certain international organization has been in the fore line in facilitating networks and partnerships in SME sector. For instance, UNIDO has played a key role in assisting businesses that work from various SMEs sector and provided direct assistance to professional organizations in Africa. In order to facilitate access to finance by these networking of SMEs, UNIDO partnered with local banks and credit associations and a new scheme providing mutual guarantee funds for the SME sector was developed. For the programme to work, various multi stakeholders working groups including the government, private sector representative and civil society organizations have reinforced their managerial and technical

competences. Equity Bank, ABC Bank, Consolidated Bank and IDM Bank have signed agreements with international institution to finance SMEs (UNIDO, 2002).

Equity bank has also been championing the SME course. The bank has stood the test of time in aiding the sub-sector. The recent announcement by the bank to support SMEs in the country following 4 billion shillings loan from China comes as a mean towards solidifying its commitments in bringing revolution in the sub-sector. Equity can be termed as a pace setter in the journey towards SME financial sustainability and policy definition. This loan facility will be available to SME clients at interest rates between 7 and 9 percent for periods of 3 to 7 years, making it the cheapest source of funding for the sector in the country (Mwangi, 2010).

The 51 commercial banks in Kenya have significantly improved their financial standing. Their non-performing loan ratio was reduced by 20% at the end of 2006 to about 10% at the end of 2007. Most major banks have plans to expand their networks in Kenya's main regional cities and to open branches in neighbouring countries. This is a proof of their commitment to targeting SMEs and taking advantage of regional trade. The higher level of officers at the banks have a good grasping of trade finance facilities, although this expertise may not be adequate in smaller branches, especially with the large increase in newly hired staff. The availability and dedication of the banks staff to spend time with SMEs, to fully understand their business and requirements, sadly is not always a priority. These arise through from stronger competition for the best clients in future. Some of the smaller banks with a more hands-on approach appear to be closer to their SMEs clients' requirements (Central bank of Kenya, 2009).

However there are some collateral restrictions as far as SMEs are concerned. Costs are major constraints for SMEs, but the Central Bank initiative to publish the bank's charges has been impressive. This included a recent survey which classified the banks according to the costs of their transactions for the private individuals. The aim was to draw the borrowers' attention to the cost issue and in the long run increased competition in the banking sector and more transparency will drive down fees. Other constraints for SMEs come from the financial capacity of the banks themselves. This has now been improved through increase of the minimum core capital requirement, from Kshs. 250 million up to Kshs. 1 billion by 2010. The ineffective computerization of the company registry, the Land Registry and, more importantly as far as trade finance is concerned; the Chattel Registry remains a major

obstacle to the safe and efficient offer of trade finance to SMEs. Since most securities linked to trade are of a short term nature, concerning small individuals' amounts as far as SMEs are concerned, they require an efficient swift and cost effective system to register pledges (GOK, 2011).

2.2.10 Evidence of Credit Constraints

SMEs form a key part of the economy throughout the world. In Kenya, SMEs have the potential to contribute significantly to economic growth and poverty reduction through increased production and employment. This role has long been recognized by the government of Kenya. Vision 2030, Kenya's long term development plan, places a strong emphasis on the sector. While SMEs face many constraints, the lack of appropriate financial products and services invariably appears in surveys and analysis as the leading hurdles to realizing growth (GOK, 2011).

Kenya has created conditions for private growth but it is still held back by an inadequate financial system and lack of sound policy provisions. SMEs in Kenya face numerous constraints in accessing affordable finance for small business primarily in issues of access to loans without collateral and access to the formal sector. Due to limited land ownership status in Kenya (Property Rights in Kenya), they are unable to provide collateral needed for loans requests. According to the World Bank report on SMEs entrepreneurs, women make up nearly half of all small and medium enterprises owners and 40 percent of small holder farm managers, yet they have less than 10% of the available credit and less than 1% of agricultural credit. This has been identified by the government of Kenya as major constraints inhibiting growth of SMEs sector and more so women entrepreneurs (Wanjohi and Mugure, 2008).

SMEs firms are the drivers of the Kenyan Economy. They employ about 7.5m or 80% of the county's total employment outside the small scale agriculture. But little has been understood about their operation, ownership, source of income and the challenges that they face as they propel growth of the Kenyan economy. Lack of insight on the sector has left policy makers, key support players such as financial institutions and other groping in the dark on how to implement SME policies (Wanjohi and Mugure, 2008).

The above analysis leads to the conclusion that SMEs in Kenya do not have adequate access to credit and may then face credit constraints. The baseline survey (1993, 1995 and 1999) reveals that only a small proportion of SMEs borrows. Even assuming that a large proportion, of those who do not borrow do so out of choice, that choice seems largely an outcome of self-selection due to poor assessment of success probabilities. This conclusion is drawn from a number of subsidiary findings. First, an analysis of enterprises that closed down indicates that more than one third of such enterprises close down to lack of working capital (Oketch, 2000; Tomeck, 1992; Kiiru, 1991).

2.2.11 Microfinance Model

The model has promoted the microfinance institution and given it the "polite and respectable" image it currently enjoys. There are several assumptions that go with this model. First it assumed that all poor people can become micro-entrepreneurs if only they were given a chance through credit, and even if this assumption were to be granted, the model further assumes that there is a vibrant market for goods and services and it is possible for micro entrepreneurs to get linked up to the market for their products. The proponent of the microfinance also assumes that the poor can repay at market interest rate or slightly above market rate. This is a good indication that they are improving unlocking household labour that had been locked up due to liquidity constraints (Hulme and Than, 2009).

According to Professor Yunus (2003), micro credit is not a miracle cure that can eliminate poverty in one fell swoop. But it can end poverty for many and reduce its severity for others. Combined with other innovative programs that unleash people's potential, micro-credit is an essential tool in our search for a poverty-free world.

Mahajan (2005) a social entrepreneur and chairman of basix, indicates that micro credit is necessary but not a sufficient condition for micro-enterprises promotion. Others inputs are required, such as identification of livelihood opportunities, selection and motivation of the micro entrepreneurs, business and technical trainings, establishing of market linkages for inputs and outputs, common infrastructure and sometimes regulatory approvals. In absence of these, micro credit by itself works only for a limited familiar set of activities such as small farming, livestock rearing and petty trading and even those where market linkages are in place.

The Microfinance Act, 2006 and the micro-finance Regulations issued there under sets out the legal, regulatory and supervisory framework for microfinance industry in Kenya. The microfinance Act became operational with effect from 2nd May 2008. The principal object of the Microfinance Act is to regulate the establishment of businesses and operation of microfinance institutions in Kenya through licensing and supervision. The Act enables Deposit Taking Microfinance Institutions licensed by the Central Bank of Kenya to mobilize savings from the general public, thus promoting competition, efficiency and access. It is therefore expected that microfinance industry will play a pivotal role in deepening financial markets and enhancing access to financial services and products by majority Kenyan (Central bank of Kenya, 2008).

2.3 Empirical Literature Review

Starting and operating a small business includes a possibility of success as well as failure. Due to their small size, a simple management mistake is likely to lead to failure of a small and micro enterprise hence no opportunity to learn from its past mistakes. Lack of planning, improper financing and poor management have been posted as the main causes of failure of small enterprises (Longenecker, et al., 2006). Lack of credit has also been identified as one of the most serious constraints facing SMEs and hindering their development (Aleke, 1994; Kiiru, 1991; Oketch, 2000 and Tomecko, 1992).

2.3.1 Access to Capital

Bolton commission report of 1971 recognised the role played by small and micro enterprises in the U.K. The report says small and micro enterprises offer a sphere of activities to people with enterprising spirit, produce creative goods, services and technology and provide a means for a leap forward to up-coming entrepreneurs which will lead industrial circles tomorrow. According to the report, small firms have limited access to the capital and money markets and therefore suffer from chronic undercapitalization. As a result, they are likely to have excessive recourse to expensive funds which act as a brake on their economic development (Bolton, 1971).

Lack of access to credit is almost universally indicated as a key problem for SMEs. This affects technology choice by limiting the number of alternatives that can be considered. Many use inappropriate technology because it is the only one they can afford. Credit constraints operate in a variety of ways in Kenya where undeveloped capital market forces entrepreneurs

to rely on self-financing or borrowing from friends and relatives. Lack of access to long term credit for SMEs force them to rely on high cost short term finance. Shares or owners equity are generally riskier than bonds (Pandey, 2004).

There are various other financial constraints that face small enterprises. They include high cost of credit, high bank charges and fees. The scenario witnessed in Kenya particularly during the climaxing period of the year 2008 testifies the need for credit among common and low earning entrepreneurs. Numerous money lenders in the name of pyramid schemes came up promising hope among the "little investors" that they can make it to the financial freedom through soft borrowing. The rationale behind turning to these schemes among a good number of entrepreneurs is merely to seek alternatives and soft credit with low interest while making profits. Financial constraints remain a major challenge facing SMEs in Kenya (Wanjohi and Mugure, 2008).

Access to finance by small holders is normally seen as one of the constraints limiting their benefits from credit facilities. However, in most cases the access problems, especially among formal financial institutions, is one credited by the institutions mainly through their lending policies. This is displayed in the form of prescribed minimum loan amounts, complicated application procedures and restrictions on credit for specific purposes. For small-scale enterprises, reliable access to short-term and small amounts of credit is more valuable, and emphasizing it may be more appropriate in credit programmes aimed at such enterprises. Schmidt and Kropp (1987) further argue that the type of financial institutions and their policies often determines the access problem. Where credit duration, terms of payments, required security and provision of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists and when they do, they will be denied access.

On the issue of interest rate, the bank also supports the news that high interest rate credit can help to keep away the influential non-target group from a targeted credit programme (Hossain, 1988). This further demonstrates the need to develop appropriate institutions for the delivery of loans to small scale borrowers.

2.3.2 Growth and Profitability

Education is one of the factors that impact positively on growth of firms. Those entrepreneurs with larger stocks of human capital, in terms of education and (or) vocational training are better placed to adapt their enterprises to constantly changing business environments. Infrastructure as it relates to provision of access roads, adequate power, water, sewage and Telecommunication has been a major constraint in the development of SMEs (Bokea, et al., 1999).

Existing literature on SMEs indicate that lack of capital is a strong constraints to growth (GOK, 1993; 1995; 1999). According to these studies, most SMEs rely mainly on own savings and reinvested profits to finance their business. Comparison of results of the three baseline studies of 1993, 1995 and 1999 shows minor improvement in the situation from 9 percent of SMEs accessing credit in 1993 to 10.8 percent in 1999. This research suggests that availability of credit is no longer as bad as it used to be judging from the previous findings on credit and small scale businesses.

SME growth is often closely associated with firm overall success and survival. Growth has been used as a simple measure of success in business. Growth is the most appropriate indicator of the performance for surviving small firms. Moreover growth is an important precondition for the achievement of other financial goals of business. It has also been found out that strong growth may reduce the firms' profitability temporarily, but increase it in the long run. A firm should earn profit to survive and grow over a long period of time. Sufficient profit must be earned to sustain the operation of the business to be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for the welfare of the society (Philips and Kirchloff, 1989).

The financial manager should continuously evaluate the efficiency of the firm in terms of profits. The profitability ratios are calculated to measure the operating efficiency of the firm. The profitability ratios calculated include profitability in relation to sales and profitability in relation to investment. Profitability in relation to sales is calculated by dividing gross profit by total sales. This indicates the efficiency of operation as well as how the products are priced. A more specific ratio of profitability is the net profit margin which is expressed as net profit after taxes divided by sales. It tells the relative efficiency of the firm after taking into account all expenses and income taxes. Profitability in relation to investment is calculated by

dividing profits after tax by net worth or capital invested. Profitability ratios provide information about management's performance in using the resources of the small business. Many entrepreneurs decide to start their own businesses in order to earn a better return on their money than would be available through a bank or other low-risk investments. If profitability ratios demonstrate that this is not occurring-particularly once a small business has moved beyond the start up phase-then entrepreneurs for whom a return on their money is the foremost concern may wish to sell the business and reinvest their money elsewhere (Van, 2002).

2.3.3 Financial Management in SMEs

Osteryoung *et al.*, (1997) writes that 'while financial management is a critical element of management of a business as a whole, within this function the management of its asset is perhaps the most important. In the long term, the purchase of assets directs the course that the business will take during the life of these assets, but the business will never see the long term if it cannot plan an appropriate policy to effectively manage its working capital." In effect the poor financial management of owner-managers or lack of financial management altogether is the main course underlying the problems in SMEs financial management.

Hall and Young (1991) in a study in U.K. of 3 samples of 100 small enterprises that were subject to involuntary liquidation in 1973, 1978 and 1983 found out that of the reasons given for failure, 48.8% were of financial nature .On the perceptions of official receivers interviewed for the same small enterprises, 86.6% of the 247 reasons given were of financial nature.

2.3.4 Characteristics of Credit Markets in Africa

Credit markets in Africa have mainly been characterised by the inability to satisfy the demand for credit in rural areas. However, whereas for the informal sector the main reason for this inability is the small size of the resources it controls, for the formal sector it is not an inadequate lending base that is the reason. Rather the reasons are difficulties in loan administration like screening and monitoring, high transaction costs, and the risk of default. Credit markets are characterised by information asymmetry, agency problems and poor contract enforcement mechanisms. They are mainly fragmented because different segments serve clients with distinct characteristics. Because of this, lending units are unable to meet the

needs of borrowers interested in certain types of credit. The result is a credit gap that captures those borrowers who cannot get what they want from the informal market, yet they cannot gain access to the formal sources (Aryeetey, 1996).

2.3.5 Loan Screening, Monitoring and Contract Enforcement

Unlike formal finance, informal lenders often attach more importance to loan screening than to monitoring the use of credit. Screening practices often include group observation of individual habits, personal knowledge by individual money lenders and recommendations by others, and credit worthiness. In group lending programmes, members are jointly liable for the loans given. The jointly liability plus the threat of losing access to future loans motivates members to perform functions of screening loan applicants, monitoring borrowers and enforcing repayment. Investigations of the effect of intra group pooling of risky assets show that groups exploit scope and economies of scale of risk by pooling risks and entering into informal insurance contracts. This confirms the role of social cohesion in group repayment (Zeller, 1998).

In group lending, the financial intermediary reduces the recurrent transaction costs by replacing multiple small loans to individuals by a large loan to a group. This enables financial intermediaries to bank with poor loan applicants who would not receive any loans under individual loan contracts due to excessive unit transaction costs. However small scale entrepreneurs who do not join the group lending programmes are unable to raise collateral to secure finance from lending institutions (Zeller, 1998).

2.3.6 Characteristics of Credit Market in Kenya

As in many other countries in sub-Saharan African, the performance of formal financial institutions and credit programmes in Kenya in terms of alleviating the financial constraints of the smallholder sector has met a lot of criticism. The criterion of creditworthiness, delays in loan processing, disbursement, and the government approach to preferential interest rates, resulting in non-price credit rationing which have limited the amount of credit available to small holders and the efficiency with which the available funds are used. This can be seen as an indication of general inadequacy of the formal credit demand in country (Atieno, 1994).

Bottlenecks in the capacity of the existing instructions to deliver credit are also reflected in the existing unsatisfied demand. Kenya's financial system displays a deficiency in the range of financial instruments and lack of coordination between different financial institutions. The lending policies used by the main credit institutions in Kenya do not ensure efficient and profitable use of credit funds, especially by farmers, and also results in a disparity between credit demand and supply. This view is further supported by a 1995 survey by the Kenya Rural Enterprise Programme (KREP) showing that whereas credit is an important factor in enterprise expansion, it will most likely lead to enterprise contraction when not given adequate amounts. Hence despite the existence of a sophisticated financial system it has not guaranteed the access to credit by SMEs.

Several studies on the SME sector in Kenya have identified access to credit as a major problem affecting the growth of SMEs. Other studies concluded that while credit in the banking sector grew steadily in the past, little of this credit reached the SME sector (Kiiru, 1991; Oketch, 2000; Tomecko and Aleke, 1992). The 1993 baseline survey showed that only nine percent of the SMEs had accessed credit and that only four percent of this credit was obtained from formal financial institutions (NGOs, commercial banks and SACCOs). The survey noted that of the bulk of SME credit which amounted to sixty nine percent came from informal savings and credit associations, mostly rotating saving and credit associations (ROSCAs), friends and relatives. The 1995 baseline survey showed that ten percent of the SMEs had accessed credit and of these, only four percent received credit from formal sources.

2.4 Conceptual Framework

This shows the relationship between the independent variables and dependent variables. Restrictions by financial institutions, limited credit facilities, limited financial management skills and experience, high interest rates and level of education have an influence on the operation, profitability and growth of SMEs. There are other variables which are referred to as intervening variables which may interfere with the model such as technology scattered market, national policy, poor infrastructure and weather pattern.

Operation -involves measuring change in employees, raising capital and looking at the investment to attain a positive change. Improved operation will mean better performance in terms of increase in number of employees, change in capital as well as change in profits.

Profitability relates change in returns as a result of increase in sales volume leading to change in profit margin. Growth is measured in terms of number of employees and increase in size reflected by increase in capital.

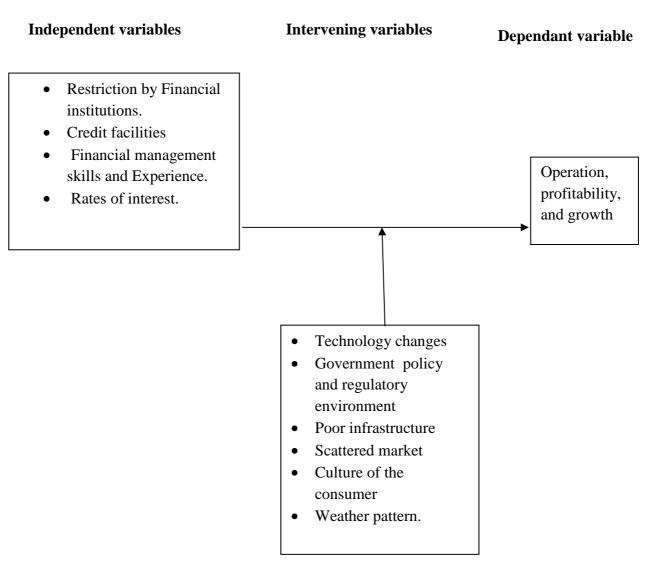


Figure 1: Conceptual Framework

Source: Author (2013)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology to be used by the researcher. The methodology includes research design, target population, sampling design and procedures, data analysis and interpretation as well as validity and reliability of the research instruments.

3.2 Research Design

Survey design was used. Survey involves a researcher working and interacting with respondents with a view to extracting information from their comments, attitudes and opinions (Kothari, 2006).

3.3 Target Population

The target population for the study consisted of Mau-Narok Division small scale entrepreneurs. The area has many small scale retail outlets. A total of 677 small and micro enterprises exist as per the county council of Nakuru.

Table 1: Number of Enterprises

Name of centre	Population
Mau-Narok	231
Likia	74
Mwisho wa Lami	116
Tipis centre	78
Kianjoya	100
Meta	72
Total	677

Source: Single Business Permit Analysis for 2011 Local Authority Integrated Financial Operation System. Local Authority Name 571/County Council of Nakuru.

The target population was stratified by region and data collected randomly by giving questionnaires to a number of respondents per region. The respondents comprised a sample of the total population who were the proprietors with permanent premises.

3.4 Sampling and Sample Size

The respondents were sampled using stratified random sampling procedure according to centre. The total number of respondents was 246 as indicated below.

Table 2: Sample Size Per Centre

Name of Centre	Target	Sample Size	
Mau Narok	231	84	
Likia	74	27	
Mwisho Wa Lami	116	43	
Tipis Centre	78	28	
Kianjoya	100	37	
Meta	72	27	
Total	677	246	

The sample was determined as follows based on Mugenda and Mugenda (1999)

When population size is greater than 10,000 the sample size is derived by the following formula:-

$$\frac{n = Z^2_{\alpha/2} Pq}{d^2}$$

Where n = desired sample size if N > 10,000

Z = standard normal deviation at the required confidence level (95%).

P = Proportion of the population with the characteristic of interest

q = 1-p (proportion without the characteristic)

d = significance level (0.05 or 5%)

Since proportion is not known

$$P=50\% = 0.5$$

$$q = 1 - P = 1 - 0.5$$

$$Z_{\alpha/2} = Z^{0.05}/_{2}$$

$$= Z_{0.025} = \pm 1.96$$

$$n = Z^{2}_{\alpha/2} Pq = \frac{(1.96)^{2} (0.5) (0.5)}{(0.05)^{2}}$$

$$= 384$$

Since n < 10,000 in the study

Where:

nf - desired sample size when N < 10,000.

n = desired sample size when N > 10,000

N = Population

Then
$$\inf = \frac{n}{1 + \binom{n}{N}} = \frac{384}{1 + \binom{384}{677}} = \frac{384}{1 + 0.567} = \frac{384}{1.56} = 246$$

3.5 Data Collection Instrument and Procedures

Primary and secondary data was used. Primary data was obtained by use of questionnaires with open and closed ended questions that were used to collect views and opinions of businessmen. Secondary data was collected through documentary analysis from past sales record even though SMEs did not maintain proper records since it is not a basic requirement for them to keep book of accounts. Standardized questionnaires provided data in the same form from all respondents. The questionnaires were distributed according to the number of respondents per area.

3.6 Data Analysis and Presentation

The data collected was analysed using descriptive statistics. Descriptive statistics was used to describe the basic features of the data in the study. Univariate analysis which involves the examination across cases of one variable at a time was done. The main characteristics of the variables that were studied include the distribution and the central tendency. Distribution summarised the frequency of individual values while central tendencies estimated the "centre" of a distribution of values using the mean, median and mode. Inferential statistics such as Pearson's Correlation coefficients, Regression and chi-square test were also applied. SPSS software and Microsoft Excel assisted in data analysis. Data was presented through figures, tables and percentages.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings and discussion on effects of financing constraints on operation, profitability and growth of small and micro enterprises in Mau-Narok Division. Both findings and discussion are presented as per objectives and research question. The chapter starts with presentation of demographic profile of the respondents followed by analysis of research questions.

4.2 Demographic Characteristics of the Respondents

The sample of investigation consisted of small and micro enterprise owners in Mau-Narok Division. The sample consisted of 246 respondents.

4.2.1 Gender of Respondents

Respondents who took part in this study were mainly males. The gender distribution of respondents who took part in this study is displayed in the figure 2.

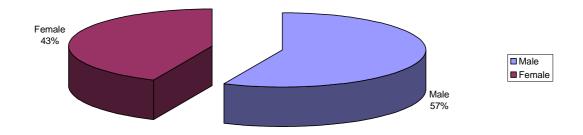


Figure 2: Gender of Respondents

As indicated in Figure 2, 57% of the total respondents were male while only 43% were female. This implies that majority of the small and micro enterprises in the study area are owned by males. Most of the time, females are often disadvantaged in terms of establishment and management of businesses due to their unequal chances of access to finance as compared to males. These results agree with Magoulios and Kydros (2011) where they noted that it is relatively difficult for females to access loans from financial institutions due to lack of collateral.

Considering a reasonable proportion of family operated small and micro enterprises in the study area, male domination implies an exclusion of females which can affect the performance of the businesses. Household decision-making has received increased attention from policy makers and researchers around the world. One reason for the increased attention is to avoid the failure of development strategies that do not take household activities and behaviours into account. If households do not pool their incomes or make decisions jointly then increasing resources through one partner in the household may not increase the welfare of the entire household. By understanding household decision-making behaviour, policy makers can hope to create policies that increase the welfare of all family members, particularly women and children (Lawrence and Mancini, 2008).

4.2.2 Age Distribution of Respondents

The distribution of respondents who participated in this study was as shown in Table 3.

Table 3: Age Distribution of Respondents

Age brackets	Frequency	Percent	Cumulative Percent
0 - 20 years	5	2.0%	2.0%
21 - 30 years	93	37.8%	39.8%
31 - 40 years	96	39.0%	84.1%
41 - 50 years	39	15.9%	100.0%
Above 50 years	13	5.3%	45.1%
Total	246	100.0%	

Majority (39.0%) of the respondents who participated in the study were aged between 31-40 years. This was closely followed by respondents aged between 21-30 years (37.8%) and 41-50 years (15.9%). There were few respondents in the age bracket of 0-20 years and above 50 years as represented by 2.0% and 5.3% of the total respondents respectively.

Age is an important factor in business enterprise since it has a significant relationship with experience (Kohut and Corriher, 1994). SMEs require some capital for their establishment during the start-up stage and as they develop they require capital for existence and survival. Capital is however correlated with individuals wealth and consequently with age (capital

accumulation theory). Most young people find it difficult to raise adequate finance (capital) required in business.

Majority of the small and micro businesses require owners' participation for long hours and maximum saving on employment labour, a condition not suited for very old and very young people. This implies that majority of the business owners in the study area are suited to be middle aged.

4.2.3 Marital Status of Respondents

Respondents taking part in this study were of varied marital status as indicated in Table 4.

Table 4: Marital Status of Respondents

Marital status	Frequency	Percent
Single	71	29.0
Married	169	68.6
Divorced	3	1.2
Widowed	3	1.2
Total	246	100.0

Majority (68.6%) of the respondents were married. The results further shows that 29.0% of the respondents were single and only 1.2% and 1.2% were divorced and widowed respectively.

Bula (2012) argued that it is relatively easy for married persons to establish and maintain a business entity due to confounding pressure of family needs as compared to unmarried people. Most businesses in the study area were further noted to utilize family labour more than employment labour which can contribute to great popularity of family businesses and partly explain the possible reasons for most respondents being married.

4.2.4 Occupation of Respondents

The distribution of respondents' main / primary occupation is as shown in the Table 5.

Table 5: Occupation of Respondents

Occupation	Frequency	Percent
Formal employment	6	2.4
Farmer	38	15.4
Businessman and employed	33	13.6
Businessman	159	64.5
None	10	4.1
Total	246	100.0

It can be noted that a notable percentage of the business persons in the study area often do not engage in the business activity in a full-time manner. However, majority (64.5%) of the sampled respondents were pure businessmen/women. This was closely followed by persons who were engaged in farming (15.4%) as their main occupation (implying that engagement in business was secondary in priority). Some of the respondents were engaged as businesspersons who were also employed elsewhere (13.6%). Respondents who claimed to lack a main occupation and those with formal employment comprised 4.1% and 2.4% respectively.

Farming is the main economic activity in the study area. Due to challenges characteristic to small and micro enterprises (limited financing, lack of qualified personnel, low management skills, etc) most people prefer to engage in business on part-time basis without dropping other economic activities presumed that businesspersons have most knowledge and experience on. Likewise, due to problems of financing, most people prefer to continue in formal employment since it is presumed to be a better (reliable and convenient) source of capital as compared to retained capital from the business.

4.2.5 Education Level of Respondents

Table 6 shows the distribution of education of the studied small and micro enterprise owners.

Table 6: Education Level of Respondents

Education level	Frequency	Percent
Primary	36	14.8
Secondary	109	44.4
Polytechnic	12	4.7
University	29	11.8
College	60	24.3
Total	246	100.0

Most small and micro enterprises owners had secondary (44.4%) and college (24.3%) level of education. Other respondents had primary (14.8%) and university (11.8%) level of education. There were very few (4.7%) respondents with polytechnic level of education.

Owner's education is an important factor that determines the quality of business management and this explains why most owners with primary level of education were very few. Education levels such as secondary, polytechnic, college and university are considered adequate for the establishment and running of the small and micro enterprises. There are very few youth polytechnics as compared to secondary schools and tertiary colleges in the study area and hence the reason for low percentage of respondents who possessed polytechnic level of education and high percentage of respondents with secondary level of education.

There are three universities within the outskirts of Mau-Narok division (Egerton University, Mt. Kenya University and Narok University College) that could be responsible for ease of access of university education in the study area and hence a substantial portion of respondent possession of university level of education. Educated entrepreneurs are mostly characterized by competence in business management and administration, financial planning and management, marketing, etc.

4.2.6 Types of Businesses Operated by the Respondents

The business owners who participated in this study were operating different types of ventures as shown in Table 7.

Table 7: Type of Business Operated

Type of business	Frequency	Percent
Sole proprietorship	188	76.3
Family partnership	44	17.8
Non-family partnership	10	4.1
Private company	4	1.8
Total	246	100.0

The most popular type of business was sole proprietorship as represented by 76.3% of the total businesses studied. The second most popular type of a business was noted to be family partnerships (17.8%). There were a few (4.1%) non – family partnership businesses and private companies (1.8%) in the study area. Sole proprietorships are the simplest types of businesses to establish. They require little capital and their management is very flexible and hence their popularity in the study area.

4.2.7 Type of Business Undertaken

There were a number of businesses undertaken by respondents who participated in this study as shown in Figure 3.

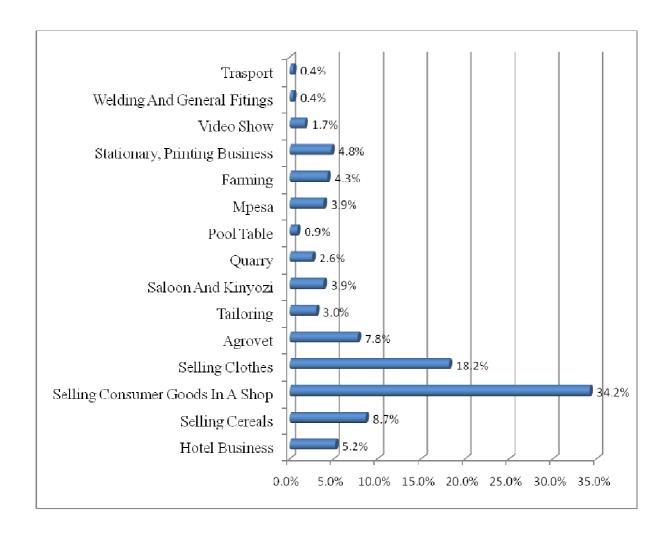


Figure 3: Types of Activities Undertaken by the Businesses

Majority of the respondents were engaged in retail trading where they were selling consumer goods in shops as represented by 34.2% of the total respondents. This was closely followed by 18.2% of the respondents who were selling clothes and 8.7% who were involved in cereal grains selling. Other types of businesses undertaken were agrovets (7.8%), hotel (5.2%), stationary/printing (4.8%), farming (4.3%), saloon and kinyozi (3.9%), MPESA (3.9%), tailoring (3.0%), quarry (2.6%), video show (1.7%), pool table (0.9%), welding and general fitings (0.4%) and transport (0.4%).

The above percentages shows that majority of the respondents were engaged in retail trading such as sell consumer goods in a shop, selling cloths, selling cereals, Agrovet and hotel business as well as provision of services like saloon, kinyozi, stationery and printing. The reasons as to why they were engaging in the above businesses is the fact that the businesses

do not reguire a lot of capital during the the start-up stage. Transport, weilding and general fitting reguire a lot of capital and some knowledge and skill for starting them which most SMEs do not have.

4.2.8 Location of the Business Studied

This study covered small and micro enterprises in Mau-Narok division. Specifically, there were businesses positioned in Mau-Narok town, Mwisho wa Lami, Likia, Tipis centre, Kianjoya and Meta as shown in Table 8.

Table 8: Location of the Business

Location	Frequency	Percent
Mau Narok	124	50.3
Likia	25	10.1
Kianjoya	19	7.7
Mwisho wa Lami	39	16.0
Tipis Centre	29	11.8
Meta	10	4.1
Total	246	100.0

Majority (50.3% of the enterprises were from Mau-Narok centre. This is because the area is highly populated and has security. This was closely followed by Mwisho wa Lami (16.0%), Tipis centre (11.8%), Likia (10.1%), Kianjoya (7.7%) and Meta (4.1%). Meta has the lowest because the area has in security due to border conflicts. This distribution is proportionate to the total population of businesses in the study area. It is thus able to portray the true picture of the business operation in the study area.

4.3 Influence of Credit Facilities on Operation, Growth and Profitability of Small and Micro Enterprises

Small and micro enterprises in the study area were noted to be financed in a variety of means as shown in the Table 9 below.

Table 9: How the Respondent Finance the Business

Source of financing	Frequency	Percent
Loan	31	12.4%
Personal contribution	124	50.3%
Funds from friends and relatives	12	4.7%
Personal contribution and loans	80	32.5%
Total	246	100.0%

Table 9 shows that majority (50.3%) of the small and micro enterprises were financed by personal contributions. About 32.5% were noted to be financed by a combination of personal contribution and loans. Other means of financing the businesses were found to be loan (12.4%) and funds from friends and relatives (4.7%). The high representation of businesses financed by personal contribution implies a possible challenge in the acquisition of loans and funds from other sources (friends, relatives, angle financiers, etc).

Despite the minimal popularity of loan as a means of financing businesses in the study area, evidence showed that majority (72.8%) of the enterprises have a financial institution within their vicinity and only 27.2% of the enterprises were situated relatively far from any financial institution. This is displayed in the table 10.

Table 10: Presence of Financial Institutions in the Study Area

Response	Frequency	Percent
Yes	179	72.8
No	67	27.2
Total	246	100.0

The key question remains to be why most businesses (even the ones situated near financial institutions) do not borrow from these institutions.

The nearness of the financial institutions to majority of the business studied and the contrast of most businesses being that they are not beneficiaries of financial institutions loans imply that there must be some serious hurdles on the provision of loans from financial institutions. A number of possible factors can contribute to this scenario (high interest rates, high collateral requirement, and unattractive repayment schedule).

It was further noted that majority (53.3%) of the small and micro enterprise owners had ever applied for a loan from any financial institution as shown in the Table 11 below.

Table 11: Application of Loan by the Respondents from the Financial Institutions

Response	Frequency	Percent
Yes	131	53.3%
No	93	37.8%
Not at all	22	8.9%
Total	246	100.0%

The above figure shows that it was only a small portion of the total business owners who had never applied a loan (a cumulative of 46.7%). Security requirement is one of the major factors that hinder the possibility of small and micro enterprises to access loans from financial institutions.

The researcher investigated the respondents who were able to raise the security requirement and consequently awarded a loan. Indicated below is the amount of loan that was given.

Table 12: Amount of Loan Given by the Financial Institution

Loan bracket (KShs.)	Frequency	Percent
0 - 5,000	10	4.1%
6,000 - 10,000	37	15.0%
11,000 - 15,000	12	4.9%
16,000 - 20,000	48	19.5%
Above 21,000	139	56.5%
Total	246	100.0%

As shown in the table above, majority (56.5%) of the small and micro enterprise under investigation had benefited with a loan of above KShs.21,000. This was closely followed by a loan amount of between KShs.16,000 to KShs.20,000 (19.5%) and KShs.6,000 to KShs. 10,000 (15.0%). However, very low amount of loan (such as KShs.0 to KShs.5,000) was noted to be very rare as was represented by 4.1% of the total loans respectively.

Most businesses that had benefited from loans from various financial institutions were found to have repaid their loan within a period of one year as represented by 73.6% of the total businesses that had received loans. Other repayment periods were found to be within two years (16.3%), within one month (4.7%), within five years (3.9%) and within six years (1.6%). This is as shown in the Table 13 below:

Table 13: Amount of Time Taken to Repay the Loan

Duration (time)	Frequency	Percent
Within one month	11	4.7%
Within 1 year	181	73.6%
Within 2 years	40	16.3%
Within 5 years	10	3.9%
Within 6 years	4	1.6%
Total	246	100.0%

A longer repayment period is considered as more appropriate by most borrowers as compared to a shorter period since it allows a loan beneficiary to have a more flexible repayment schedule.

The Figure 4 below shows the frequency distribution of the respondents who had gotten loan from financial institutions and those who had not. The figure indicates that majority (58%) of the respondents had acquired loan services and only a few did not (42%).

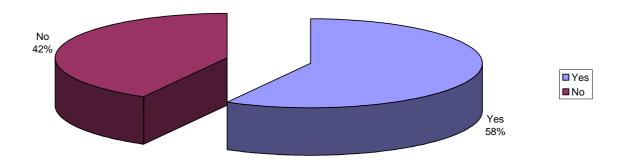


Figure 4: Loan Acquisition from Financial Institutions

Despite the great challenges (high interest rates, unfriendly repayment schedule, high collateral requirement, etc) in the acquisition of loan from financial institutions, most businesses still sacrifice in order to get financial services to service their businesses so that not to cripple the business operation.

4.3.1 Summary of the Data on Operation, Growth and Profitability of the Sampled Businesses

The following table shows the changes in employee number, capital base and gross income among the businesses that were studied.

Table 14: Paired Samples T-Test Results for the Change in Employee Number

Variables	Mean	N	Std. Deviation	Std. Error
Employee at the start of the business	2.3049	246	2.50072	.15944
Employees employed by the business currently	3.5203	246	3.26228	.20800

Mean difference = -1.21545, T-value = -7.259, P-value = 0.000, Degrees of freedom = 245

The above table shows that there was a significant increase in the number of employees employed in the businesses studied. The mean number of employees at the start was 2.3049 persons while the mean number of employees currently was 3.5203 persons. The mean difference of 1.21545 is significant at 1% level.

As far as the change in capital base was concerned, similar trends were noted. The table below shows that there was a significant increase in capital base in the businesses studied. The mean capital base amount at the start was kshs. 50060.9756, while the mean capital base currently was kshs. 109857.7236. The mean difference of 59796.74797 is significant at 1% level.

Table 15: Paired Samples T-Test Results for the Change in Capital Base in the Business

Variables	Mean	N	Std. Dev.	Std. Error
Capital base at the start of the business	50060.98	246	47617.70	3035.99
Capital base of the business currently	109857.72	246	77307.23	4928.93

Mean difference = -59796.75, T-value = -13.35, P-value = 0.000, Degrees of freedom = 245

As far as the change in gross income was concerned, similar trends were noted. The table below shows that there was a significant increase in gross income in the businesses studied. The mean gross income amount at the start was KShs.10,564.8536, while the mean gross income currently was KShs.23,912.1339. The mean difference of KShs.13,347.28033 is significant at 1% level.

Table 16: Paired Samples T-Test Results for the Change in Gross Income in the Business

Variables	Mean	N	Std. Deviation	Std. Error
Gross income at the start of business	10564.85	239	11217.62	725.61
Gross income of the business now	23912.13	239	16355.70	1057.96

Mean difference = -13347.28, T-value = -14.62, P-value = 0.000, Degrees of freedom = 245

In order to analyze the influence of credit facilities on growth, operation and profitability of SMEs within the study area, the researcher used independent samples t-test. The mean change in growth, operation and profitability as measured by change in employee numbers, change in capital base and change in gross income was computed and compared between those businesses that acquired the loan and those that did not and the results noted in the Table 17 below:

Table 17: Growth of SMEs in the Area.

Mean change in growth,						
Response	Frequency	operation and profitability	Std. Deviation	Std. Error Mean		
Yes	143	1.226087	1.404912	0.131009		
No	103	0.863454	1.222016	0.134134		

T-values = 2.93 (Calculated), 1.96 (Critical), Degrees of freedom = 244, P-value = 0.042, Mean difference = 0.3226

The above results shows that there is a significant difference in growth, operation and profitability of small and micro enterprises that were able to acquire loans and those that were not able to acquire (calculated t-value of 2.93 is greater than the critical t-value of 1.96 at 244 degrees of freedom).

These results imply that there was generally an improvement in growth, operation and profitability of businesses that had acquired loans than those that had not. There is a significant difference in the change of growth, operation and profitability between the businesses that were financed through the loan and those that were not financed. The mean difference of 0.3226 was significant at 5% level (P-value<0.05), implying that the highest improvement in growth, operation and profitability was associated with loan financed businesses.

This agrees with Thorsten & Demirguc-Kunt (2006) findings that access to finance is the major business growth constraint in most economies.

4.3.2 Influence of Credit Facilities on Operation, Growth and Profitability of SMEs: Ordered Logit Results

The estimation results of the ordered logit models are shown in Tables 18. To correct for heteroscedasticity, the Huber/White/sandwich estimator of variances was used (White, 1980). In the ordered model the dependent variable is ordered where 1= Low; 2=Medium and 3= High. Therefore, a positive sign for the variable in the ordered logit model means the higher the likelihood of improvement in operation, growth and profitability. The signs of the exogenous variables in the ordered logit model explaining the determinants of the SMEs health in operation, growth and profitability are largely as expected.

The chi-square value is significant at one percent implying that the explanatory variables taken together influence the SMEs operation, growth and profitability. A positive value means that the explanatory variable increases the propensity of SMEs operation, growth and profitability with an increase in its magnitude.

Table 18: Influence of Credit Facilities on Operation, Growth and Profitability of SMEs

Variable	Parameter	Std error	P-value
Credit facilities access			
Acquisition of loan from financial institution (1=Yes)	.0424046	.0148472	0.004*
Availability of financial institution in the area	.3796234	.2707705	0.161
(1=Yes)			
Amount of loan given by financial institution			
Amount $(1 = 0 - 5000)$.0235946	.3023182	0.938
Amount $(1 = 6000 - 10000)$.1335225	.2619669	0.610
Amount $(1 = 11000 - 15000)$.1335225	.2619669	0.610
Amount $(1 = 16000 - 20000)$.4803418	.2372247	0.043**
Amount (1 = Above 21000)	.7595078	.3773067	0.044**
_/cut1	3.39		
_/cut2	3.82		
Log likelihood	-217.69		
Prob > Chi2	0.0316		
Pseudo R ²	0.711		

^{*=}significant at 1%; ** significant at 5%

The ordered logit model successfully estimated the significant variables (related to credit access) associated with SMEs operation, growth and profitability. The following variables were found to be significant in influencing SMEs operation, growth and profitability: Acquisition of loan from financial institution and amount of loan given by financial institution (loan amount of KShs 16000 - KShs.20000 and above KShs.21000).

The estimated parameter for acquisition of loan from financial institutions is statistically significant at 1% level of probability and has a positive sign indicating that business owners who had acquired loan tend to have better performance in their businesses operation, growth and profitability. This is consistent with findings in most business studies, in the Kenya. Access to credit is argued to be a major factor that affects SMEs operation, growth and profitability. Similar findings have been recorded by Thorsten and Demirguc-Kunt (2006). The amount of loan borrowed per session (whether it lies in the bracket of KShs. 16000 –

KShs.20,000 and above KShs. 21,000) coefficients are positive and statistically significant at 5% level of probability.

SMEs that got an average of less than KShs. 16,000 as loan per session did not benefit so much from this loan and hence their operation, growth and profitability did not improve significantly. On the contrary, there was positive improvement in SMEs that were able to get at least a loan amount of between KShs. 16,000 and KShs. 20,000. SMEs that were able to get an average of more than KShs. 21,000 as loan per session improved significantly in terms of operation, growth and profitability as compared to those that were not able to get a similar loan amount. McPherson (1996) had a similar result and interpreted it as a confirmation that the amount of credit borrowed may in fact depress the business if it is not adequate in respect to its size.

4.4 Influence of Interest Rates on SMEs Growth, Operation And Profitability

The second objective in this study sought to determine how the interest rates charged by financial institutions affect SMEs growth, operation and profitability. Interest rate is one of the major factors that may act as a constraint on small and micro enterprises financing. The rates of interest charged by financial institutions serving the respondents covered in this study were varied as shown in the table 19 below.

Table 19: Rate of Interest Rate that the Financial Institutions Charge on Loans

Below 15% 75 16 - 20% 111 21 - 25% 47 26 - 30% 4 Above 31% 9 Total 246	Interest rates	Frequency	Percent
21 - 25% 47 26 - 30% 4 Above 31% 9	Below 15%	75	30.4%
26 - 30% 4 Above 31% 9	16 - 20%	111	45.2%
Above 31% 9	21 - 25%	47	19.1%
	26 - 30%	4	1.7%
Total 246	Above 31%	9	3.5%
	Total	246	100.0%

Table 19 shows that majority (45.2%) of the small and micro enterprises were charged interest rate of between 16 - 20% for the acquisition of their loan. It was further noted that 30.4% of the small and micro enterprises had a loan with an interest rate of below 15%. About 19.1% of the businesses had a loan with an interest rate of between 21 - 25% while about 1.7% of the total respondents had a loan with interest rate of between 26 - 30%. Some

of the small and micro enterprises owner had acquired a loan with as high interest rate as more than 31% as noted by 3.5% of the total responses. As noted with the above data, majority of the interest rates are generally high. This may discourage the rate of borrowing and thus suppress the activities of small and micro enterprises in the study area.

Most respondents (53.8%) felt that the interest rates charged on loans by financial institutions influence the operation, growth and profitability of businesses as opposed to only 46.2% who felt otherwise.

Table 20: Influence of Interest Rates on Operation, Growth and Profitability of SMEs

Opinion	Frequency	Percent
Yes	133	53.8%
No	113	46.2%
Total	246	100.0%

To verify how interest charged by financial institutions affects small and micro enterprises growth, operation and profitability, appropriate means of measuring small and micro enterprises growth, operation and profitability was developed. The change in the number of employees since the start of the business until present times was used.

Appropriate measures of small and micro enterprise growth, success in operation and profitability were devised in this study. The change in number of employees since the start of the business until currently was one of the measures used. Likewise, the change in the capital base of the business since the start of the business till present was also used. Gross income from the business at the start was also compared with the gross income from the business in the last financial year as well as the current projections of net income likely changes in the current financial year.

4.4.1 Change in Number of Employees

The use of Pearson's chi-square test was employed to analyze the dependency and relationship between interest rates charged by financial institutions and small and micro enterprise and influence on growth, operation and profitability. Table 21 is a cross tabulation which indicates the relationship between these variables with respect to the changes in

number of employees employed in the business. The change in employees' numbers in the business was measured as either low, medium or high.

Table 21: Interest Rates and Changes in Number of Employees in the Business

Type of employee number change				
Low	Medium	High	Total	
48 (85.7%)	21 (70.0%)	48 (84.2%)	117 (81.8%)	
6 (10.7%)	7 (23.3%)	8 (14.0%)	21 (14.7%)	
2 (3.6%)	2(6.7%)	1 (1.8%)	5 (3.5%)	
	48 (85.7%) 6 (10.7%)	Low Medium 48 (85.7%) 21 (70.0%) 6 (10.7%) 7 (23.3%)	Low Medium High 48 (85.7%) 21 (70.0%) 48 (84.2%) 6 (10.7%) 7 (23.3%) 8 (14.0%)	

Pearson Chi-Square = 5.729, Degrees of freedom = 4, Probability value = 0.642

The Pearson's chi-square value calculated for the relationship between interest rate and small and micro enterprise growth, operation and profitability is 5.729. This is insignificant at 5% level (the corresponding critical chi-square value is 9.488 (larger) while the p-value is calculated as 0.642 (greater than 5% level of significance). This implies that there is an insignificant effect on small and micro enterprise growth, operation and profitability by the interest rates charged by financial institutions.

These chi-square results imply that there is a weak relationship between interest rates level and the change in employee number in businesses. This means that low interest rates do not always boost business growth. Most of the times, low interest rates comes at a high cost to the business especially its unavailability when required and supply in low quantities. High interest rates imply that they can still be healthy to a business venture under certain conditions (e.g. flexible repayment, convenience of repayment, quick loan approval, etc).

4.4.2 Change in Business Capital Base

The use of Pearson's chi-square test was also employed to analyze the dependency and relationship between interest rates charged by financial institutions and small and micro enterprise growth, operation and profitability as measured by the change in capital base. The table 22 below is a cross tabulation which indicate the relationship between these variables.

Table 22: Interest Rates and Changes in Capital Base

Changes	in	Capital	Base
		Cubicui	

Interest Rates	Low	Medium	High	Total
Low	68(58.1%)	27 (23.1%)	22 (18.8%)	117 (100.0%)
Medium	9 (42.9%)	7 (33.3%)	5 (23.8%)	21 (100.0%)
High	1 (20.0%)	2 (40.0%)	2 (40.0%)	5 (100.0%)

Pearson Chi-Square = 13.372, Degrees of freedom = 4, Probability value = 0.049

The Pearson's chi-square value calculated for the relationship between interest rate and small and micro enterprise growth, operation and profitability (as measured by the change in capital base) is 13.372. This is significant at 5% level (the corresponding critical chi-square value is 9.488 (smaller) while the p-value is calculated as 0.049 (lesser than 5% level of significance). This implies that there is a significant effect on change in small and micro enterprises capital base by the interest rates charged by financial institutions. Low interest rates on loan (representing 81.8% of the total interest rates cited, that is 117 out of 143 respondents) was noted to dominate in majority of the businesses.

Majority of the business showing a low growth in capital base (58.1%) had used loans of low interest rates. It was only 21.4% and 20.5% of the business that reported a medium and high change in capital base respectively were found to use low interest rates loans. In this regard, low rates of interest do not translate to a great change in capital base for a business.

About 42.9% of the businesses that were reported to use medium interest rate loans were noted to report a low change in their capital base while 33.3% and 23.8% were businesses that were utilising interest with medium rates were noted to report a medium and high change in capital base respectively.

It was only a small portion (20.0%) of the businesses that had utilized high interest rate loans that reported to achieve a low capital base. The distribution of the businesses that utilized high interest rates was equal (40.0% and 40.0%) for businesses that reported a medium and high change in capital base. In this regard, higher rates of interest translate to a greater change in capital base for a business.

Entrepreneurs who are able to accept higher interest rates are most of the time able to acquire their loans quickly and thus channel the obtained finances into gainful business activities that eventually boost the capital base.

4.4.3 Change in Gross Income from the Business

The change in gross income since the start of the business till the last financial year (in KShs) was used to measure/estimate the growth, operation and profitability of in small and micro enterprises. The change in growth, operation and profitability among business ventures under investigation in the study area were categorised as low, medium and high as shown in Table 23.

Table 23: Interest Rates and the Changes in Gross Incomes

Change in Gross Income						
Interest rates	Low	Medium	High	Total		
Low	69 (86.3%)	27 (77.1%)	23 (75.0%)	117 (81.8%)		
Medium	10 (12.5%)	5 (17.1%)	5 (17.9%)	21 (14.7%)		
High	3 (1.3%)	2 (5.7%)	2 (7.1%)	5 (3.5%)		
Total	80(100.0%)	35(100.0%)	28(100.0%)	143(100.0%)		

Chi-Square = 6.368, Degrees of freedom = 4, P-value = 0.191

The computed chi-square value of 6.368 at 4 degrees of freedom and 5% significance level (p-value = 0.191) implies that there is no significant relationship between interest rates charged by financial institutions and the small and micro enterprises growth, operation and profitability as measured by business change in gross income. This therefore means that most small and micro enterprises can survive and operate effectively with high interest rates for the loan (provided the loan availability is not a challenge) just like how their growth, operation and profitability can be boosted with low interest loans that may translate to higher borrowing and eventually good operation that lead to higher gross incomes.

4.4.4 Regression Analysis for the Influence of Interest Rates Charged by Financial Institutions on Operation, Profitability and Growth of SMEs

Before determining the influence interest rates charged by financial institutions on operation, profitability and growth of SMEs using ordered logistic regression analysis, diagnostic tests were first conducted to check the presence of any multicolinearity between the

independent/explanatory variables. The presence of multicollinearity was tested using contingency coefficients test. For dummy variables, if the value of contingency coefficients is greater than 0.75, the variable is said to be collinear. The values of the contingency coefficients ranged between 0.001 and 0.382 which indicates there is no evidence for strong correlation between the dummy variables. Consequently, all the explanatory variables were entered and the equation fitting the Ordered Logit Regression Model was estimated.

Table 24: Influence of Interest Rates on Operation, Profitability and Growth of SMEs

Explanatory variables	Coefficient	Std. Errors	P - values
Interest rates			
Interest rate $(1 = Below 15\%)$.0255547	.1498474	0.865
Interest rate $(2 = 16\% - 20\%)$	0.649*	0.243	0.009
Interest rate $(3 = 21 - 25\%)$	0.043	0.087	0.49
Interest rate $(4 = Above 31\%)$	-0.140	0.093	1.51
_/cut1	1.641		
_/cut2	3.371		
Log likelihood	-173.74703		
Prob > Chi2	0.046		
Pseudo R ²	0.859		

Source (Research Data, 2012)

The rate of interest charged for the loan advanced by financial institutions was statistically significant at 5% level of probability in influencing SMEs operation, growth and profitability only for interest rate of 16% to 20%. Such a level of interest rates is typical for most commercial banks, implying that loans from commercial banks were better in influencing SMEs operation, growth and profitability. This could be attributed to the reliability as well as the amount of the loan in which, it is relatively easy to get loan of any amount if the borrower meets all the requirements given by the lending institution. Financial institutions offering low interest loan were consequently unreliable. This disagrees with Brigham and Gapenski (1996) who argued that low interest rates contribute to SMEs improvement in performance.

4.5 Restrictions by Financial Institutions and Their Effect on SMEs Growth, Operation and Profitability

The third objective of this study sought to determine the restrictions by financial institutions and their effects on operation.

Majority (85.8%) of the respondents were noted to indicate that there exist specific problems affecting small and micro enterprise in their area with only 14.2% of the respondents indicating otherwise as shown in the Table 25 below.

Table 25: Presence of Problems that Affect SMEs

Responses	Frequency	Percent
Yes	211	85.8
No	35	14.2
Total	246	100.0

Below is a list of the specific problems cited to affect small and micro enterprise in the Centre.

Table 26: Specific Problems Cited to Affect Small and Micro Enterprise

Problems	Frequency	Percent
High municipal charges	11	5.4
High rent of premise	7	3.4
High unemployment rate in the area	2	1.0
Insecurity	27	13.3
Lack of bank financing	74	36.5
Limited customers	29	14.3
No records	3	1.5
Seasonal cash flow	3	1.5
Unfair competition	47	23.2
Total	203	100.0

The above table shows that majority of the businesses suffered from problems of lack of bank financing (36.5%). This is closely followed by unfair competition (23.2%), limited customers (14.3%), insecurity (13.3%), high municipal charges (5.4%), high rent of business premises (3.4%), seasonal cash flow (1.5%), lack of records (1.5%) and high unemployment rates in

the area (1.0%). This implies that the most pronounced business problem relate to lack of external financing from financial institutions.

4.5.1 Regression Analysis for the Influence of Selected Problems on Operation, Profitability and Growth of SMEs

In analyzing the influence of selected problems on operation, profitability and growth of SMEs, the variables relating to high unemployment rate in the area (significant at 1%) and lack of bank financing was found to be significant at 10% level while variables relating to insecurity, limited customers and seasonal cash flow were found to be significant at 10% level implying that these variables significantly influence operation, profitability and growth of SMEs in the study area. These results are presented in Table 27.

Table 27: Problems Affecting Operation, Profitability and Growth of SMEs

Explanatory variables	Coefficient	Std. Errors	P - values
High municipal charges	-0.051	0.087	0.590
High rent of premise	-0.043	0.087	0.490
High unemployment rate in the area	-0.001*	0.001	0.001*
Insecurity	-0.038*	0.022	0.084***
Lack of bank financing	-0.058*	0.031	0.063***
Limited customers	-0.002*	0.001	0.079***
No records	-0.140	0.093	0.510
Seasonal cash flow	-0.017*	0.010	0.085***
Unfair competition	-0.022	0.026	0.395
Log likelihood	-358.51244		
Pseudo R ²	0.693		

^{*}significant at 1%;**significant at 5%;***significant at 10%

The coefficient for high municipal charges, high rent of premises, lack of records and unfair competition were not significant indicating that they were not important factors in influencing operation, profitability and growth of SMEs in the study area.

The coefficient for high unemployment rates in the area was negative and significant at 1% level, suggesting that operation, profitability and growth were greatly hampered by increase of unemployment problem in the area. This may be attributed to the reduction of the purchasing power of the customers.

The coefficient for lack of bank financing was negative and significant at 10% level, suggesting that operation, profitability and growth were greatly hampered by lack of bank financing. Normally, lack of credit from financial institutions such as banks cripples the operation of the businesses as well as discourages the establishment of new ones.

The coefficient for insecurity was negative and significant at 10% level, suggesting that increase in insecurity in the study area affects operation, profitability and growth of businesses as most investors fear to put more of their hard earned resources in the businesses. The coefficient for limited customers was negative and significant at 10% level implying that businesses that were affected by low numbers of customers experienced low performance in operation, profitability and growth. The problem of limited customers may be associated with the high unemployment rate in the area.

The coefficient for seasonal cash flow was negative and significant at 10% level implying that businesses that were affected by high seasonality of their cash flow experienced low operation, profitability and growth.

4.5.2 Impact of Restrictions by Financial Institutions on the Growth of Small and Micro Enterprise

Restrictions by financial institutions have a direct impact on the growth of small and micro enterprise. When the respondents were requested to comment on their agreement with the statement, "Given financial support by the government, businesses would grow", the responses below were compiled.

Table 28: How the Businesses Could Grow if Given Financial Support by the Government

Responses	Frequency	Percent	
Strongly disagree	10	4.1	
Strongly agree	118	48.0	
Agree	95	38.6	
Disagree	13	5.3	
Neutral	10	4.1	
Total	246	100.0	

As shown in the above table, majority of the respondents strongly agreed (48.0%) with the statement that businesses would grow if given financial support by the government. This is closely followed by respondents who agreed (38.6%). It was only 41.%, 5.3% and 4.1% of the total respondents that strongly disagreed, disagreed and were neutral respectively. These results are an indication of the great importance of supportive financial institutions to the welfare of businesses in the study area.

4.5.3 Influence of Restriction by Financial Institutions on SMEs Operation, Growth and Profitability

Before determining the influence of selected factors on financial institutions restrictions on operation, profitability and growth of SMEs using ordered logistic regression analysis, diagnostic tests were first conducted to check the presence of any multicolinearity between the independent/explanatory variables. The presence of multicollinearity was tested using contingency coefficients test. There is no evidence for strong correlation between the dummy variables and consequently, all the explanatory variables were entered and the equation fitting the Ordered Logit Regression Model was estimated.

Table 29: Influence of Restriction by Financial Institutions on SMEs

Variable Variable	Parameter	Std error	P-value
Possession of adequate collateral (1=Yes)	0.352*	0.148	0.0422
Possession of an active account (1=Yes)	0.348*	0.178	0.0417
Time taken to repay the loan			
Time taken to repay the loan $(1 = Within 1 month)$	-0.621	0.843	0.086
Time taken to repay the loan $(1 = Within 1 year)$	0.806*	0.351	0.0177
Time taken to repay the loan $(1 = Within 2 years)$	0.459*	0.115	0.0384
Time taken to repay the loan $(1 = Within 5 years)$	0.050	0.154	0.051
Time taken to repay the loan $(1 = Within 6 years)$	0.090	0.130	0.103
_/cut1	0.829		
_/cut2	1.544		
Log likelihood	-187.33		
Prob > Chi2	0.0279		
Pseudo R2	0.0875		

The requirement on possession of adequate collateral has a positive and statistically significant effect on reported SMEs operation, growth and profitability at 5% significant level. However, this effect is probably due to the effect of commercial bank financing in which such loan sources mostly require collaterals with the advantage that they are able to give higher loans to viable businesses that boost their operation, growth and profitability. In the same connection, the requirement to be in possession of an active bank account (as is the case with most commercial banks loan financing) has a positive and statistically significant effect on SMEs operation, growth and profitability at 5% significant level. SMEs that were able to borrow from commercial banks and therefore were able to overcome the challenge of being in possession of an active bank account reported better operation, growth and profitability in their businesses. This is consistent with what McPherson (1996) found with regard to the size of loan advanced by financial institution.

Time taken to repay the loan that lied within 1 year and 2 years significantly influenced SMEs operation, growth and profitability at 5% significance level. Loan amounts that were advanced to be repaid in more than 1 month but within one year were noted to improve SMEs operation, growth and profitability as opposed to those advanced to be repaid within 1 month. Similarly, loan amounts that were advanced to be repaid in more than 1 year but within two years were noted to improve SMEs operation, growth and profitability as opposed to those advanced to be repaid in less than 1 year time. Businesses that had adequate time to repay their loan benefited more from the service. Long repayment period is the most important factor that influences the borrowing levels from commercial banks. Borrowing from commercial banks increased with the increase in the repayment periods. Most SMEs owners prefer loan from sources that offer them long as opposed to short repayment periods since they believe there is better chances of utilizing the funds well and improve the businesses. This agrees with Bwire (2006) who noted that the repayment periods as one of the important factors that influence borrowing from financial institutions as well as prudent utilization of the borrowed loan.

4.6 Influence of Financial Management Skills on Operation, Growth and Profitability of Small and Micro Enterprise

The fourth objective in this study sought to determine the influence of limited financial management on small and micro enterprises growth, operation and profitability. This was analyzed using Pearson's chi-square.

The researcher measured financial management skills by considering four parameters. These parameters are; (i) whether the small and micro enterprise owner had training on how to run the business, and if so, (ii), how much money was used in the training, (iii) whether the owner was preparing financial statements and (iv)whether the financial statements prepared are analyzed using ratios to estimate growth, operation and profitability of the business. Table 30 shows the description of respondents' financial management skills as measured by four parameters.

Table 30: Summary Statistics on Financial Management Skills of the Sample

Parameters Parameters	Responses	Frequency		
Whether the respondent was	Yes	72	29.3%	
trained on how to run the	No	174	70.7%	
business	Total	246	100.0%	
Amount of money used in the	Amount (Kshs)			
training	0 - 20,000	32	44.4%	
	21,000 - 40,000	12	16.7%	
	41,000 - 60,000	9	12.5%	
	61,000 - 80,000	4	5.6%	
	Over 81,000	15	20.8%	
	Total	72	100.0%	
Whether the respondent	Responses			
prepare financial statements	Yes	134	54.5%	
for the business	No	112	45.5%	
	Total	246	100.0%	
Whether the respondent	Responses			
analyze financial statements	Yes	101	41.1%	
using ratios to estimate	No	145	58.9%	
operation, growth and	Total	246	100.0%	
profitability of the business				

The above table shows that majority (70.7%) of the respondents had not been trained on how to run the business with only 29.3% being trained. Training on business related issues enhances the trainee management skills.

Majority of the small and micro enterprise owners who indicated that they had business training were noted to have spent less than 20,000 for the training. Other training costs were over 81,000 (20.8%), between 21000 and 40000 (16.7%), between 41000 and 60000 (12.5%) and between 61000 and 80000 (5.6%). The training costs of over 81,000 correspond to degree or diploma level of education.

The above table shows that majority (54.5%) of the respondents did not prepare financial statements for the business with only 45.5% being indicating to be preparing the financial statements. Financial statements are very crucial in the indication of the state of the business and to show the record of periodic operation.

Majority (58.9%) of the respondents did not analyze financial statements using ratios to show growth and profitability for the business with only 41.1% being indicating to be using financial ratios. Financial ratios are able to show some hidden information that may otherwise not be gotten from financial statements. The responses collected were then utilized to compute a Likert scale of between 0 and 4. The below table shows the frequency distribution of each of the scores generated as a measure of financial management sills along with the suggested description.

Table 31: Financial Management Scores

Score	Suggested description	Frequency	Percent	Cumulative Percent
0.00	Very low	0	0.0	0.0
1.00	Low	32	13.0	13.0
2.00	Neither low nor high	10	4.1	17.1
3.00	High	140	56.9	74.0
4.00	Very high	64	26.0	100.0
Total		246	100.0	

The table above shows that majority (56.9%) of the respondents had high financial management skills (as computed with a score of 3). This is closely followed by very high (26.0%), low (13.0%) and neither low nor high (4.1%).

The below cross tabulation was used in the analysis of the relationship between financial management skills and business growth, operation and profitability.

Table 32: Financial Management Skills and Business Growth, Operation and Profitability

Employee number change			Change in capital base of the business				Change in income						
m	nancial anagement ills	Low	Medium	High	totals	Low	Medium	High	Totals	Low	Medium	High	totals
1	Low	63.2%	26.3%	10.5%	100%	78.9%	15.8%	5.3%	100%	52.6%	31.6%	5.3%	100%
2	Neither low nor high	55.3%	32.0%	12.6%	100%	34.0%	56.3%	9.7%	100%	39.8%	57.3%	2.9%	100%
3	High	17.4%	45.3%	37.2%	100%	14.0%	46.5%	39.5%	100%	14.0%	38.4%	47.7%	100%
4	Very high	2.1%	42.1%	55.3%	100%	0.0%	41.7%	58.3%	100%	0.0%	43.8%	56.3%	100%
Pearson Chi-Square = 31.540		Pearson Chi-Square = 16.384			Pearson Chi-Square = 15.931								
	Degrees of freedom $= 6$		Degrees of freedom $= 6$		Degrees of freedom $= 6$								
Probability value = 0.000		Probability value = 0.027			P-value = 0.040								

The Pearson's chi-square value of 31.540 (computed at 8 degrees of freedom) is significant at 1% level since the p-value is less than 0.01. This implies that there is a relationship between financial management skill and the growth, operation and profitability as measured by the changes in the number of employee in the business. As shown Table 32, majority of the businesses that showed low change in growth, operation and profitability as measured by change in employee number were those whose financial management skills of the owner was poor and vice versa. The table shows that 63.2% of the businesses whose owner had low financial management skills had low growth in employee number as compared with 26.3% and 10.5% of the businesses that reported a medium and high growth in employee number respectively while being owned by persons with low financial management skills.

Small and micro enterprise owners with moderate (neither low nor high) financial management skills had their reported employees number changes distributed as low change (55.3%), medium change (32.0%) and high change (12.6%) respectively. Majority (45.3%) of the small and micro enterprise owners who possessed high financial management skills recorded a medium change in employee number in their business. This was closely followed by those who recorded a high change in employee numbers (37.2%). About 17.4% of the owners with high skills recorded a low change in employee numbers.

Majority (54.2%) of the small and micro enterprise owners with very high skills were noted to record high change in employee numbers. This was closely followed by those who recorded a medium change (43.8%). About 2.1% of the owners with very high skills recorded a low change in employee numbers. These results indicate that businesses with good financial management among the owners were doing well as compared to those that had no good financial management.

The Pearson's chi-square value of 16.384 (computed at 6 degrees of freedom) is significant at 5% level since the p-value is less than 0.05. This implies that there is a relationship between financial management skill and the growth, operation and profitability as measured by the changes in the capital base of the business. As shown in table 32, majority (78.9%) of the businesses whose owners had low financial management skills had a low change in capital base recorded. Other results for business owners with low financial management skills were medium (15.8%) and high (5.3%) change in capital base respectively. The above table shows that majority (56.3%) of the businesses whose owners had average financial management

skills had a medium change in capital base recorded. The business owners with average financial management skills and recording low and high change in capital base of the business were 34.0% and 9.7% respectively.

Majority of the small and micro enterprise owners with high financial management skills had medium change in capital base for their businesses as represented by 46.5%. This was closely followed by businesses with high (39.5%) change in capital base. The owners with high financial management skills who recorded a low changes in capital base was only 14.0%. Majority of the small and micro enterprise owners with very high financial management skills had high growth in capital base for their businesses as represented by 58.3% of the businesses studied. Other owners with very high financial management skills recorded a medium changes in capital base (41.7%). None of the business owners with very high financial management skills recorded a low change in capital base. These results indicate that businesses with good financial management among the owners were doing well as compared to those that had no good financial management.

Small and micro enterprises whose owner's financial management skills were low had their change in income distributed as follows: low (52.6%), medium (31.6%) and high (5.3%). Similarly, SMEs whose owners had average financial management skills recorded changes in business income distributed as follows: low (39.8%), medium (57.3%) and high (2.9%). On the other hand, SMEs whose owners had high financial management skills recorded changes in business income distributed as: low (14.0%), medium (38.4%) and high (47.7%) while SMEs whose owners had very high financial management skills recorded changes in business income distributed as; low (0.0%), medium (43.8%) and high (56.3%). The above results shows that there is a significant relationship between the financial management skills by the small and micro enterprise owners and the business growth, operation and profitability as measured by the change in gross income (Chi-square = 15.931 with a P-value of 0.04 is significant at 6 degrees of freedom).

Table 33 shows the Pearson's correlation analysis results for the relationship between financial management skills of the business owners and three variables (change in employee number in the business, change in capital base of the business and change of gross income of the business) that were noted on how they changed since the business was started.

Table 33: Financial Management Skills and SMEs Growth, Operation and Profitability

Variables	Correlation coefficient	P-values
Change in Employee Number	0.9276*	0.001
Change in capital base of the business	0.8696*	0.030
Change in Business Gross Income	0.8127*	0.021

^{* =} Significant at 5%

The above results shows that there was a significant relationship between financial management skills and change in employee numbers (positive and significant at 5% level), change in capital base (positive and significant at 5% level) and change in business income (positive and significant at 5% level).

The positive and significant relationship between owner's financial management skills and the employee numbers change imply that the higher the financial management skills of the owners, the higher the growth, profitability and operation of a business venture and the greater would be the business requirement of extra employees. These results agrees with (Philips and Kirchloff, 1989) who noted that as businesses grow, their requirement for additional employees also increases and that sufficient profit must be earned to sustain additional employees in any business venture.

Table 33 shows that there was also a significant positive relationship between owners financial management skills and the change in capital base of the business, which imply that the higher the financial management skills of the owners triggers growth in profitability and operation of a business venture which further stimulates a swell in capital bases of the business.

Modigliani and Miller's (1958) noted that lending institutions are biased towards the ventures which have been recording an improvement in their profitability, a situation that is best nurtured by owners with higher financial management skills. The positive and significant relationship between owner's financial management skills and the change in business gross incomes implies that higher business incomes are best achieved by business owners whose financial management skills are also higher. The ability to manage and control the business resources, especially the finances has a significant contribution to the growth, operation and profitability of businesses (Van, 2002).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary, conclusion and recommendations of the findings of the study. It also highlights the suggestions for further studies. The study sought to evaluate the effects of financing constraints on growth, operation and profitability of small and micro enterprises.

5.2 Summary of Findings

The businesses that were not financial through loans had minimal improvement in growth operation and profitability as compared to those that had acquired loan. There was a significant in growth operation and profitability as demonstrated by the mean difference of 0.3226 at 5% significance level. This implies that highest growth operation and profitability was associated with loan financed business and that access to finance is major business growth constraint.

Interest rates between 15% and above 31% were generally very high. This may discourage borrowing and suppress the activities of small and micro enterprises. Most respondents (53.8%) felt that the interest charged on loan by financial institution influenced growth operation and profitability.

The major restriction is high interest rate and lack of bank financing due to lack of collateral. This makes majority of the respondents unable to access finance from financial institutions given that the return from the businesses are low. Banks do not give credit to businesses with out collateral which most SMEs lack.

Majority of respondent (70.7%) had not been trained on how to run businesses. Those who had financial management skill indicated high growth operation and profitability as measured by the change in number of employees and change in capital base and change in growth income. The Pearson's chi-square values of 31.54, 16.384 and 15.931 (significant at 5% level) implies that there is a relationship between financial management skill and the growth operation and profitability as measured by change in the number of employees, change in capital base and change in gross income in the business.

5.3 Conclusion

It is generally recognized that SMEs (Small and Micro Enterprises) face unique challenges, which affect their growth, operation and profitability and hence, diminish their ability to contribute effectively to sustainable development. This does not spare businesses in the study area.

The credit facilities available to SMEs in the study area contribute to low growth, operation and profitability of small and micro enterprises. The amount of credit is not sufficient to induce significant growth.

Restrictions by financial institutions such as collateral requirements, inflexible repayment period and other conditions in the study area contribute to low growth, operation and profitability of small and micro enterprises in the study area.

5.4 Recommendations

Government has an important role in transforming the institutional environment in formal banking and non-banking set up as well as providing regulatory frameworks and fostering competition so that the rates of interest charged by the institutions can reduce to a reasonable level.

The government should revise its regulatory framework in order to create and encourage an environment that encourages more financial institutions in the study area. The possible competition from the operation of these institutions may boost the availability of finance to small and micro enterprises.

The government should come up with training centres for training managerial and technical courses for the small enterprises entrepreneurs. Equally, there should be business information centres.

The government should come up with proper regulatory policies that are small enterprises friendly since many of what we have in Kenya, frustrates every effort of a junior entrepreneur. The policies we have seemed to care for the well-established businesses.

Since majority of small enterprises lack finance, government should establish friendly small loaning system. This would include low interests rates to ensure the continuity of these businesses. SMEs have the potentiality of transforming the economy of a crippling nation. As such, every effort should be made to boost their growth.

5.5 Suggestions for Further Research

The research has covered influence of credit facilities, influence of interest rates charged by financial institution, influence of restriction by financial institution and influence of financial management skills on growth, operation and profitability of SMES.

The findings of this study would act as a base for more findings on the issue of financing constraints on growth, operation and profitability of small and micro enterprises in the study area. However, the study was not exhaustive and the researcher suggests the following:

- i) An investigation of financing needs by small and micro enterprises in the study area.
- ii) A study to identify and understand SME lending practices by financial institutions in the study area and identify best practices in the study area.
- iii) The role of technology in expanding banks' services delivery to small and micro enterprises in the study area.

REFERENCES

- Aleke, D. (1994). Credit to the Informed Sectors Approaches and Models Experienced in Kenya. KREP Occasional Paper No. 27. Nairobi: Kenya Rural Enterprise Programme.
- Armstrong . M (2006). *Performance Management*. Published in Great Britain: Kogen Page Limited.
- Aryeetry, E. (1996). Rural Finance in Africa: Institutional Development and Access for the *Poor*. The World Bank Annual Conference on Development Economics, 25 to 26 April, Washington DC.
- Atieno, R. (1994). *Institutional Credit Lending Policies and the Efficiency of Resources Use Among Small-Scale Farmers in Kenya*. Studied Zur Landlichen Entwickling Number 46, LIT Verlag Munster-Hamburg.
- Bates, T. and Nucci, A. (1989). An Analysis of Small Business Size and Rates

 Discontinuance. *Journal of Small Business Management* (October):68-74.
- Bokea, C, Aleke, D., and Mutiso, J. (1999) '*Physical infrastructure*'. In: A. Mullei and C. Bokea eds. Micro and Small Enterprises in Kenya: Agenda for improving the policy Environment. Nairobi: International Centre for Economic Growth.57-80.
- Bolton ,J.E (1971). *Report of the Committee of Inquiry on Small Firms*. Her Majesty Stationery Office London.
- Bowen, M., Morara, M and Muriithi, S. (2009) Management of Business Challenges Among Small and Micro Enterprises in Nairobi Kenya. *K. C. A Journal of Business Management*, 2(1).
- Brealey, R., Myers, S., Allen, F. and Mohanty, P. (2007). *Principles of Corporate Finance*, 8th *Edition*: Tata Mcgraw-Hill. New Delhi.

- Brigham, E.F & Gapenski, L.C (1996). *Intermediate Financial Management*. 3rd Edition. New York: publisher.
- Bula, H.O. (2012). Performance of Women in Small Scale Enterprises (SSEs): Marital Status and Family Characteristics. *European Journal of Business and Management*. Vol 4, No.7
- Bwire, J.F. (2006). *The Impact of Microfinance Credit on Small Enterprise Growth.* A Case Study of Nakuru Municipality.
- Central Bank of Kenya. (2008). *Annual Supervision Report*. Nairobi. Central Bank of Kenya. (2009). *Annual Supervision Report*. Nairobi.
- Daniels, L., Mead, C. D, and Musinga, M. (1995). *Employment and Income in Micro and Small Enterprises in Kenya*. Results of A 1995 Survey". KREP Research Paper No. 26. Kenya Rural Enterprise Programme (KREF). Nairobi.
- Davis, L and Nazneen, K (2009) Non-Governmental Organisations and Development. New York
- Emery, D. R; Finnety J.D. and Stowe, J. D. (2007). *Corporate Financial Management*, 3rd Edition; Pearson International Edition.
- GOK.(1993). National Baseline Survey on National Micro and Small Enterprise Baseline. Government Printers.
- GOK.(1995)..*National baseline survey on National Micro and Small Enterprise Baseline Survey*. Central Bureau of Statistics. Government Printers.
- GOK.(1999). *National Baseline Survey on Micro and Small Enterprises*. Conducted by Central Bureau of Statistics, International Centre for Economic Growth (ICEG) and K REP Holdings Ltd. Nairobi Kenya. Government Printers.

- GOK. (1992). Sessional Paper No. 2 on Small Enterprises and Jua Kali Development in Kenya. Government Printers. Survey, Nairobi: GEMINI, Studies.
- G.O.K (2011). Economic Survey. Nairobi Kenya: Government printers.
- Hall, G. and Young, B. (1991). *Factors Associated with Small Firm Insolvency* in R. Atkin, E. Chell and C. Mason Business Research Aldreshot, Avebury.
- Hallberg. K. (2000). A Market Oriented Strategies for Small and Medium Scale Enterprise

 .Part 63- World Bank International Finance Corporation Washington D.C 20433.

 U.S.A
- Harber and Reichel, A (2005). Identifying performance measures of small ventures- The case of Tourism industry, *Journal of small Business Management* 243(3),257-286.
- Hashi.I and Krasnigi.B.A(2011). Enterprise and SME growth: Evidence from Advanced and laggard transition economies. *International Journal of Enterprise Behaviour and Research*, volume 17. issue 4,pp456-487.
- Hossain, M (1988). *Credit for Allocation of Poverty*; The Grameen Bank in Bangladesh. IFPRI Research Report No.65.
- Hulme, D. and Than, O. M. A. (2009). Microfinance. Routledge. U. S.A and Canada
- Jovanovic. B (1982). "Selection and Evolution of industry". *Econometrica* volume 50 (3), 649-670.
- Kihlstrom, R.E. and Laffont, J. J. (1979). General Equilibrium Entrepreneurship Theory of Firm formation Based on Risk Aversion". *Journal of Political Economy* volume 87(4), page 19-48 August.
- Kiiru, W. K. (1991). A Review of the Institutional Lending to the Jua Kali and Small Enterprises in Kenya: Geneva; International Labour Organisation.

- Kohut, G.F. and Corriher, S.E. (1994). The Relationship of Age, Gender, Experience and Awareness of Written Ethics Policies to Business Decision Making. *SAM Advanced Management Journal*, Vol. 59, No. 1
- Kothari, C.R. (2006). Research Methodology; Methods and Techniques; India: New Age International Publishers.
- Lawrence, P. G. and Mancini, M. (2008). Household Decision-Making in Venezuela. *Revista de Economia Institucional*, Vol. 10, Number 18. Columbia.
- Lebas, M. and Euske, K. (2002). A conceptual and operational definition of performance, in business performance measurement. Theory and practice, Neerly; Andrew editor. Cambridge University Press.
- Longenecker, J. G. Petty, C. W., Moore, J. W. and Palich, L.E. (2006). *Small Business Management, An Entrepreneurial Emphasis*. London Thompson South Western. LTD 576 Masjid Road, Jangpura, New Delhi-110014.
- Lowson, R.H. (2007). *International journal of procurement management*. volume 1, number 1-2
- Lucas, Jr. R. E. (1978). The size and distribution of business firm . *Bell Journal of Economics* 2, 508-523.
- Madura. J. (2007). *International Financial Management*. Published by Cengage; 11 Edition Florida Atlantic University.
- Magoulios, G., and Kydros, D. (2011). Women Entrepreneurship: Problems and Means of Finance. MIBES Transactions, Vol 5, Issue 2
- Mahajan, V. (2005). From micro credit to livelihood finance. *Economic and Political Weekly* Oct.8.

- McPherson, M. A. (1996). Growth of Micro and Small Enterprises in Southern Africa. *Journal of Development Economics*, 48, 253_77.
- Modigliani, F. and Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment . *The American Economic Review* 68(3):261-297.
- Mugenda, O. M. and Mugenda, A. G. (1999). *Research Methods*. Qualitative and Quantitative. Acts, Press; Nairobi.
- Mwangi, J.(2010). Orange Money is Launched in Kenya Powered by Equity Bank. Retrieved from www.equitybank.co.ke/user Files/File/paper/Equity% 20NEWS-Issue/.Pdf.16th June 2012. Nairobi ICEG and KREP.
- Norton, E. (1991). Modern Financial Management Theories on Small Business Capital Structure and Growth of Firms. *The Journal of Small Business Finance* 1 (2) 161-177.
- Obonyo, M.B. (2005). Factors hindering access to credit facilities among small and medium enterprises in Kenya: case of SMEs in Kitengela, Kajiado District. Published in Kenyatta University. Nairobi.
- Oketch, H. O. (2000). Gender Equity. In A. Mullei and A. Bokea (Eds). *Micro and Small Enterprises in Kenya: Agenda for Improving The Policy Environment* Nairobi: ICEG.
- Osteryoung, J., Derek, S., Newman, L. and Leslie, G. D. (1997). Small Firm Finance. Forth Edition.
- Pandey, I. M. (2004). Financial Management Eighth Edition Vikas Publishing House PVT
- Parker, J. C. and Torres, T. R. (1994). *Micro and Small Enterprises in Kenya*. Results of the 1993 National Baseline Survey Sponsored by USAID.

- Phillips, B and Kirchhhof, B. (1989). Formation, Growth and Survival. Small Firm Dynamics in the US Economy. *Small Business Economics* 1(1), 65-74
- Pushpakumari.M.D and Wijewickrama.A.K.A. (2008). *Planning and performance of SME organisations*. Evidence from Japan, international conference on business and management Education, Bangkok, Thailand Review.
- Ronge, E., Ndirangu, L. and Nyangito, H. (2002) *Kenya Institute for Public Policy Research and Analysis* (KIPPRA).Bishop Garden Tower, Bishops Road. Nairobi Kenya.
- Schmidt, R.H. and Kropp, E. (1987). *Rural Finance*; Guiding Principle, Rural Development Series, BMZ/GTZ/DSE Rossdorf. TZ-verlagsgesell Chaft.
- Simmon,R.(2000). Performance measurement and control systems for implementing strategy.

 Prentice Hall.
- Terziovski. M and Samson. D (2000). *The Effects of Company Size on the Relationship* between TQM Strategy and Organisational Performance. The TQM Magazine Vol 12 No 2 PP 44-49.
- Tomecko, J. and Aleke, D. (1992). *Improving the Growth Potential of Small Scale and formal Sector*. Rural Enterprises Programme Nairobi Kenya
- UNIDO .(2002). Sustainable industrial development UNIDO position design/DTP: World link films and graphical cover. C. Univazo B. Saulich.
- Van, H. (2002). Financial Management Policy. 12th Edition. Pearson Education. Asia.
- Von P. J. D, Adams, D. W. and Donald G. (1993). *Financial Market in Developing Countries*. Balitore, John Hopkins University Press for the Economic Institute of the World Bank.
- Wanjohi, A. M .and Mugure, A. (2008). *Factors Affecting Growth of ICT Firms* in Kiserian Township, Kajiado District of Kenya.

- White, H. (1980). A heteroskedasticity-consistent Covariance Matrix Estimator and a Direct test for Heteroskedasticity. *Econometrica*, 48: 817-838.
- Wilbur, M. Y. (1995). *Self Defense Finance for Small Business*. Published by John Wiley and Son. Canada.
- World Bank. (2004). World Development Report: making services work for poor people. The World Bank Washington.
- World Bank. (2008). *World Development Report*, 2008. The World Bank Washington. Worth, TX: Dryden Press.
- Yunus, M. (2003). Banker to the poor: micro lending and battle against world poverty. New York.
- Yunus, M. (2008). Creating a World Without Poverty: Social Business and the Future of Capitalism. New York.
- Zeller, M. and Meyer, R.L. (2002). *The Triangle of Microfinance*: Financial Sustainability, Outreach and Impact. John Hopkin for International Food Policy Research Institute, Baltimore.

APPENDICES

Appendix I: Questionnaire for Small and Micro Businesses

INSTRUCTIONS

My name is Karanga Mwohe, a Master of Business Administration student at Kabarak University. I am here to solicit for some information through this questionnaire. The aim is to find out "the effects of financing constraints on the operation, profitability and growth of small and micro enterprises."

This questionnaire is for academic purposes and seeks to collect data on the financing constraints and their effects on the operation, profitability and growth of small and micro enterprises. Please spare a few minutes of your valuable time to complete it. Your participation will help in understanding your business and give you a chance to make input in strategies for improving small businesses. Please be assured that your responses will be treated with strictest confidentiality and can only be produced with your authority.

QUESTIONS

CENERAL INFORMATION

л.	GENERAL I	INFORMATION				
1.	Gender Ma	ale	Fem	ale		
2.	Age					
	0 - 20 yrs		21 - 30 yrs		Above 50 yrs	
	31 - 40 yrs		41 - 50 yrs			
3.	Marital Status					
	Single		Married		Divorced	
4.	Occupation					
	Formal		Farmer		Businessman and Employed	
	Businessman		None			
5.	What is the le	vel of your educati	on?			
	Primary		Secondary		Polytechnic	
	University		College			

6.	What type of business do yo	ou operate?				
	Sole proprietorship			Family partne	rship	
	Non-family partnership			Private compa	any	
	Others (specify)					
7.	Where is your business base	ed?				
	Mau Narok		Likia		Kianjo	oya 🔲
	Mwisho wa Lami		Tipis Center		Meta	
8.	Were you employed before	you started y	our business?			
	Yes N	Vo 🔲				
	If yes, how has your standar	rd of living in	nproved as a re	esult of the busi	iness?	
	Not at all					
	Lowly improved					
	Neutral					
	Moderately improved					
	Extremely improved					
	If No, has the business enab	oled you to m	eet your basic i	needs?		
	Yes No					
9.	When did you start your bu	siness?				
	Less than 1 year					
	1 - 2 years ago					
	3 - 5 years ago					
	6 - 10 years ago					
	11 years ago					

10. Wh	nat business do	you do?				
Ho	tel business					
Sel	ling cereals					
Sel	ling consumer g	goods in a shop	P 🔲			
Sel	ling clothes					
Oth	ners					
11. Ho	w many employ	ees were empl	loyed by your b	usiness when it was st	tarted (including th	e
OW	ner)?					
One	e person only		2 - 5 people		Above 16 people	
6 -	10 people		11 - 15 people			
12. Ho	w many employ	ees are emplo	yed by your bus	siness currently?		-
13. Ho	w much money	did you use to	start your busir	ness (Kshs.)?		
0 -	30,000		31,000 - 60,000	0 🔲	61,000 - 90,000	
91,	000 - 120,000		More than 121,	,000		
14. Ho	w much is your	capital now? l	Kshs			
0 -5	50,000		51,000 – 100,0	00	101,000 – 150,00	0 🔲
151	1,000 – 200,000		More than 201,	,000		
15. W	hat was your gr	oss income fro	m the business	at the start (Kshs.)?		-
0 -	5,000		6,000 - 10,000		11,000 - 20,000	
21,	000 - 30,000		Above 31,000			
16. Wh	nat was your gro	oss income from	m the business in	n the last financial yea	ar (Kshs.)?	_
0 -	10,000		11,000 - 20,000	0 🔲	21,000 - 30,000	
31,	000 - 40,000		Above 41,000			
17. Bas	sed on your curi	rent projection	s, is the net inco	ome of your business i	in the current	
	ancial year likel			-		
	wer		About the same	e	Neutral	
Hig	gher		Very high			

18.	How do you use your income?
	Consuming
	Paying school fees
	Saving in the bank
	Reinvesting in the business
	Others
19.	Do you think there are constraints that are special to women operated businesses?
	Yes No No
	If yes please list them starting with the major ones
20.	Are there specific problems affecting small and micro enterprises in your region?
	Yes No
	If yes, list them starting with the main ones
D	DESTRICTIONS BY FINANCIAL INSTITUTIONS
	RESTRICTIONS BY FINANCIAL INSTITUTIONS How do you finance your bysiness?
21.	How do you finance your business?
	Loan
	Personal contribution
	Funds from friends and relatives
	Personal contribution and loans
	Others
22.	Are there financial institutions in the area which can give you financial assistance?
	Yes No No
23.	Have you ever applied for a loan?
	Yes No Not at all
24.	Are you able to raise the required security for loans?
	Yes No No

	If yes, how much	i were you give	en as Ioan? Kshs.	•			
	0 - 5,000		6,000 - 10,000		11,000 - 1	5,000	
	16,000 - 20,000		Above 21,000				
25.	How long did yo	u take to repay	the loan?				
	☐ Within one m	nonth					
	Within one y	ear					
	☐ Within 2 year	rs					
	☐ Within 5 year	rs					
	☐ Within 6 year	rs.					
26.	Are there other c	onditions to ge	t loans other than	n the required	security?		
	Yes	No [
	If yes, indicate _						
27.	Do you agree wi	ith the statemer	nt that if you wer	e given finan	cial support by the		
	government your	business woul	d grow?				
	Strongly Disagre	ee	Strongly Agree	e	Agree		
	Disagree		Neutral				
C.	INTEREST RA	TE					
28.	What is the rate of	of interest that	financial instituti	ions charge or	n loans?	%	
	Below 15%		16 - 20%		21 - 25%		
	26 - 30%		Above 31%				
29.	Does the interes	t rate charged o	on loans influenc	e the operatio	on, growth and profi	tability	
	on your business?						
	Yes	No					
	If yes, explain						
30.	If interest rates w	vere low, would	l you be able to l	oorrow more	so as to activate gro	wth of	
	your business?						
	Yes	No [

D. FINANCIAL MANAGEMENT, SKILLS AND EXPERIENCE

31.	Were you trained or	how to run your business'?
	Yes	No
	If yes, how much m	oney was used in your training (Kshs.)?
	0 - 20,000	21,000 - 40,000 41,000 - 60,000
	61,000 - 80,000	Over 81,000
32.	Do you prepare fina	ancial statement for your business?
	Yes	No
33.	Do you analyze the	financial statements using ratios to estimate operation, growth and
	profitability of busin	ness?
	Yes	No
34.	Does the experience	e and skills you have influence the operation, growth and profitability
	of your business?	
	Strongly disagree	
	Disagree	
	Neutral	
	Agree	
	Strongly agree	

Appendix II: Letter of Introduction

I am a student undertaking an MBA (Finance option) Degree at Kabarak University. I am carrying out a research on the effects of the financing constraints on operation, profitability and growth of small and micro-enterprises. Due to your position and responsibility, I have chosen you to participate in the study. I assure you that the information you will give me will be treated with the utmost confidentiality and it shall not be used for any other purpose other than for academic use for which it is intended. Please give your honest information as required.

Thank you very much for your cooperation and congratulations for being a participant in the study.

Yours

Karanga Mwohe