TERMINANTS OF GROWTH OF MANUFACTURING SMES IN KENYA: A CASE STUDY OF INDUSTRIAL AREA IN NAIROBI

BY

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DECLARATION

This research project is my original work and has not been presented to any university for any award or anywhere else for academic purposes.

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This project has been submitted for examination purposes with my approval as University Supervisor.

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DEDICATION

This study is dedicated to my loving parents. Mr. and Mrs. Ruirie and my brother Samuel Miti Ruirie who continuously inspired me and supported my efforts throughout this study; he could confirm every step throughout my study and encourage me. Thanks Brother.

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LIST OF ABBREVIATIONS

AGOA	: African Growth and Opportunity Act
AMT	: Association for Manufacturing Technology
ANOVA	: Analysis of variance
CBK	: Central Bank of Kenya
COMESA	: Common Market for Eastern and Southern Africa
DOHS	: Directorate of Occupational Health and Safety
EAC	: East African Community
EPZ	: Export Processing Zones
EU	: European Union
ICT	: Information and Communications Technology
KAM	: Kenya Association of Manufacturers
LDC	: Least Developed Country
SMEs	: Small and Medium Term Enterprises

ABSTRACT

This research aims to give an overview of determinants SMES growth in Kenya. The analysis covers a period of five yearsfrom 2006 to 2011. A range of approaches and results are discussed within a unified framework; regression analysis was used to analyses the factors. To comparatively examine the individual impact of ten "key factors" influencing business failure within the small and medium-sized enterprises (SMEs) in Kenya; A surveyinstrument testing ten key variables was developed and data was generated by conducting a census in industrial area. Forty nine questionnaires were administered to manufacturing SMEs in industrial area to fill. The results showed that interest rates, dollar rate, fuel Cost, business skills and political instability were the major factors found to influence SMEs growth into large business enterprises. This study adopteda census of a small area due to the short time frame for conducting the study. The results of this study reveal that finance cost, manufacturing cost factors and politicalstability are responsible for SMEsfailures in the Kenya hence more effort needs to be focused in these areas.This study attempted to fill the gap in comparative studies on factors influencing manufacturing SMEs failure inKenya

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Small and medium enterprises (SMEs) arefirms whose personnel numbers fall below certain limits. The abbreviation "SME" is used in the European Union and by international organizations such as the World Bank, the United Nations and the World Trade Organization (WTO). European Union (2011) classified a business with a headcount of fewer than 250 employees as a medium-sized; a business with a headcount of fewer than 50 employees is classified as small, and a business with a headcount of fewer than 10 employees is considered microbusiness. The European system also takes into account a business's turnover rate and its balance sheet. These ceilings apply to the figures for individual firms only. A firm, which is part of larger grouping, may need to include employee/turnover/balance sheet data from that grouping too as tabulated below.

Table 1.1: European Commission Categorization of SMEs

Company category	Employees	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Source (European commission, 2011)

According to Investopedia (2009),growth of any business depends largely on it's financial performance. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales (Investopedia, 2009). Furthermore, the

analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt.

According to Churchill and Lewis (1983) any firm whose business generates significant positive cash flows or earnings, which increase at significantly faster rates than the overall economy is growing. A growth oriented company tends to have very profitable reinvestment opportunities for its own retained earnings. Thus, it typically pays little to no dividends to stockholders, opting instead to plow most or all of its profits back into its expanding business to tap the investment opportunities.

Koech (2011) observed that in practice, sales growth is also easier to measure compared with some other indices and is much more likely to be recorded. Sales are a good indicator of size and, therefore, growth. Sales may also be considered a precise indicator of how a firm is competing relative to their market.

1.1.1 Factors that DetermineSMEs Growth

It is generally recognized that SMEs face unique issues which affect their financial performance, hence diminish their ability to contribute effectively to sustainable growth (Robai,2006). There are those factors that are common to all SMEs and those that are unique to Manufacturing SMEs. These factors can be broadly classified in four, manufacturing sector context;financial costs factors, manufacturing cost factors, manufacturing efficiency factors and others (political instability and government policies).

Financial costs factors are factor that increases the finance cost of afirm; these factors are interest rates andcollateral for loan. Interest rate is a fee charged as a percentage of the total amount borrowed from a financial institution.

According to Mworia (2011), the increasing borrowing rates for the last few months have been incredible and unprecedented and pose a grave risk to the momentum of Kenya's industrial growth. According to (CBK,2012), most banks interest rate are above 22% per annum an

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increase by over 60% from the year 2010. This can result to decline in borrowing to finance investments through loan by the firms.

According to Wisegeek (2002), collateral is an asset where in exchange the creditor may sell that which is offered for collateral if the loan is unpaid. Some firms may have no collateral to secure a loan especially microbusinesses, this may result to slow growth as a result of lack of funds to finance desired investments.

Manufacturing costs factors includes; cost of energy (electricity), raw materials, cost of fuel and exchange rates.

Increasing electricity cost increase the manufacturing cost and as a result reduce the profitability of a firm. Economists and manufacturers have expressed concern that the increase in cost of electricity is bound to push up the cost of production, dampen economic growth prospects and make Kenya an uncompetitive investment destination (Aron, 2012).

Another major expense incurred in manufacturing sector is the purchase of fuel used to power its machines and transport it's products. Increase in fuel prices results to an increase in manufacturing cost, these costs are transferred to the final consumer by increase in price of the productleading to reduction in sales volumes as the products becomes less competitive hence decline in performance. Manufacturers depend on outside suppliers for the raw materials used in the business. Any significant decrease in supplies, any increase in costs or a greater increase in delivery costs for these materials could result in a decrease in profit margins, which could harm financial performance (Wisegeek, 2002).

A foreign currency exchange rate is the amounts of one currency required to purchase or sell another currency. For the manufacturing industries which rely on importation of raw material, they are constrained to grow when the shilling is weaker to the dollar as the raw materials will be more expensive. This will result to increase in price of the product. A rise in the price of manufactured goods will often translate into fewer sales, and can often cut into the profits of manufacturing companies hurting the industry growth (KAM, 2012

Manufacturing efficiency is determined by how well a firm embraces technology and the required skills and competence in operation of a business, the factors associated to efficiency are technology and skilled labour.

Technology is a broad term that refers to both artifacts created by humans, such as machines, and the methods used to create those artifacts (AMT, 2011). ICT is key to every firm today; if a firm is not computerized as may be the case of SMEs,it's financial performance will be affected as result of inefficiency in manual operations. Those firms than embrace the latest technology grow rapidly as opposed to firms resistant to change.

According toWanjohi (2009), inadequate business skills affect the performance of business as the investment decision may not be viable because decision makers are not skilled .When machines are operated by inexperienced workers a lot of waste during production may be realized and low output per worker may be low.The firm may fail to completed customers orders as are result of its internal inefficiencies hence reducing its confidence in customers; this can result to reduction of its market share hence declined growth.

1.2 Statement of the Problem

The subject of financial performance has received significant attention from scholars in the various areas of finance and strategic management. It has also been the primary concern of business practitioners in all types of organizations since financial performance has animplications to organization's health and ultimately it'sgrowth. High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large (Naser, and Mokhtar, 2004). Prior research by (Robai, 2006),(Koech, 2011), (Olawale and Garwe, 2010) and (Khang'ati, 2011) focused onfactors inhibiting SMEs growth in a general perspective but did not focus more on manufacturing sector which is key to Kenya.

According to Vision 2030, Kenya will shift from agricultural economy to industrial economy by year 2030. After several technological revolutions, the industrial sector has gained weight in national production. However, there is a gap as the literature on firm growth has not evolved at

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the same speed, sometimes for lack of information or interest and the number of studies of manufacturing sector has not matched their economic development. In fact, it is important to note the lack of empirical studies related to the manufacturing sector.

This study aimed to fill the gaps by conducting comprehensive research including more factors affecting SMEs performance. The study focusedon manufacturing sector which is critical to Kenya asit is looking forward to become newly industrialized country by year 2030. In this area few studies have been conducted. In filling the research gaps identified, this study answered the following research question; what are the basic factors that determinegrowth of manufacturing SMEs in Kenya? The expected result of the study was a strong correlation between financial factors and manufacturing SMEs growth.

1.3 Objective of the Study

Objective was to analyze factors that determines growth of manufacturing SMEs in Kenya

1.4 Value of the Study

The study will be of significance in the following ways:

The SMEs will find this research useful for they are interested in growth to large companies. The research findings on determinants of growth in manufacturing sector will be useful to the management of SMEs to deal with factors hindering firm's performance.

The government of Kenya will benefits from the findings and can utilize the results to promote growth of manufacturing sector to realizevision 2030. In order to be newly industrialized by 2030 a country needs to deal will the hindranceof growth, this study will be of help to policy makers to formulate policies to promote growth of small businesses.

Scholars will find this research useful as it will provide a contribution to the scholarly dialogue concerning manufacturing SMEs in LDC like Kenya. This will be important to such future researchers who may want to use the findings of this research as a basis for advancing their arguments.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will explore the literature that is relevant to understanding the development of, and interpreting the results of this study. Since this study focus on SMEs growth, the literature review will focus on theories of growth of the firm in details in section two of the chapter. The section will summarize the assumptions and major findings of the theories of growth, empirical review of prior studies will be covered in section three. The research topic focuses on manufacturing sector in Kenya, for better understanding of the study section four coversgrowth of manufacturing Sector in Kenya.

2.2 Theories of the Growth of the Firm

This wide range of determinants of growth is represented by several theories. These different theories are the result of the relevance of the topic and the difficulty in analysing it (Correa, 1999). The main schools of thought can be divided into four groups: (i) classical economists; (ii) behaviourist economists, who emphasis the role of managers on increases in firm size; iii) stochastic theory, which assumes that firm growth follows a stochastic process; and (iv), models of learning and selection, which are linked to the stochastic firm growth theory.

2.2.1 Theory of the Growth of the Firm

Theory of the Growth of the Firm byPenrose (1959) employs the resource based view. The theory differentiated between resources and the services they render. Resources can provide a variety of productive services. In turn, the provision of these services can modify the attributes of the resources and enable the provision of new services. In this sense, the firm is considered as a collection of productive resources the disposal of which between different uses and over time is determined by administrative decisions (Penrose, 1959). The fact that there is heterogeneity rather than homogeneity of both human and material productive services implies that firms are unique.

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In the years post-1992 Penrose's contribution and the resource based view have acquired significant recognition, arguably challenging transaction costs, as the leading economics-based theory of the firm. For Penrose (1959), moreover, one cannot even start analysing the external environment of the firm (to include the market) without a prior understanding of the nature of the firm, which is its human and non-human resources, and their interaction. In theory of growth of the firm emphasis is on the internal resources of the firm and it is at the organisation as a whole that we must look to discover the reasons for its growth.

Motivation to innovation according to Penrose, focus is on the analysis of the expansion of the innovating multi-product, flesh and blood, organisations that businessmen call firms, not on optimal price/output equillibrium of neo-classical theory. Such firms consist of human and non-human resources, under administrative authoritative co-ordination and communication. Human, and especially managerial, resources are most important. Resources can provide multiple services. Firms use their resources to perform activities that result in products for sale in the market for a profit. Firms differ from markets, their boundaries defined by the reach of authoritative co-ordination and communication.

For reasons related to resource indivisibility and the balance of processes, firms always have excess resources. Importantly, moreover, the very performance of activities within firms creates new knowledge through specialisation, division of labour, resource-combination, teamwork and learning. This reduces the time required for the implementation of current activities, thus generating further excess recourses, which are not fully utilized at any given point in time.

According to theory on the dynamics of early firm growth, very new firms are subject to high infant mortality and their survival chances increase as they age, while for a whole cohort of firms, the proportion continuing to grow falls over time as events take their course. Theory and evidence suggest that no more than half of a cohort of new firms will grow to the point of achieving self-sufficiency, at most a quarter will expand beyond the plateau stage, and among these, few will be unable to sustain their growth performance or recover from reversal following early expansion. It is to be expected that under five percent of the cohort will experience the sustained growth amplification effects required if they are to become major players in their

industry (Storey, 1994). Nevertheless, surviving firms may grow sufficiently to capture increasing market share (Baldwin, 1995).

2.2.2 Behavioral Theory of the Firm

According to Cyert and March (1963) in order to understand contemporary economic decision-making, we need to supplement the study of market factors with an explanation of the internal operation of the firm. The theory summarizes the three core ideas of behavior of the growth of the firm to be; those bounded rationality, imperfect environmental matching and unresolved conflict.

Bounded rationality refers to limitations of information and calculation. It implies the need to set targets and try to satisfy these, as opposed to optimising the best imaginable solution. Firms attend to goals sequentially, and follow 'rules of thumb' and 'standard operating procedures'. Imperfect environmental matching suggests that human agency is not uniquely determined by an exogenously given structure. Accordingly, history matters, pointing to the importance of organisational adaptation. Unresolved conflict is based on the assumption that in organisations there exist multiple actors, with potentially conflicting interests, that are not entirely alleviated by contracts. Instead, individual and sub-group interests are continuously renegotiated, with consistency being hard to obtain and sustain.

Important insights in behavioral theory of the firm, among many, concern 'organisational slack', learning and innovation. 'Organisational slack' refers to the difference between the resources required to maintain an organisation and the resources received by a coalition within the organisation.

Concerning learning and innovation, behavioral theory of the firm attaches significance to the concept of problemistic search. Search can be induced by problems, and lead to the finding of solutions, inviting the prediction that relatively unsuccessful firms would be more likely to innovate than relatively successful firms.

This prediction, Cyert and March observed, was not supported by available evidence at the time. A possible solution to this problem of the theory was to reconsider 'slack'. By providing a source of funds, 'slack' could enable innovation. As 'slack' is normally present in successful firms, the latter would also be expected to innovate. Both 'problem-orientated innovation' and 'slack innovation' may therefore exist, the former being most justifiable in the short run, and linked directly to a problem, while the latter in the longer run, and related to major organisational problems.

The idea and role of imperfect environmental matching and productive opportunity according to this theory the modern firm has control of the market; it has discretion within the market; it sees the market through an organisational filter. Discretion over the market implies an interaction between external and internal. Productive opportunity of firms refers to the dynamic interaction between the perceived by management internal and external environments.

Unresolved conflict is based on the assumption that in organisations there exist multiple actors, with potentially conflicting interests, that are not entirely alleviated by contracts. Instead, individual and sub-group interests are continuously re-negotiated, with consistency being hard to obtain and sustain.

2.2.3 Gibrat's Law on Growth of the Firm

Gibrat (1931) suggested that there is no relationship between the size of a firm and its growth. This is known as Gibrat's Law or the Law of Proportionate Effect. In fact, firm growth is the result of a multiplicative process that affects the initial size. The factors that can affect firm growth relate not only to the firm, but also to its environment.

The main consequences of Gibrat's Law are as follows (Sutton, 1997): There is no optimum size to which firms will converge, the likelihood of growth is independent of initial size, so expected growth and its variability are the same for all firms, past growth does not affect current growth since there is no serial correlation (both between firms and over time), firm size dispersion increases over time, so market concentration is higher if the number of firms remains constant

and the variance of firm growth rates is equal for all sizes. This means that the variance of firm growth rates for small firms is equal to the variance of firm growth rates for large firms.
In other words, Gibrat's Law postulates that the "probability that the next opportunity is taken up by any particular active firm is proportional to the current size of the firm" (Sutton, 1997).

The law of proportionate growth gives rise to a distribution that is log-normal. Gibrat's law is also applied to cities size and growth rate, where proportionate growth process may give rise to a distribution of city sizes that is log-normal, as predicted by Gibrat's law. While the city size distribution is often associated with Zipf's law, this holds only in the upper tail, because empirically the tail of a log-normal distribution cannot be distinguished from Zipf's law. A study using administrative boundaries (places) to define cities finds that the entire distribution of cities, not just the largest ones, is log-normal.

However, it has been argued that it is problematic to define cities through their arbitrary legal boundaries (the places method treats Cambridge and Boston, Massachusetts, as two separate units). A clustering method to construct cities from the bottom up by clustering populated areas obtained from high-resolution data finds a power-law distribution of city size consistent with Zipf's law in almost the entire range of sizes. Note that populated areas are still aggregated rather than individual based. A new method based on individual street nodes for the clustering process leads to the concept of natural cities. It has been found that natural cities exhibit a striking Zipf's law. Furthermore, the clustering method allows for a direct assessment of Gibrat's law. It is found that the growth of agglomerations is not consistent with Gibrat's law: the mean and standard deviation of the growth rates of cities follows a power-law with the city size.

In general, processes characterized by Gibrat's law converge to a limiting distribution, which may be log-normal or power law, depending on more specific assumptions about the stochastic growth process.

In the study of the firms (business), the scholars do not agree that the foundation and the outcome of Gibrat's law are empirically correct.

2.2.4 Stochastic Firm Growth Theory

More recently, the learning theory has appeared in the economic literature. Geroski (1995) emphasized that firm growth and survival depend on a firm's capacity to learn. Empirical evidence shows that the survival and post-entry performance of new firms depends on their capacity to adapt to the environment and apply the correct strategies. The learning and selection approach emphasizes the ability of firms to learn, their capacity for innovation and sectorial features. There are several outstanding models of the learning and selection processes. These include those of Jovanovic (1982), Ericson and Pakes (1995) and Pakes and Ericson (1998). The main characteristics of these models are the fact that they take into account the dynamics of firms and their level of efficiency, which determine their chances to survive.

Jovanovic (1982) provided a model in which firms do not know their level of efficiency until they enter the market. This learning process is called a Bayesian or passive learning process. Once in the market, the most efficient firms grow faster until they reach a minimum efficient size. Inefficient firms disappear with the course of time. This is the Theory of "noisy" selection. These types of model introduce variables such as age to measure this ability of a firm to learn its economic efficiency.

Specifically, firms are created with a number of workers and are affected by a reductive shock. The distribution of the probability of profits is unknown at the initial moment and does not vary with time.

The main result is that firms whose size is inferior to the minimum efficient size do not accept Gibrat's Law. If these small firms survive, they will increase their size. However, for firms above the minimum efficient scale (MES), Gibrat's Law is accepted. Jovanovic (1982) therefore models the heterogeneous behaviour of firm growths depending on firm size and their level of efficiency.

Ericson and Pakes (1995) and Pakes and Ericson (1998), on the other hand, presented an active learning process in which firms not only know their efficiency level when they participate in the market but can also can modify it through investment. During each period of time, firms Ericson

and Pakes (1995) and Pakes and Ericson (1998), on the other hand, presented an active learning process in which firms not only know their efficiency level when they participate in the market but can also can modify it through investment. During each period, firms decide whether to continue in the market or to leave it, depending on both their own and their competitors' investment.

2.3 Empirical Review

A study by (Koech, 2011) examined the financial factors affecting growth of SMEs in Kenya, she found out that Small and Medium Enterprise (SME) Sector has continued to play an important role in the Kenyan economy. The sector's contribution to the Gross Domestic Product (GDP) has increased from 13.8 per cent in 1993 to about 20 per cent in 2007. Many entrepreneurs have limited ways to grow their business into large enterprises. There are many to constraints hindering their growth, so it is important for an entrepreneur to fully understand all financial constraints. The study involved a survey of the financial constraints hindering growth of SME's : a case study of Kamukunji District. Descriptive research design was applied with questionnaires as the main instrument of data collection from the 100 Small and Medium Enterprises within Kamukunji District. According to (Koech 2011), sales data are usually readily available and business owners themselves attach high importance to sales as an indicator of business performance. In addition, sales growth is also easier to measure compared with some other indices and is much more likely to be recorded. Sales may also be considered a precise indicator of how a firm is competing relative to their market (Barringer et al., 2005).

A study by Yuanyi, (2011) found out that, theoretical models of financial institution theory predict that firm access to credit depends onfinancial market structure. But empirical studies offer mixed results. Some studies find that higherconcentration is associated with higher credit availability consistent with the information hypothesis that lesscompetitive banks have more incentive to invest in soft information. Other empirical studies, however, findsupports for the competitive financial market hypothesis that credit can be easily got in competitive creditmarket. The paper choosing China's financial market as a research sample, studies on the relationshipbetween financial market structure and SME's financial constraint in China. The

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result shows that when moreSME banks were built up in China's financial market and more foreign banks were allowed to open businessin China, SME's are easier to get credit.

Lee (2008) examined the effect of equity ownership structure on firm financial performance in South Korea. It focused on the role of two main dimensions of the ownership structure: Ownership concentration (i.e., the distribution of shares owned by majority shareholders) and identity of owners (especially, foreign investors and institutional investors). Using panel data for South Korea in 2000-2006, the study found that firm performance measured by the accounting rate of return on assets generally improved as ownership concentration increases, but the effects of foreign ownership and institutional ownership are insignificant. The study also found that there exists a hump-shaped relationship between ownership concentration and firm performance, in which firm performance peaks at intermediate levels of ownership concentration. The study provided some empirical support for the hypothesis that as ownership concentration increases; the positive monitoring effect of concentrated ownership first dominates but later is outweighed by the negative effects, such as the expropriation of minority shareholders. The empirical findings shed light on the role ownership structure plays in corporate performance, and thus offer insights to policy makers interested in improving corporate governance systems in an emerging economy such as South Korea.

Atieno (2001) in her study assessed the role of institutional lending policies among formal and informal credit institutions in determining the access of small-scale enterprises to credit in Kenya. The results of the study show that the limited use of credit reflects lack of supply, resulting from the rationing behaviour of both formal and informal lending institutions. The study concludes that given the established network of formal credit institutions, improving lending terms and conditions in favour of small-scale enterprises would provide an important avenue for facilitating their access to credit.

2.4 Growth of Manufacturing Sector in Kenya

Small and medium enterprises (SMEs) are increasingly seen as playing an important role in the economics of many countries. The SMEs sector provided 78% of total employment and contributed over 57% of the new jobs created in 2005/06 according to the Economic survey of

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Kenya 2007. The economic survey of 2010 stated that of the 503,000 jobs in year 2010, 440,400, or 80.6 per cent were in the SMEs. Only 62,600 or 12.4 percent were created in the formal sector. These indicators send a strong message to policy makers regarding solutions to the unemployment situation in Kenya. The survey indicated that a crucial element in the development of the SMEs sector is access to finance to enhance growth. Manufacturing SMEs have unique factors affecting their growth as most of them import raw materials so affected by fluctuation in foreign currency, availability of raw materials, tariffs and oil price changes (Kenya Association of Manufacturers, 1959)

Turning a small business into a big one is never easy. The statistics are grim. Research suggests that only one-tenth of 1 percent of companies will ever reach $250 million in annual revenue. Even more microscopic group, just 0.036 percent, will reach $1 billion in annual sales. In other words, most businesses start small and stay there (Inc.com,2010, December 21).

The manufacturing sector is a major sector of growth, with its share in GDP having risen from 13 percent In 2002 to 15.7 percent in 2007. Kenya, as the most politically stable country in East Africa, has attracted a large number of investors who now thrive in many sectors of manufacturing (Embassy Of The Republic Of Kenya In Japan, 2012). The sector is dominated by subsidiaries of multi-national corporations, large manufacturing firms and SMEs. Improved power supply, increased supply of agricultural products for agro processing, favourable tax reforms and tax incentives, more vigorous export promotion and liberal trade incentives to take advantage of the expanded market outlets through African Growth and Opportunity Act (AGOA), COMESA and East African Community (EAC) arrangements, have all resulted in a modest expansion in the sector of 1.4 % percent in 2009 as compared to 1.2% in 2010.

The rising levels of poverty coupled with the general slowdown of the economy has continued to inhibit growth in the demand of locally manufactured goods, as effective demand continues to shift more in favour of relatively cheaper imported manufactured items. In addition, the high cost of inputs as a result of poor infrastructure has led to high prices of locally manufactured products thereby limiting their competitiveness in the regional markets and hampering the sector's capacity utilisation. However, the recent introduction of the EAC Customs Union provides Kenya's manufacturing sector, the most developed within the region, a greater opportunity for

growth by taking advantage of the enlarged market size, economies of scale, and increased intraregional trade.

In addition, Kenya Association of Manufacturers (KAM)established in 1959 has evolved into a dynamic, vibrant, credible and respected business association that unites industrialists and offers a common voice for businesses in Kenya.

PricewaterhouseCoopers has unsurpassed experience serving the major enterprises in the manufacturing sector in the East African region. They are also at the forefront of developments within the manufacturing sector through their close partnership and membership of the Kenya Association of Manufacturers.

The manufacturing sector comprises of more than 700 established enterprises and employed over 218,000 people in 2000. According to the Economic Recovery Strategy for Employment and Wealth Creation Report for 2007, the manufacturing sector is a major source of growth, with still high potential of growth and investment.

Some key Kenyan manufacturing sub-sectors include galvanized iron sheets, cement, cigarettes, and beer and wheat flour. All of these have increased in production between 2005 and 2010; particularly cement which has always been a good indicator of economic activity. On the consumer goods side, products manufactured locally include stationery and grooming products. The table in appendix one show the growth of the sector for variety of commodities selected until 2007 (Central Bureau of Statistics, 2007).

According Kenya's Export Processing Zones Authority (EPZA) (2004), Africa was the number one recipient of Kenyan exports with 47.5 percent. Europe was next with 27.9 percent, followed by Asia with 15.8 and America with 2.8 percent.

The largest industrial sector contribution to exports in 2005 was garments (74.4 percent), followed by chemicals (7.2 percent) and agro-processing (5.2 percent). Despite the challenges

facing the textile trade, Kenya maintained its position as the leading exporter of ready-made garments in East Africa.

The production of Kenyan manufactured goods has improved in the last years, although the growth has slowed due to both internal and external factors that are greatly affecting the manufacturing sector in SMEs.

2.5 Summary

From literature review, finance affects firm's growth in different ways. At the micro economic level, there is a widely held view that the slow growth of firms is the result of lack of access to financial resources; however other factors may come to play. Kenya has an intention by 2030 to become a newly industrialized country, a shift from agricultural economy. However, there is a gap as the literature on firm growth has not evolved at the same speed, sometimes for lack of information or interest and the number of studies of manufacturing sector has not matched their economic development. To fill the research gaps, the study will focus on the manufacturing sector in Kenya to identify key factors which affects SMEs performance.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology used to conduct the study. It specifies the research design, target population, data and data collection method and how analysis of the data will be done.

3.2 Research Design

This study was exploratory and descriptive in nature and the researcher usedcensus method. A census was conducted in industrial area as the population is not large to warrant sampling. Primary data collected from the census is more reliable and up-to-date and hence the choice of this method. The descriptive research was used to enhance a systematic description that is as accurate, valid and reliable regarding the responses on the growth of SMEs and the factors considered to be affecting firm's performance. This research design was applied by Koech (2011) to survey financial constraints hindering Growth of SME's in Kenya, she sampled 100 firms of similar nature of this study and come up with reliable findings.This study covereda period of five years from 2006 to 2011

3.3 Population

A censuswas conducted in industrial area; this means that all the manufacturing SMEsin the population were includedin the study, therefore no samplingwas done.For ease of the study the firms included in the populationwere classifiedas shown in table 4.3according to location not to omit any firm during the study.

3.4 Data and Data Collection

The study used primary data. Primary data is data observed or collected directly from first-hand experience (Davies, 2002). In this study data was obtained from census ofmanufacturing SMEs in industrial area.

For data collection a formal list of questionnaire was prepared. The questionnairecontainedquestions ofopinion on factors that hinder SMEs growth to large organization. The respondents were required to indicate the weight they attach to each factor

perceived to be affecting their growth. The questionnaire consisted both open ended and closed ended questions covering issues on the factors that determine growth of manufacturing SMEs in Kenya.

In this study manufacturing SMEs were visited in their business premises and questionnaire were administered to them to fill. Once the completion of the questionnaires was through, they were collected in readiness for data analysis.

3.4.1 Data Reliability and Validity

Reliability and validity is a major issue when it comes to research, indeed failure to assure the validity and/or reliability of the findings may cause the research to be questioned even worse rejected as invalid. (Wallen and Fraenkel, 2001)

According to Cooper and Donald (2008) reliabilityreferstoconsistency and/or repeatabilityofthemeasurement. Since the study use questionnaire as a method of data collection, to enhance reliability questionnaire wereclear and welldefine in ordernot to confuse therespondents.Repeatabilityheremeansthat if researchers have findingsfrom a group theyshouldbeabletorepeatthesurvey and getexactlythesameresults.

Validity refers to the degree to which the measurement procedure actually measures the concept that it is intended to measure (Cooper and Donald, 2008). Validity wasaddressed when writing the questionnaires in order to measure what the study is intended to; relevant questions to the area of study were asked. In addition, respondents chosen to fill the questionnaire were guided on filling the questionnaire and had good background of the company. Due to limited intellectual sophistication of the subjects, questions were clarified and even translated to Kiswahili as deemed necessary. Field editing was conducted before departure from the field.

3.5 Data Analysis

After performing the field survey, rawdata was obtained which needed to be analysed to make sense to the users of the information. The raw form may look unrecognizable and be nearly

meaningless without processing, but it may also be in a form that some can interpret(Davies, 2002).

Responses to the questionnaire were recorded, coded, exported in a spreadsheet, and transferred to a statistical software package for in-depth analysis. Descriptive statistics was calculated and data relationships were analyzed in accordance with the objectives of the study. Factor analysis was used to rank factors considered in order of importance, while descriptive analysis used frequency distribution and percentages. The statistical package for social sciences (SPSS) and Excel was used to analyze the data.

3.5.1 Conceptual Model

According to Kumar (2005) conceptual modeling develops the representation of entities and their relationships in a format that is easy to read and understand. The conceptual framework below shows diagrammatic relationship between independent and dependent variable.

Figure 3.1: Conceptual Framework
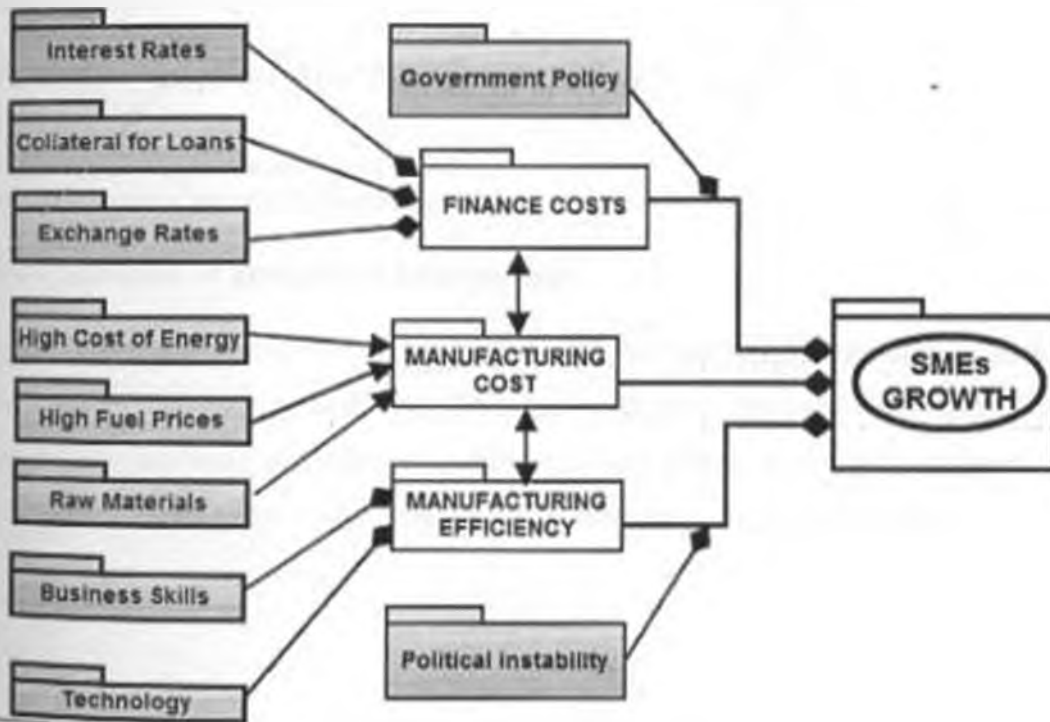
Below is the conceptual model function showing the relationship between dependent variable G and independent variables X.

$$G_1 = f(X_1 + X_1 + X_3 + X_4 + X_6 + X_6 + X_7 + X_8)$$

Where:
G: Growth in sales and Investments

X1: Interest Rates   X5: High Cost of Energy
X2: Collateral for Loans   X6: High fuel prices
X3: Inadequate Technology   X7: Exchange rates
X4: Inadequate Business Skills   X8: Unavailability Raw Material

For analysis purposes, the variableswere measured quantitatively. The result from the census was quantified and then analysed to come up with factors that affect SMEs in order of their importance. For open ended question Content Analysis was applied. Content analysis creates a structure to organize open-ended information. (Kumar, 2005)

The expected relationship of the factors is a negative linear relationship, that is when the factors are not favorable the SMEs will have a stagnant growth or exit from operation as a result of adverse selection and vice versa

3.5.2 Analytical Model

$$G_1 = \alpha + \beta_1 x_1 + \beta_2 x_1 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \varepsilon$$

Where
G_1: Growth in sales and investments
α:Autonomous growth β:Slopeε:Error

Determination of Strength of Relationship

Independent t-tests and simple analysis of variance (ANOVA) was used to look for significant differences between growth and financial constraints grouped into four: financial factors, manufacturing costs, manufacturing efficiency and others. A statistical software program, SPSS (Statistical Package for Social Sciences) was used for in-depth data analyses

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter shows findings of the study and discusses these findings in length. The study targeted the SME's within industrial area. 43 Small and Medium Enterprises were studied by use of census. Section 4.2 shows summary statistics. section 4.3 is estimated model. section 4.4 discusses the average SMEs growth 4.5 summarizes the chapter.

4.2 Summary of Statistics

4.2.1 Location of Business and Age of the Businesses

The primary source of information for the study was a census of manufacturing SMEs conducted in industrial area in Nairobi Kenya. A population 43 firms wasstudied. Of the 43 firms studied. 7% are located in Nanyuki Road. 23% Lusaka Road 23. 14% Likoni Road. 33% Enterprise Road and 10% LungaLunga Road

Table.4:1: Location of Business

SME Location	Frequency	Percent
Nanyuki Road	3	7
Lusaka Road	10	23
Likoni Road	6	14
Enterprise Road	14	33
LungaLunga Road	10	23
GRAND TOTAL	43	100

Source: Author's Computation

Most of the manufacturing SMEs in industrial areahave been in operation for more than five year. Only 9% of the firms were in operation for 2 years and below. 5 % were in operation for 4 years. 86% were above five year.thisgave a good picture of the study which covered a period of five year.

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Table 4:2: Age of the Business

NUMBER OF YEAR	NUMBER OF FIRMS	PERCENT
2	4	9
4	3	5
Above 5 Years	37	86
Grand Total	43	100

4.2.2 Source of Raw Materials

The businesses in industrial area import and purchase raw materials locally for production, 75% do both, import and export, 19% rely on importation of raw materials and do not purchase local inputs, only 9 of manufacturing firms depend solely on local purchase. Figure 4.1 shows the graphical representation

Figure 4.1: Source of Raw Materials

	BOTH	IMPORT	LOCAL
▪ Series1	72	19	9
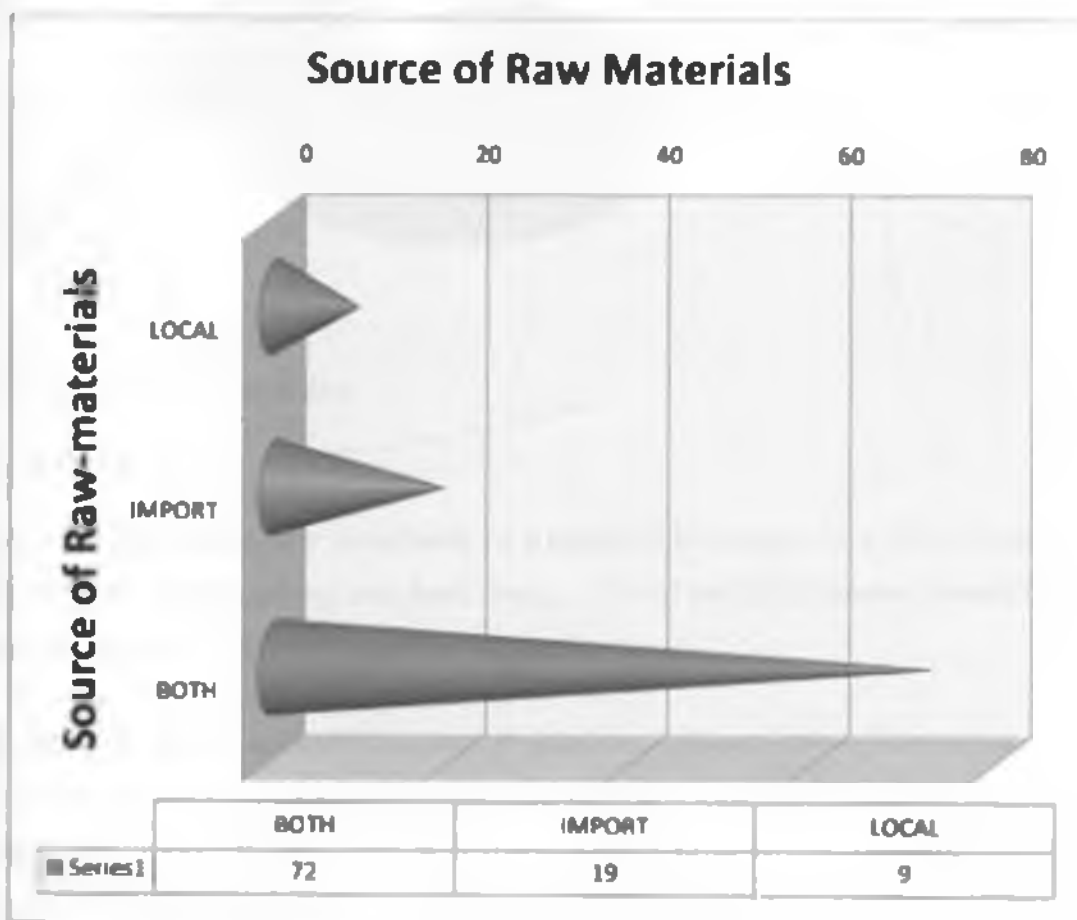
Source: Author's Computation

4.2.3 Firms New Investments and Sources

The study sought to find out during the last five years the firm has been in operation whether the firm made any new investment or expenditure intended to result in growth. The outcome was that 70% made new investment, 30% didn't not make any new investment intended to result to growth within that period. This was as a result of financial challenges which will be discussed in latter. Figure4:2 show a graphical representation of the findings

Figure4:2 Firm's New Investments

Source: Author's Computation

Source of Investments

30% of the firms made no new investment for a period of five years, 16% of the firms financed their investments solely on long term bank loans.   5% of the firms financed through retained earnings. 5 % finance through shares (own capital)

Firms, due to financial constraints, choose to combine different forms of financing. 23% of the firms combined long term bank loans & retained earnings. 12% combined long term bank loans, retained earnings and informal finance. There are those firms which combined long term bank loans, retained earnings (profits), informal finance and shares (own capital) that is 2% .2 % also combined long term bank loans and informal finance. 2% combined long term bank loans and

informal finance and finally 2% used retained earnings (profits) combined with informal finance. The table below shows the combination of sources of finance to finance investment.

Table 4.3: Source of Finance

Source of Finance	Number Of Firms	Percentage
No investment	13	30
Long Term Bank Loans	7	16
Retained Earnings (profits)	2	5
Shares (own capital)	2	5
Long Term Bank Loans & Retained Earnings	10	23
Long Loans, Retained Earnings (profits) and Informal finance	5	12
Long Loans, Retained Earnings Informal finance and Shares	1	2
Long Term Bank Loans and Informal finance	1	2
Long Term Bank Loans and Informal finance	1	2
Retained Earnings (profits) & Informal finance	1	2
Grand Total	43	100

Source: Researcher

4.2.4 Borrowing Limitation and Cause

Figure 4:3 Borrowing limit

Borrowing limit

- Not limited to borrow 47%
- Limited to borrow 53%
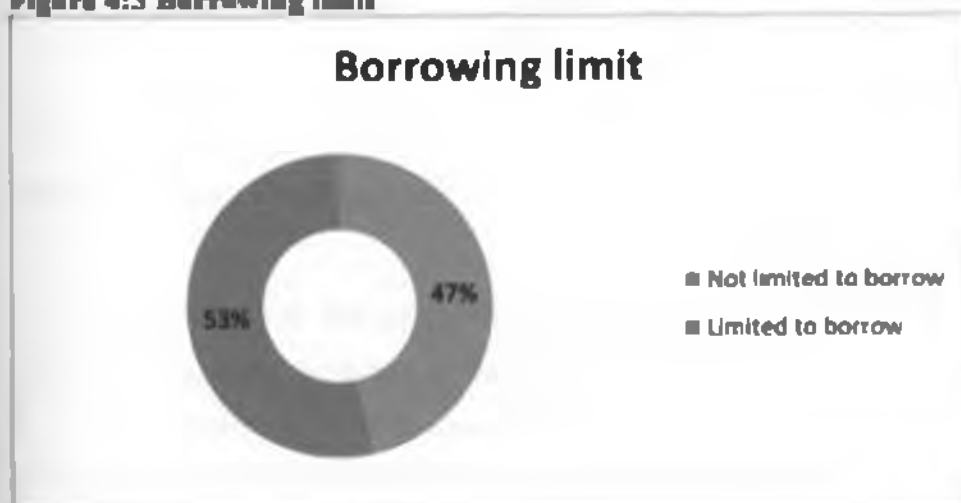
The combination of financing options shown in table4.3 above was as a result of hindrance to borrowing from commercial banks. The above figure show that 53% of the firms included in this study were limited to borrow from commercial banks, 47% of the firms did not experience any challenge in borrowing behavior. Figure 4.4 shows the cause of hindrance to finance investment through loan 100%.

Figure 4.4: Cause of Limitation

Borrowing Limitation
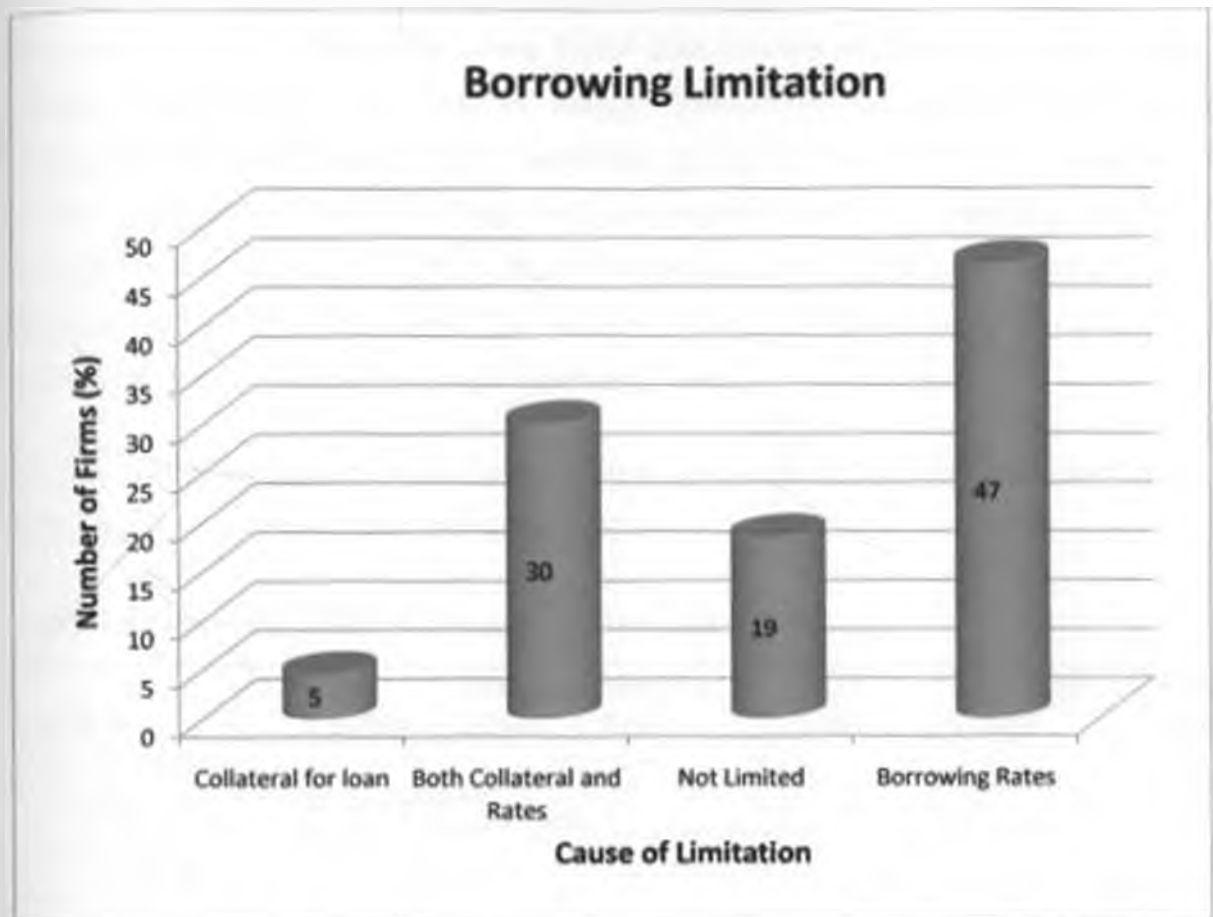
Source: Author's Computation

Few Small SMEs with few on no fixed assets to offer as collateral for a load found it hard to secure any loan from the banks as they had no collateral, this amounted to a small percentage of 5%. Bigger SMEs that is 30% were affected by collateral even though they could be awarded loan but not enough to finance the whole project; they were also affected by interest rates. Only 19% said that they were not affected by rates or collateral because they did not reduce their

borrowing. The greatest percentage of SMEs was affected greatly by interest rates. They had the collateral to secure loan but the interest rates which has sky rocketed put them off and the finance through combination of sources discussed in 4.2.3

4.2.5 Financial Constraints

The research sort to investigate the factors that hinder growth of manufacturing SMEs in Kenya. 10 factors were perceived to affect growth of SMEs. These factors are: Increased Interest Rates for loans, Lack of Collateral for Loans, Dollar Rate (weaker shilling to the dollar), High fuel Prices (Petrol/Diesel), High Cost of Energy (Electricity), Unavailability Raw Materials, Inadequate Business Skills, Political instability eg post-election violence, Government/ local Authority regulation, Inadequate Technology eg computerization, ICT, machinery etc. A scale of 1-5 was used to weigh the effect of above factors on growth. Respondent were asked to rank them in order of effect to growth. The scale of 1 being no effect 2 being low effect, 3 being medium (avarage) effect, 4 being high effect and 5 being very high effect .

Frequency was calculated for each factor on the weights indicated by individual firm. The following was the result of the findings in table 4.4:

Table 4.4 Frequency Table of Factors Constraining Growth

SCALE	No Effect	Low Effect	Medium Effect	High Effect	Very high Effect	Grand Total
Interest Rates	8	4	5	17	9	43
Collateral	17	10	7	6	3	43
Dollar Rate	7	2	5	14	15	43
Fuel Cost	9	6	6	13	9	43
Cost of Energy	6	5	14	11	7	43
Raw Materials	7	8	12	6	10	43
Business Skills	6	9	15	9	4	43
Political instability	4	4	14	15	6	43
Government Policy	7	9	18	6	3	43
Technology	6	13	12	5	7	43

Figure 4:5 Percentage Frequency Polygon on Factors Constraining Growth
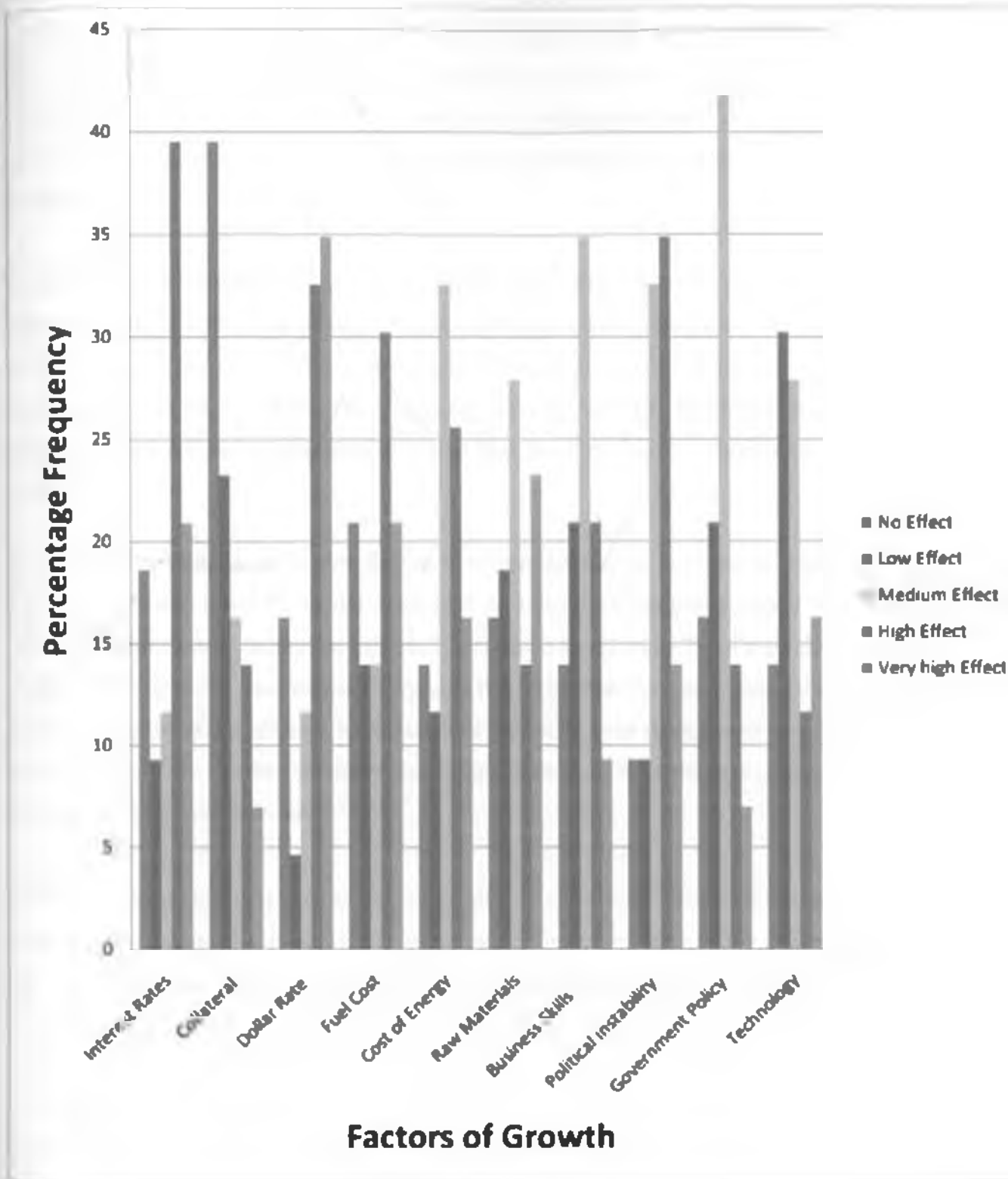
Frequency polygon in figure 4:5 show that interest rates affected many SMES, only 12 % of SMEs felt that interest rates had medium effect to growth as they combined Bank loans with other forms of financing. 28% of the firms were below average; this means that bank rates did not affect them as they financed their investment via other forms and did not take loans to finance their growth. 60% of the firms were above average this mean that they were affected greatly as they financed their investment through loan or they did not take loans because of high interest rates.

Collateral had little effect on growth of SMEs. Only 21% felt that collateral was a major hindrance when it came to financing investment through loan. These firms were young SMEs in terms of age and asset base. They had no asset collateral for loan.16 % were on average as they could secure loan but to certain extent. Majority, 63% did have any problem with collateral. The research found out that manufacturing SMEs had huge machinery which they could use as collateral.

Dollar Rate has being unstable over the last few year, the shilling has been weaker to the dollar. Figure 4.2 showed that 72% of the firms both imported and purchased locally raw materials. 19% of the firms solely depend on import. The research found that 67% of manufacturing SMEs were affected by dollar rate, explained by importation of their Raw materials. 16% experienced medium effect by being affected by dollar rated indirectly even though they may buy materials from local suppliers as some suppliers may have imported. 21% of the firm experienced little or no effect of dollar rate increase.

Fuel Cost increase affected most of the SMEs growth, 51% being affected above average 14 % experiencing medium effect and 35% below average. Those who were below average did not use fuel but used electricity on their production and transported a few items once produced as customer came to purchase the items at their premises.

Cost of energy (Electricity) had little effect on firms growth as the electricity prices has been relatively stable over a period of time.42% were above average, 33% on average and 26% below average.

Raw Materials also did not have great effect as the SMEs said that most of the materials were readily available.35% were below average, 28% on average and 37% above average.

Business Skills affected the growth of SMEs because SMEs employed both skilled and manual laborers. Manual laborers were not experienced and a lot of wastage was experienced during production. 35% were below average, 35% at medium effect and 30% above average.

Political instability affected almost all the SMEs. Industrial area was hard hit by post-election violence in 2007 and early 2008. Respondent said the most laborers who are employed in the area mostly stay in low income Estates like Kayole, Ndandora, Botelakaloleni among other places. During the period they could not report to work hence production was put to a halt. Customer also did not pick their orders, some places were looted lending to low sales in 2008.19% of SMEs were below average, 33% were on average and 49% were above average.

Government Policy had no impact on growth of SMEs, 37% being below average, 42% being medium level and 21% being above average.

Finally Technology had a moderate effect, where 44% were below average, 28% were on average and 28% being above average.

4.3Estimated Model

For statistical analysis, multiple regression was used, dependent variable being sales growth (Y) and independent variable being financial constraints factors(Xi), explained in analytical model. Below are the regression output.

Table 4.5: Regression statistics

Regression Statistics	
Multiple R	0.74
R Square	0.55
Adjusted R Square	0.41
Standard Error	10.10
Observations	43.00

Source: Author's Computation

R-squaremeasures the proportion of the variation in the dependent variable (Growth) that was explained by variations in the independent variables (financial factors). From regression analysisR-Square tells us that 55% of the variation was explained. $R^2 = 0.55\%$ means that 55% of the variation of y_i around $y^\wedge$ (its mean) is explained by the regressors $x_2\ x_3 ..... x_n$

Adjusted R-square Measures the proportion of the variance in the dependent variable that was explained by variations in the independent variables. Adjusted RSquare of 0.41 shows that 0.41% of the variance was explained.

Table 4.6:Anova Table

ANOVA					
	df	SS	MS	F	Significance F
Regression	10.0000	3965.6589	396.5659	3.8900	0.0016
Residual	32.0000	3262.2586	101.9456		
Total	42.0000	7227.9175			

Source: Author's Computation

The column labeled F gives the overall F-test of H0: $\beta_j = 0$ versus Ha: at least one of $\beta_j$does not equal zero. The column labeled significance F has the associated P-value. Since0.0016 > 0.05, we do not reject H0 at significance level 0.05.

Table 4.6: Coefficient Matrix

		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
X₁	Intercept	26.52	11.02	2.41	0.02	4.05	48.99
X1	Interest Rates	-2.47	1.65	-1.50	0.14	-5.83	0.89
X2	Collateral	-0.52	1.55	-0.34	0.74	-3.68	2.64
X3	Dollar Rate	-0.89	1.40	-0.63	0.53	-3.74	1.96
X4	Fuel Cost	-0.47	1.57	-0.30	0.76	-3.66	2.72
X5	Cost of Energy	0.06	1.76	0.04	0.97	-3.52	3.64
X6	Raw Materials	0.69	1.42	0.49	0.63	-2.20	3.58
X7	Business Skills	-1.82	1.88	-0.97	0.34	-5.66	2.02
X8	Political instability	-6.90	2.20	-3.14	0.30	-11.38	-2.42
X9	Government Policy	1.77	1.66	1.07	0.29	-1.61	5.15
X10	Technology	-0.87	1.58	-0.55	0.58	-4.10	2.35

Source: Author's Computation

Column "Coefficient" gives the least squares estimates of β_j. Column "Standard error" gives the standard errors (i.e.the estimated standard deviation) of the least squares estimates b_j of β_j. Column "t Stat" gives the computed t-statistic for H0: $\beta_j = 0$ against Ha: $\beta_j \neq 0$.This is the coefficient divided by the standard error. It is compared to a t with (n-k) degrees of freedom where here n = 43 and k = 10. Column "P-value" gives the p-value for test of H0: $\beta_j = 0$ against Ha: $\beta_j \neq 0$. This equals the $Pr\{|t| > t\text{-Stat}\}$ where t is a t-distributed random variable with n-k degrees of freedom and t-Stat is the computed value of the t-statistic given in the previous column. This p-value is for a two-sided test. For a one-sided test divide this p-value by 2 (also checking the sign of the t-Stat). Columns "Lower 95%" and "Upper 95%" values define a 95% confidence interval for β_j.

A simple summary of the above output is that the fitted line is

$$Y= 26.52-2.47X_1-0.52X_2-0.89X_3-0.470X_4 +.06X_5+0.69X_6-1.82X_7-6.90X_8+1.77X_9-0.87X_{10}$$

The 95% confidence interval for slope coefficient β_1 is from figure 4.4 is (-5.83, 0.89) β_2 -3.68-2.64...... β_n

Test of Statistical Significance

The coefficient of Interest Rates has estimated standard error of 1.65, t-statistic of -1.50 and p-value of 0.14. It is therefore statistically significant at significance level $\alpha = .05$ as p > 0.05. The coefficient of Collateral has estimated standard error of 1.55, t-statistic of -0.34 and p-value of 0.74 .It is therefore statistically insignificant at insignificance level $\alpha = .05$ as p > 0.05. The coefficient of Dollar Rate has estimated standard error of 1.40, t-statistic of -0.63 and p-value of 0.53.It is therefore statistically insignificant at significance level $\alpha = .05$ as p > 0.05. The coefficient of Fuel Cost has estimated standard error of 1.57, t-statistic of -0.30 and p-value of 0.76.It is therefore statistically insignificant at significance level $\alpha = .05$ as p > 0.05.

The coefficient of Cost of Energy has estimated standard error of 1.76, t-statistic of -0.04and p-value of 0.97.It is therefore statistically insignificant at significance level $\alpha = .05$ as p > 0.05.
The coefficient of Raw Materials has estimated standard error of 1.42, t-statistic of 0.49 and p-value of 0.63 .It is therefore statistically insignificant at significance level $\alpha = .05$ as p > 0.05.

The coefficient of Raw Materials has estimated standard error of 1.88, t-statistic of -0.97 and p-value of 0.34.It is therefore statistically insignificant at significance level α = .05 as p > 0.05.

The coefficient of Political instability has estimated standard error of 2.20, t-statistic of -3.14 and p-value of 0.003.It is therefore statistically significant at significance level α = .05 as p > 0.05.

The coefficient of Government Policy has estimated standard error of 1.66, t-statistic of 1.07and p-value of 0.29.It is therefore statistically significant at significance level α = .05 as p > 0.05.

The coefficient of Government Policy has estimated standard error of 1.58, t-statistic of -0.55 and p-value of 0.58.It is therefore statistically insignificant at significance level α = .05 as p > 0.05.

4.4. Average SMEs Growth
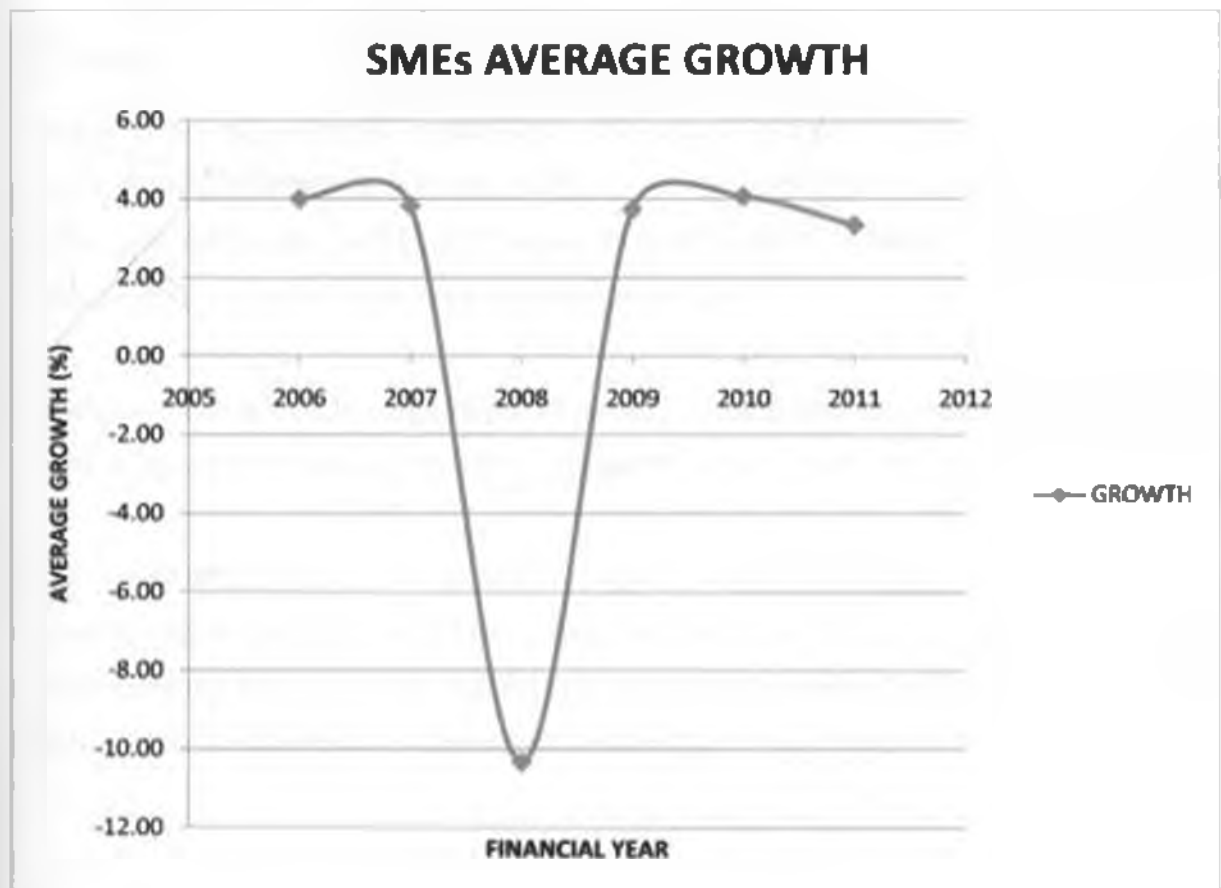
Figure 4.6: SMEs Average Growth

Figure 4.6 above shows the summary of SMEs growth, it was noted that on average SMEs sales grew by 4% in 2006 financial year, in 2007 sale grew by 3.83 %, in 2008 sale declined by 10.33 %, in 2009 sale grew by 3.74 % in 2010 sale grew by 4.07% and finally in 2011 sale grew by 3.34%.

The study showed that sales grew at a declining rate. For new firms sale grew very fast for the first few years then the sale grew at a declining rate after some time. Sales grew very slowly as the firm age some growth even starts declining. It is at this time that a firm invests to diversify, so old firms experienced slow growth in sale as opposed to new firms. In year 2008 most firms experienced decline in sales on average by 10%, this was as a result post-election violence experienced in late 2007 and 2008. After 2008 sales grew rapidly to a positive value in 2009, and from there sale has been growing at a declining rate.

4.5 Summary

The data collected was useful in answering the research question: what factors influence/affect manufacturing SMEs growth into large business enterprises? From the analysis of data collected, interest rates, dollar rate, Fuel Cost, business skills and political instability were the factors found to influence SMEs growth into large business enterprises

Government Policy, Technology, Cost of Energy, Raw Materials and collateral affected the growth marginally that is to say that they dint not influence growth greatly.

The expected relationship of the factors is a negative linear relationship, that is when the factors are not favorable the SMEs will have a stagnant growth or exit from operation as a result of adverse selection and vice versa, this was proved by the regression analysis. Regression show a significant relationship between dependent variable (Sales) and independent variables Xi

CHAPTER FIVE

SUMMARY, CONCLUSIONSAND RECOMMENDATION

5.1 Introduction

Section 5.2 of this chapter provides the summary of key findings, section 5.3 provides the research conclusions, 5.4 explains limitations of the study and section 5.5 gives recommendations for further research.

5.2 Summary of key findings

The objective of the study was to find out financial constraints to growth of manufacturing SME's in Kenya. In order to realize the objectives of the study, survey design was adopted to facilitate the collection of original data necessary for the study. The target population included manufacturing SMES within industrial area Nairobi Kenya.Quantitative primary data was collected using structured questionnaires. Data collected was first edited in order to check for completeness. Thereafter, it was coded and formatted before being analyzed to obtain percentages and frequency distribution tables.

The research found out that the businesses in industrial area import and purchase raw materials locally for production, 75% do both, import and export, 19% rely on importation of raw materials and do not purchase local inputs, only 9 of manufacturing firms depend solely on local purchase. Only 70% of SMEs interviewed made new investment, 30% didn't not make any new investment intended to result to growth within a period of five years.

For the investment, 16% of the firms financed their investments solely on long term bank loans, 5 % of the firms financed though retained earnings. 5 % finance through Shares (own capital) , 23% of the firms combined Long Term Bank Loans & Retained Earnings. 12% combined Long Term Bank Loans, Retained Earnings and Informal finance. There those firms which combined Long Term Bank Loans, Retained Earnings (profits), Informal finance and Shares (own capital) that is 2% .2 % also combined Long Term Bank Loans and Informal finance, 2% combined long Term Bank Loans and Informal finance and finally 2% used Retained Earnings (profits)

combined with Informal finance. The table below shows the combination of sources of finance to finance investment.

The research intended to find out the factors that affect SMEs growth. It was found bank rates affected 60% of the firms, this mean that they were affected greatly as they financed their investment through loan or they did not take loans because of high interest rates.63% of SMEs said they had no problem with collateral for loan so that had no significant effect to growth. The research found that 67% of manufacturing SMEs were affected by dollar rate, explained by importation of their Raw materials. 51% of SMEs were affected by fuel prices this shows an average effect. Cost of energy (Electricity) had little effect of firms growth as the electricity prices has being relatively stable over a period of time.42% were above average, 33% on average and 26% below average.

For Business Skills it was found that Manual labourers were not experienced and a lot of wastage was experienced during production. 35% were below average, 35% at medium effect and 30% above average. Political instability affected almost all the SMEs. Industrial area was hard hit by post-election violence, 19% of SMEs were below average, 33% were on average and 49% were above average. Government Policy had no impact on growth of SMEs, 37% being below average, 42% being medium level and 21% being above average.

Finally Technology had a moderate effect, where 44% were below average, 28% were on average and 28% being above average.

5.3 Conclusions

Ten factors affecting SME's growth were identified, and measured with a scale of very high, high, medium, low and no effect. In order of contribution, the factors influencing growth of SMEs are: political instability, interest rates, business skills, dollar rate, technology, collateral, fuel cost, and cost of energy, raw-materials and government policy. (Arranged from very high effect to no effect)

It was however noted that these factors, when further analyzed, grouped into five, financial costs factors, manufacturing costs factors, manufacturing efficiency, political and government factors. Political factors affect the growth of SMEs more but is not common in Kenya is a one off occurrence. Financial factors were identified to have a great impact, manufacturing cost second and manufacturing efficiency last.

Some factor had little or no effect at all; collateral for loan had little effect as manufacturing SMEs had assets to secure their loans. Because most firms imported raw materials they were greatly affected by fluctuation in exchange rate.

Firm needs is depended on their age, newly established firms have a problem with collateral for loans as they don't have a healthy balance sheet. As they age they can be able to take loans with ought any problem as the will have accumulated some assets. Growth in sales increased at a decreasing rate and thereafter sales starts to decrease.

5.4 Limitations of the Study

This research did not go without challenges. The research was faced by various unexpected interferences which sometimes ended into premature discontinuation. These interferences were caused by respondents who needed to attend to their businesses like serving customers. Some respondents opted not to respond to some questions, increasing the number of missing values. Some respondents treated us with suspicion because they thought perhaps we were spies from the government. Some denied access to their premises thinking that I was there to seek for employment

Language barrier especially in industrial area was one of the limitations as most firms were owned by Indian who found it hard to communicate in English. We had to interpret the questions which sometimes took a lot of time to get information from the respondents. It was very evident that some respondents expected compensation for the information they diverged. Some even asked openly whether they would get 'something' for their information.

5.5 Recommendations for Further Research

The results of this study reveal that finance cost, manufacturing cost factors and political stability are responsible for SMEs failures in the Kenya. Hence more effort needs to be focused in the area of management development for SMEs and peace in Kenya

Stimulate additional research on the impact of capital provision to SMEs on economic indicators at the micro- and macro-level. There is a large amount of anecdotal information on impact, but few systematic, controlled studies.

Future researchers can consider topics which intends to analyse the effect of access to finance on the financial (growth and profitability) and operational characteristics of individual firms ,analyse the aggregated effect of increased capital on the sectoral and macro-economic levels (e.g. GDP, output, employment), including different socio-economic groups

Analyse the effect on organizational behaviours (e.g. innovation) and on social impact (e.g. female participation in the workforce, minority inclusion, etc.).Work toward a differentiated understanding of the impact of SME financing on different sectors (e.g. agriculture, services) and lending channels

Support initiatives to harmonize SME definitions among stakeholders to facilitate collecting and comparing data

REFERENCE

Adam Smith. (1776). An Enquiry into the Nature and Causes of the Wealth of Nations. Padstow: PJ international Ltd.

Aron. M. (2012).High Cost of Electricity to Stall Economic Growth. Nairobi: Standard Group Limited .

Beynon-Davies (2002). Information Systems: An introduction to informatics in organisations. Basingstoke, UK: Palgrave Macmillan.

Bokea, C., andMullei, A. (1999).Micro and small enterprises in Kenya. Nairobi: ICEG. Africa Program,

Burns, R., & Burns, A. (2008).Business research Methods and Statistics Using SPSS. New Delphi: Sage Publication Inc.

Business Dictionary. (2010, December 12). *BusinessDictionary.com*. Retrieved July 12, 2012, from BusinessDictionary.com: http://www.businessdictionary.com/definition/census.html

Central Bank of Kenya. (2008, December 31). The Annual Economic Report. Retrieved April 13, 201, from Central Bank of Kenya: http://goo.gl/BXWKG

Central Bank of Kenya. (2008, December 12). Interest rates: News and predictions. Interest rates: News and predictions , pp. 1-1.

Chiranjibi, N. B., andNiraula. K. (2008). Technology Transfer In SMEs:Problems And Issues In The Context Of Nepal. Published MBA Project , 1-3.

Cohen, J., Cohen, P., West. S. G., and Aiken, L. S. (2003).Applied multiple regression/correlation analysis for the behavioral sciences, 3rd Ed. Mahwah, NJ: Lawrence Erlbaum Associates

Cooper, and Donald R. (2008).Business Research Method. Columbus,: McGraw-Hill Companies.

Cyert, R. M., J. G. March. 1963/1992.A Behavioral Theory of the Firm. 2nd ed. Prentice Hall, Englewood Cliffs, NJ.

Dawson, Catherine. 2002. Practical Research Methods, New Delhi, UBS Publishers Distributors

European commission. (2011, December 23). European Union website, the official EU website. Retrieved 2012 13, March, from Definition of SMEs: http://goo.gl/ne8Bx

Fraenkel, J., and Wallen, N. (2008). *How To Design And Evaluate Research In Education.* London: McGraw-Hill,.

Investopedia . (2009, January 12). Financial Performance. Retrieved July 22, 2012, from Google Maps: http://goo.gl/vU6GR

Industry Canada. (2011, December 12). *Industry Canada*. Retrieved June 12, 2012, from Industry Canada: http://goo.gl/5BH9

Jabara, C. (2009). How Do Exchange Rates Affect Import Prices. Office of industries working paper , 1-20.

JICA.(2004). Japan International Corporation Agency. Japan International Corporation Agency , 1-30.

Kenya Association of Manufacturers. (2012, January 12). Kenya Association of Manufacturers. Retrieved April 27, 2012, from latest News: http://www.kam.co.ke/

Kenya Association of Manufacturers.(2012). High cost of electricity to stall economic growth. Nairobi: Standard Group Limited.

Kenya's Export Processing Zones Authority. (2004). Export Growth InKenya. Export Growth In Kenya , 1-2.

Khang'ati, A. (2011). Daily Nation Kenya Newspaper. AllAfrica - All the Time , AllAfrica - All the Time

Koech, B. C. (2011). A Survey Of The Financial Constraints Hindering Growth OfSme's In Kenya: The Case Of Kamukunji District In Nairobi County. Unpublished MBA project University of Nairobi ,

Kothari, C.R.,1985, Research Methodology- Methods and Techniques, New Delhi,Wiley Eastern Limited.

Kraus, A., Robert, andLitzenberger.(1972). A State-preference Model of Optimal Financial Leverage. Los Angeles: Graduate School of Business, Stanford University.

Kumar, Ranjit, 2005, Research Methodology-A Step-by-Step Guide for Beginners,(2nd.ed.),Singapore, Pearson Education.

Lee, S. (2008). Ownership Structure and Financial Performance: Evidence from Panel Data of South Korea. *Corporate Ownership and Cntrol, 6*(2), 1-30.

Leedy, P., and Ormrod, J. (2001). *Practical Research: Planning and Design.* Chicago: Pearson Education.

Ministry of State for Planning. National.(2009). 2009 Population and Housing Census Results. 2009 Population and Housing Census Results , 1-3.

Mocality. (2012, January 1). Kenya's largest Business Directory. Retrieved June 21, 2012, from Kenya's largest Business Directory: http://www.mocality.co.ke/

Mugenda M. O. and Mugenda G. A., (2003) Quantitative and Qualitative Approaches, ACTS Press, Nairobi, Kenya

Mworia, J. (2011, January 3). Interest rate increase poses a grave risk to Kenya's economic prospects. Daily Nation 2011 , pp. 3-5.

Naser, K., &Mokhtar, M. (2004). Determinants of Corporate Performance of Malaysian Companies. Fourth Asia Pacific Interdisciplinary Research in Accounting Conference, Singapore

Nesbary, D. (2000). *Survey research and the World Wide Web*. Pennsylvania State University: Allyn and Bacon.

Olawale, F., andGarwe, D. (2010).Obstacles to the growth of new SMEs in South Africa. Published MBA Project South Africa: , 3-4.

Penrose, E. (2009). The Theory of the Growth of the Firm. Oxford: 2009.

Ricardo, D. (1823). On the principles of political economy, and taxation. London: John Murray.

Robai, V. (2006, Dec 12). Informal finance as a Source of Fund for SME In Kenya: Dandora. Published MBA Project University of Nairobi , pp. 1-57.

SME Network. (20112, June 12). *SME Network*. Retrieved June 30 15, 2012, from SME Network: http://smenetwork.co.ke/

The Association for Manufacturing Technology. (2011). What is Manufacturing Technology . Virginia: West park McLean.

United Nation Industrial Development organization (UNIDO) (2002).Stimulating SME environment. Retrieved July 5th 2010 from www.unido.org

University of Southern California. (2012, January 12). *Organizing Your Social Sciences Research Paper*. Retrieved June 12, 2012, from Organizing Your Social Sciences Research Paper: http://tinyurl.com/bwah673

Wanjohi, A. (2009). Challenges Facing SMEs in Kenya. Retrieved July 10, 2010 from http://www.buzzle.com/articles/challenges-facing-smes-in-

Wikipedia. (2012, January 27). Manufacturing. Retrieved April 6, 2012, from Wikimedia Foundation, Inc.: http://en.wikipedia.org/wiki/Manufacturing

Wisegeek. (2002). What is a Collateral Loan. London: Conjecture Corporation.

Wolfe, M. (2010). How Does the Fuel Price Affect Manufacturing. Chicago: Demand Media, Inc.

Yin, R. K. (1984).*Case study research: Design and methods*. Newbury Park, CA: Sage.

SURVEY QUESTIONNAIRE

GENERAL INFORMATION

1. What does the firm manufacture or sell:_____

2. Number of employees both permanent and Casual : Permanent (3   ) Casual (5)
    Others   specify_____

3. How many years has the firm been in business? 0-1 Year (   ) 2 years (   ) 3 Years ( ) 4
    year( ) 5 years and above (+   )

4. Do the firm import raw material or purchase locally: import ( ) local ( ) both ( )

DETERMINANTS OF GROWTH/FINANCIAL PERFORMANCE

1. In a scale of 1-5 how would you rank the following factors that affect performance of your
    firm's and inhibits growth.1 being no effect and 5 being very high effect.

FINANCIAL CONSTRAINTS	No Effect	Low Effect	Medium Effect	High Effect	Very High Effect
Increased Interest Rates					
Lack of Collateral for Loans					
Dollar Rate (weaker shilling)					
High fuel Prices (Petrol/Diesel)					
High Cost of Energy(Electricity)					
Unavailability Raw Materials					
Inadequate Business Skills					
Political instability eg post-election violence					
Government/ local Authority regulation eg licensing, fees, rates…. etc					
Inadequate Technology eg computerization, ICT, machinery etc					

MEASURE OF GROWTH/PERFORMANCE

1. During the last five years has your firm made any new investment or expenditure intended to result in growth?

   Yes ( )   No ( ) (Go to question 3)

2. How were new investments financed as a percentage of the total investments?

SOURCE OF FINANCE	PERCENTAGE
Long Term Bank Loans	
Retained Earnings (profits)	
Informal finance eg loan from friends Merry go round etc	
Shares (own capital)	
Others	
TOTAL	**100 %**

3. Did an inability to borrow sufficient funds prevent the firm from making all or part of the desired growth investments and expenditures

   Yes ( ) **(go to 4)**   No ( )

4. What was the main hindrance for growth in 3 above _____

5. Kindly indicate the your sales volume for the last five years in your firm **(If your firm has not been in operation for five years fill from the year your started the business).**

YEAR	SALES IN SHILLINGS
2006	
2007	
2008	
2009	
2010	
2011	

6. In your opinion what could be the major cause of lack of growth or slow growth in sales in your firm _____

THANK YOU FOR YOU RESPONSES