FACTORS AFFECTING THE GROWTH OF SMES: A CASE STUDY OF MOTOR VEHICLE GARAGES IN INDUSTRIAL AREA, NAIROBI

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DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university for academic credit.

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This research project has been submitted for examination with my approval as university:

Supervisor

Signed: _____ Date: _____

Mr Martin Odipo.

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This achievement would have been a futility without the input of the significant others. The mercy of the good God has always been with me and I cannot overstate the blessings, love and care I have so far received. My family has been my source of strength and a true foundation upon which I have build my success. They have also been a well from whom I have drawn financial and material resources. I also appreciate the support of my friends, the criticism, guidance and encouragement that has been my driving force this far. Today I stand proud because they have stood with me.

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DEDICATION

To my grandfather whose legendary intent has always been to see everyone of his grandchildren get quality education, my parents for their love, and humble upbringing, and bringing forth the KING, my brothers David and Kennedy, sisters Judy, Grace and Margaret for pushing me to greater achievements.

To Cate, Rome and Tarmo for letting my world revolve around them and giving me a reason to go home every day, my uncles and aunts for pushing and supporting me when it mattered most, my lecturers, fellow students and true friends for their unquestionable loyalty, and for all those who nurture love and espouse level playing grounds.

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LIST OF ABBREVIATIONS

CBK : Central Bank of Kenya

EU : European Union

GDP : Gross Domestic Product

ICT : Information and Communications Technology

KAM : Kenya Association of Manufacturers

KNBS : Kenya National Bureau of Statistics

LPE : Law of Proportionate Effect

MSE : Micro and Small Enterprises

NCG : Nairobi County Government

PCA : Principal Component Approach

SMEs : Small and Medium Enterprises

KRA : Kenya Revenue Authority

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ABSTRACT

Available estimates show that SMEs are a growing and vibrant stream with a lot of untapped potential and employ about 7.5 million Kenyans or 80 per cent of the country's total employment outside small-scale agriculture and contributes 20 per cent to the country GDP. Of all the 503,000 jobs created in 2011, 440,400 or 80.6 per cent were in the SMEs. Despite their importance, over 60% of SMEs are estimated to fail each year in Kenya. The health of the economy as a whole has a strong relationship with the health and nature of SMEs. However, despite government efforts in Kenya to promote SMEs activity, not much progress seems to have been achieved, judging by the performance of the informal sector. There is very little information on how the SMEs sector is structured. Despite their major contributions to the economy, many SMEs do not grow into large scale enterprises to significantly contribute to employment creation and economic growth.

There are many constraints to growth and the objective of this study was to identify the factors that affect the growth of motor vehicle garages in Industrial Area, Nairobi. A descriptive design was used to study 54 garages in Industrial Area, Nairobi. Questionnaires which included questions on background, growth and constraints to growth were used to collect the data from the 54 garages. Data was analysed using Ms Excel and SPSS and the researcher identified eight factors that constrain the growth of SMEs. The factors, from high effect to no effect are inadequate technology, cost of machinery, low business skills, cost of energy (fuel and electricity), cost of raw materials, loan transaction cost, Interest rates and collateral for loans. Some factor had little or no effect at all on some of the garages, while some of the factors had very high effect. Transaction cost for loans had no effect on the highest number of garages, while cost of machinery had very high effect on most of the garages. The research further found out that growth in sales does not lead to a proportional growth in profits and employment.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

SMEs are widely defined in terms of their characteristics, which include the size of capital investment, the number of employees, the turnover, the management style, the location and the market share (Kasekende and Opondo, 2003). There is no international standard definition of a small firm. This is because a small firm in one industry and one in another industry might have different levels of capitalization, sales and employment. Thus, definitions which are objective in nature (considers size such as number of employees, sales, profitability , net worth etc) at a sectoral level, mean that in some sectors all firms may be regarded as small while in other sectors there are no possibly firms which are small (Storey 1994). 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 micro business. 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 a group, may need to include employee, sales, assets and liabilities data for the group as shown below.

Table 1: European Union 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 Union, 2011)

The Committee of Inquiry on Small Firms set up buy the UK government in its report called the Bolton Report (1971) recognised that a small firm has three characteristics; managed by its owner(s) in a personalised way, has relatively small share of the market in economic terms, it is indipedent in the sense that it does not form part of a larger enterprise and its ownership is relatively free from outside control in its principal decisions. However the

report supplemented the above general qualities by more specific quantitative measures depending on the industry type. A manufacturing enterprise with 200 employees or less was categorized as an SME while a construction firm with 25 employees or less was categorized as SME. A road transport enterprise with 5 vehicles or fewer was categorized as an SME.

According to Beaver (2002), SME's are much easier to describe than to define. Further there is no generally accepted operational or numerical definition of what constitute an SME. Countries and in many cases individual institutions within them have developed classifications and definitions that reflect the nature and compositions of that country's settings. Definitions may also reflect the nature and context of the industrial sector or the market under consideration; for example different criteria would be considered appropriate for firms engaged in manufacturing, construction, retailing hospitality and tourism, and professional services etc. The issue of small and micro enterprises definition and classification is a complex one and individuals should use their innate business and common sense to dictate suitable criteria that are helpful in a given sector or operating context.

According to Page and Soderbom (2012), SMEs are also diverse – ranging from small workshops making furniture, metal parts and clothing to medium-sized manufacturers of machinery. Some are services providers, such as restaurants, consulting and computer software firms. Some are traditional, "craftsman" enterprises that are satisfied to remain small, while others – epitomized by the Silicon Valley start-up - are innovation based and growth-oriented. All of this suggests that the romantic stereotype of the small enterprise as Bill Hewlett and David Packard, in their garage in Palo Alto growing into a global manufacturing giant is likely to be the exception rather than the rule.

1.1.1 Growth of SMEs

Firm growth is one of the most analysed fields in economics. Its impact on employment, industry concentration, firm survival and economic activity are reasons enough for it to be considered an issue of crucial interest (Carrizosa, 2007). Several arguments highlight the crucial importance of this field. First, firm growth is related very closely to firm survival. Specifically, firm growth is positively correlated with the likelihood of survival and firms that experience continuous growth have a higher probability of surviving in the market.

Second, firm growth is related to employment. A positive rate of growth implies a net creation of new jobs, and the vice versa is true. The third factor is the effect of business growth on economic growth. The economic dynamics are related to the growth of the firm. Fourth, firm growth is a way to introduce innovation and is a leading factor leading to technological change. For example, if a firm wants to grow and survive in a competitive industry, it needs to incorporate new technologies in order to be more efficient. In this sense, growth is a challenge a firm must meet by introducing innovation. Fifth, the evolution of the size of incumbents and new entrants determines market concentration. If small firms grow at a high rate, market competitiveness will increase. Conversely, increases in the size of large firms will affect market concentration. The regulation of market concentration to avoid the creation of monopolies and oligopolies has been one of the main interests of governments. The analysis of firm growth may therefore help to clarify the concentration of firms in a market. Firm growth also has practical consequences for policy-makers' decisions. Firm growth can increase employment and economic activity and policymakers can control these macroeconomic variables using firm growth policies. However, as the growth is heterogeneous between firms, it is crucial to know the internal and external characteristics of firms that affect their performance in the market. An ample knowledge of these features will enhance the effectiveness of public policies as well as their impact. A study of firm growth can shed light on the importance of the selection process after a firm has entered the market. Once a firm enters a market a selection process takes place and less efficient firms decrease in size and disappear and more efficient firms survive and grow. The analysis of firm growth will therefore show how firms behave once they enter the market, their market opportunities, turbulence and level of efficiency.

Only a tiny proportion of SMEs plan to and achieve growth in employment. Not all small businesses are growth oriented and scholars have identified a variety of characteristics that an established small firm may possess in order to achieve high growth and the factors are entrepreneurial, business based or integrated (Storey, 1994). 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. According to Koech (2011), profits and sales are the factors that influence business growth. Sales growth is easier to measure compared with some other indices and is much more likely to be

recorded. According to Investopedia, a firm is growing if it generates significant positive cash flows or earnings, which increase at significantly faster rates than the overall economy. A growth 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. There are many different ways to measure financial performance which should all be taken in aggregation. Revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt.

1.1.2 Factors affecting the growth of SMEs

Cost, capital market and capital access are the highest factors constraining SMEs growth into large business enterprises. Profits and sales are other factors that influence business growth (Koech, 2011). According to Robai (2006) SMEs face unique issues which affect their financial performance and diminish their ability to contribute effectively to sustainable growth. Some of those factors are common to all SMEs and others are unique to various clusters of SMEs. According to Thuranira (2009), interest rate, literacy levels, the number of lending institutions and the security for the loans are some of the factors that affect SMEs access to credit and hence affect their growth. Bokea et al. (1999) identify infrastructure, as it relates to provision of access roads, adequate power, water, sewerage and telecommunication as the major constraint in the development of SMEs. The factors that affect SMEs can be classified into three; financial costs, production costs and production efficiency factors.

1.1.3 Relationship between SMEs growth and factors affecting it

Business financing is a very important factor in growth and performance of businesses, Shepherd, et al. (2007) noted that one of the most difficult problems in the small businesses is obtaining financing. For the entrepreneur available financing needs to be considered from the perspective of debts versus equity and using external versus external funds. The external finances or credit facility is the type of finance that is obtained from persons other than the actual owners of the company (Manasseh, 2004). As Steel (1994) highlights, high transactions costs and risks associated with small loans, a lack of collateral and an historical orientation towards larger enterprises, continue to restrict small scale enterprise access to

formal credit. Credit facilities can be form of loans, debentures, overdrafts, lease finance, trade creditors, etc. Financial costs increases the finance cost of a firm; these factors are interest rates, collateral for loan and transaction costs. Interest rate is the amount charged, expressed as a percentage of principal, by a lender to a borrower. Interest can be defined as the return on capital (Saleemi, 2007). The rate of interest can be fixed or variable.

Collateral, also referred to as security is an asset pledged to get a loan. Collateral plays a major part in the accessibility of loans among the SME's since majority of them do not have collateral. Loans not secured are charged a higher rate of interest to cover the high risk. To make matters worse, most SMEs are not registered and banks and other financial institutions find it hard to deal with non formal entities. In the site www.allbusiness.com, collateral is highlighted as a major constraint to credit accessibility. According to Beaver (2002), the historical development and the associated culture of the banking system underpins the problem of the emphasis on the provision of collateral as a primary condition in lending. Banks have always adopted a risk averse stance towards small firms, with an accompanying inability to focus on the income generating potential of the venture, when analyzing the likelihood of loan repayment.

Transaction costs are costs relating to the issue of a loan. Banks charge fees for managing and issuing a loan. In Kenya the fees take various forms like loan negotiation fees, risk management fee etc. This costs are charged at the beginning of the loan or annually. They increase the cost of the loan. The costs are charged as a percentage of the loan or as a fixed amount. According to (CBK,2013), the average bank lending rate is was 16.97% in July 2013 having gone down from over 20% in 2011.This can result to decline in borrowing to finance investments through loan by the firms. Banks are particularly nervous of smaller businesses due to a perception that they represent a greater credit risk (Kariuki, 1995). Small scale borrowers are faced with higher nominal interest rates and higher explicit transactions costs of borrowing.

Production costs include cost of energy (Fuel and Electricity), cost of raw materials and cost of machinery. For most of the last century, cheap oil powered global economic growth. However, in the last decade, the price of oil has quadrupled, and that shift will permanently shackle the growth potential of the world's economies. Oil provides more than a third of the

energy we use on the planet every day, more than any other energy source. You can draw a straight line between oil consumption and gross-domestic- product growth. The more oil we burn, the faster the global economy grows. On average over the last four decades, a one percent bump in world oil consumption has led to a two percent increase in global GDP. That means if GDP increased four percent a year as it often did before the 2008 recession, oil consumption was increasing by two percent a year. Over the last four decades, every time oil prices have spiked, the global economy has entered a recession (Rubin 2012). Fuel is a major factor of production. Fuel is used to run machines for production and also for transport. 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). The negative impact of increasing energy costs might force the emerging SMEs to shut down their operations due to increased production costs (KAM, 2002). According to the World Bank doing business survey (2012), high cost of energy is one of the factors affecting growth of firms in Kenya. Most of the raw materials used in motor vehicle garages are exported. The cost is therefore determined by the international market, transport costs across the world and locally, government taxes and exchange rate fluctuations. Garages also require machinery to make their work faster and efficient. These machines are expensive to acquire and maintain and the technology required to maintain them may not be available locally.

Production efficiency is determined by how well a firm uses resources to maximize production. Efficiency is driven by technology and trained manpower. ICT is important to every firm whether big or small today; Manual operations result in inefficiencies such as high cost and slow decision making. Those firms than embrace the latest technology grow rapidly as opposed to firms resistant to change. Manufacturing uses machines which are expensive to buy and maintain for SMEs. According to Wanjohi and Mugure (2008), change of technology has posed a great challenge to small businesses. Since the mid-1990s there has been a growing concern about the impact of technological change on the work of micro and small enterprises. Even with change in technology, many small business entrepreneurs appear to be unfamiliar with new technologies. Those who seem to be well positioned, they are most often unaware of this technology and if they know, it is not either locally available or not affordable or not situated to local conditions.

Low business skills affect the performance of SMEs due to poor decision making, wastage in production and low outputs. This translates to high prices, industrial accidents and dissatisfied customers. Skilled employees are expensive to hire and sometimes not even available. Many SMEs owners or managers lack managerial training and experience. The typical owner or managers of small businesses develop their own approach to management, through a process of trial and error. Their management style is therefore likely to be more intuitive than analytical, more concerned with day-to-day operations than long-term issues, and more opportunistic than strategic in its concept (Hill, 1987). According to King and McGrath (2002), those with more education and training are more likely to be successful in the SMEs sector. Majority of those who run SMEs are ordinary lot whose educational background is lacking and hence they may not be well equipped to carry out managerial routines for their enterprises. According to Thuranira, (2009), the level of literacy is one of the factors affecting SMEs access to credit. Most institutions insist on well written business proposals and business records which most SMEs do not keep because of low levels of literacy. The lengthy loan application procedure could pose a challenge and discourage the less literate loan applicant. Majority of SMEs also fear applying for loans due to their inability to understand the loan application process. As Saleemi (2007) states, complete, accurate and precise information is necessary for financial decisions including obtaining business loans. Small and medium enterprises therefore require trained and experienced staff if they are to grow into large organizations and realize their true potential.

1.1.4 Motor Vehicle garages in Industrial Area

Small and Micro Enterprises (SMEs) play an important economic role in many countries. According to the KNBS Economic survey 2012, of all the 503,000 jobs created in 2011, 440,400 or 80.6 per cent were in the SMEs. This clearly shows that efforts to reduce joblessness should be channeled to the SMEs and informal sector. Motor vehicle garages in Kenya deal with motor vehicle body building, accidental repairs, reconditioning of old vehicles and customization. Most of the garages also act as training centres for mechanics. The garages operate as companies, partnerships and sole proprietorships. They form of employment is both permanent and casual, with casual employees being hired when there is a stretch on the available labour. The importance of the garages in the economy is not limited

to employment only. The garages also help in preventing economic waste and environmental degradation by repairing cars which would otherwise be grounded and dumped. They have also become sources of innovation, a fact that can be attested to by the Kenyan Matatu culture.

The growth in the Kenya Motor Vehicle industry has been very high in the recent past. The first vehicle in Kenya was introduced in 1905. In 1990 Kenya had 350,000 registered units and by 2009 the number had risen to 569,400 representing an average increase of 0.8% per year with a registration of 150 vehicles per day. In Kenya, as it's in most third world countries, 50% of all cars and motorcycles owned in the country are based in the capital city. The numbers of reported accidents have been showing an increasing trend from 10,300 in 1990 to 16,800 in 2000 and 17,400 in 2009. The annual economic cost of road traffic accidents is 5% of the country's Gross National Product (East African Orthopaedic Journal, 2009). As the number of vehicles increase, the need for garages grows also. This growth in the motor vehicle industry opens room for more employment and innovation. With the right technology, trained manpower and government support, some of the garages are potential motor vehicle assemblers and producers in the long run. It is worthwhile to note that manufacturing together with tourism, agriculture, wholesale and retail trade, ICT & Business Process Outsourcing (BPO) and Financial Services have been identified as some of the sectors with the potential to contribute to the envisaged 10% GDP growth for the achievement of vision 2030. Vision 2030 is the country's long–term development blueprint which aims to create a globally competitive and prosperous country providing a high quality of life for all citizens. It aspires to transform Kenya into a newly industrializing, middle income country by 2030.

1.2 Statement of the Problem

Globally, small and medium firms – those with less than 250 workers – account for nearly 80% of employment in the formal sector in low income countries (Ayyagari, Demirguc-Kunt and Maksimovic, 2011). When micro and informal firms are counted, the employment share of SMEs in developing countries rises to an estimated 90% of all workers. In Africa firms with more than 100 workers employ about 50% of the labor force. Medium scale enterprises (20-99 workers) constitute the second leading employment category with about 27% of the

labor force, and small firms employ a further 23%. However, consistent with the evidence for developing countries in general, small firms in Africa appear to create a disproportionate share of new jobs. In the African countries, about 47% of new jobs are created in firms with 5-19 workers (Page and Soderbom, 2012)

The Micro, Small and Medium Enterprise industry has for a long time been the buzzword in the world economy. It has been touted as the panacea to the growth of most developing economies. It still plays an important role in the provision of employment and contribution to the developed world's Gross Domestic Product (GDP). Kenya, which is considered as a market economy, relies heavily on SMEs to provide the much needed employment. Available estimates show that SMEs are a growing and vibrant stream with a lot of untapped potential and employ about 7.5 million Kenyans or 80 per cent of the country's total employment outside small-scale agriculture and contributes 20 per cent to the country GDP (Wandabusi, 2011). According to the KNBS Economic survey 2012, of all the 503,000 jobs created in 2011, 440,400 or 80.6 per cent were in the SMEs.

In Kenya, over 60% of SMEs are estimated to fail each year (KNBS, 2007). The health of the economy as a whole has a strong relationship with the health and nature of SMEs. However, despite government efforts in Kenya to promote SMEs activity, not much progress seems to have been achieved, judging by the performance of the informal sector. There is very little information on how the SMEs sector is structured. Despite their major contributions to the economy, many SMEs do not grow into large scale enterprises to significantly contribute to employment creation and economic growth.

There is a gap on the literature on SME growth due to lack of information or interest and the number of studies of SME sector has not matched their economic development. It is important to note the lack of empirical studies related to a specific sector. Prior research focused on factors inhibiting SMEs growth in a general perspective. However, a study by Njoroge (2012), focused on the factors influencing the performance of small scale horticulture farmers in Thika District. A study by Mwobobia (2012) focused on the challenges facing Small-Scale Women Entrepreneurs in Kenya.

This study seeks to investigate the factors that influence the performance of motor vehicle garages in order to develop an understanding of their dynamics for the development of support program and growth strategies and also for the growth of the economy as a whole. The research will seek to answer the following research question; how do financial costs, production costs and production efficiency affect the growth of SMES? The information is crucial in the evolution of appropriate policies for promoting SMEs development and increasing the sector's impact on poverty reduction.

1.3 Objective of the Study

The objective of the research is to establish the factors that have an effect on the growth of SMEs in Kenya.

1.4 Value of the Study

The research findings will be important in management of SMEs. The research findings on determinants of growth will be useful to the management of SMEs to identify and deal with factors hindering their performance and growth.

This study will be of help to policy makers and development partners to formulate policies to promote growth of SMEs. The government can utilize the results to promote its development agenda and Vision 2030. Development partners will also find this research useful in developing programs for funding of activities aimed at improving the growth of SMEs in Kenya.

This study will provide a contribution to the scholarly discourse concerning SMEs in Kenya. This will be important to 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 reviews the literature on the growth of the firm. It will look at the theories of growth of a firm, empirical study of previous international studies and topics specifically targeting the SME sector in Kenya.

2.2 Theories of the Growth of the Firm

Small business scholars have devoted much effort to examining the variations in the birth of small firms over time, space and sector (Storey, 1994) as well as the factors which impact on small business growth and demise. A review of small business and entrepreneur literature reveals many determinants of business success and growth including entrepreneurial and environmental factors. At the same time, the 'barriers to growth' literature (Storey, 1994) identifies key barriers and problems for small firms. A high proportion of firms are likely to cease to trade in the short term, while other firms which are currently small are moving towards becoming medium sized. Even so the highest numbers of SMEs are those which are small today and, even if they survive, are always likely to remain small-scale in operations. Not all small businesses are growth oriented and scholars have identified a variety of characteristics that an established small firm may possess in order to achieve high growth and the factors are entrepreneurial related, business related or integrated. However, no clear understanding, predictive theory or interrelated model emerges from the small business literature which can determine whether a small business will start up, grow, succeed or fail. Similarly, no simple pattern or ideal-type personality for pre-determining characteristics of business success or demise is identified. Rather, the literature points towards a complex set of interrelated situational and contextual factors that increase or decrease the probability that an enterprise will become a successful and growing small business (Tonge, 2001).

There has been no convergence of the theories of business growth. These may be due to the complexity involved in defining the firm (Carrizosa, 2007). Contributions from classic economic theory, the behaviorist theories, the stochastic growth theory and the learning models have helped to perceive the causes and effects of firm growth. This complexity has

led to the emergence of scholars with different perspectives and, more importantly, with different predictions of the evolution of growth. This is clearly seen from the variables used in the literature to measure firm growth and its determinants. Some theories focus on average size, some focus on internal characteristics and others focus on random variables. Firm size is however a major link in all the theories.

2.2.1 Behavioral Theory of the Firm

Nelson and Winter's (1982) evolution theory is loosely based on a biological evolutionary model, where organisms, with genetic material, evolve in response to their changing environment. Their goal is to use models of evolutionary theory to improve economic theory. They are solely interested in the understanding of economic problems, with the core concern of their evolutionary theory being the dynamic process by which firm behavior patterns and market outcomes are jointly determined over time. However, there is no sharp distinction between blind evolution and deliberate goal-seeking. This approach, where firms are both carried along by their changing environment and deliberately evolve to improve their position therein, is the critical contribution of Nelson and Winter toward firm strategy and ultimately the dynamic capabilities theory of the firm. While Nelson and Winter acknowledge the difficulty of deliberate direction in firm evolution, they do not espouse the impossibility of it. Nelson and Winter suggest a role for long-term strategic planning in the dynamic performance of the firm. Firms are no longer purely myopic and inevitably tied to their existing standard operating procedures. They have the ability to affect their chances of long-term survival, that is, to partially guide their evolution. They do not possess the absolute control of neo-classical managers, nor do they suffer from the evolutionary impotence of the behavioral theory. They have differential characteristics and abilities and thus have unique potential evolutionary paths. This limited but nonetheless existent adaptive control implies that firm strategy is not only possible, but also highly important because it has an impact on the survival and profitability of the firm.

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 (Cyert and March, 1963). Their work presents the firm as a complex organization defined by its unique goals, expectations, and standard operating procedures. Because each firm is uniquely

defined by these aspects, firms are heterogeneous and thus not easily modeled. This heterogeneity creates inequalities in both short and long-term performance, as each firm's unique characteristics make it better or worse suited than its rivals to succeed in a given environment. Cyert and March argue that a behavioral theory of the firm requires attention to organizational goals, expectations, choice, and control. Only through these characteristics can one truly understand how firms function.

2.2.2 Gibrat's Law on Growth of the Firm/ Law of Proportionate effect.

Gibrat (1931) suggested that proportionate growth rate of a firm is completely random and independent of firms' initial size or previous growth rates. This is known as Gibrat's Law or the Law of Proportionate Effect. Factors that influence firm growth such as increase in demand, management talent and innovation, organisational structure and luck, are distributed across firms in a manner which cannot be predicted from information about firm's current size or its previous growth performance (Goddard et al ., 2001). 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.

While Gibrat's theory had little immediate impact, the 1950s and 1960s saw a revival of stochastic firm growth theory. The main implications of the LPE: large and small firms should have the same average proportional growth; no heteroscedasticity in growth rates; the firm size distribution should be log-normal; and the relative dispersion of firm sizes should increase over time. Using these properties as a basis for regression-based tests, scholars found no evidence against the LPE for various industries during the 1930s, 1940s and 1950s. As pointed out by Sutton (1997), the contribution of Mansfield (1962) is of particular interest. Mansfield points out that the previous inconclusive findings about the validity of the LPE emanates from using three different types of samples: all firms (including those that fail to survive during the period); surviving firms only; and well established firms (i.e. firms which have exhausted economies of scale). Overall, Mansfield concludes that smaller firms have higher and more variable growth rates than large firms, while there is support for the LPE for firms which have exhausted the economies of scale.

According to Sutton, (1997), there is no optimum size to which firms will converge, the likelihood of growth is independent of initial size and 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”

In the study of the firms the scholars do not agree that the foundation and the outcome of Gibrat's law are empirically correct. This approach has been criticised in the literature because it assumes that the firm growth process is a random walk in which factors such as luck have a high weight. Nelson and Winter (1982) propose an evolutionary model of firm growth which implies that there is some serial correlation in growth: “success breeds success and failure breeds failure”. This is in contrast to purely stochastic models of growth, such as the LPE. The model avoids strict maximizing assumptions in favour of weaker rationality assumptions, and raises some fundamental questions as to the appropriateness of making strong rationality and informational assumptions on agents who face continuing technological change. Instead of optimising, agents tend to react automatically to changes in the market environment using routines which are specific to the firm. Successful routines which have produced growth in the past are likely to do so in the future. It is true that circumstances change, but successful firms have successful routines for changing previous methods to meet new market environments.

2.3 Empirical Review

2.3.1 Local Empirical Review

Bowen, et al. (2009) studied the management of business challenges among small and micro enterprises in Nairobi-Kenya. Small and Micro Enterprises (SMEs) play an important economic role in many countries and in Kenya, for example the SME sector contributed over 50% of new jobs created in 2005. Despite their significance, SMEs are faced with the threat

of failure with past statistics indicating that three out five fail within the first few months. This study sought to understand how SMEs manage the challenges they face which seems to evolve according to different macro and micro conditions. This study employed stratified random sampling to collect data from 198 businesses using interviews and questionnaires. The data was analysed descriptively and presented through figures, tables and percentages. Competition among themselves and from large firms, lack of access to credit, cheap imports, insecurity and debt collection were found to be the challenges facing SMES. They found out that credit constraint seemed to be easing up when compared to previous researches and relevant training or education is positively related to business success. Fair pricing, discounts and special offers, offering a variety of services and products, superior customer service and continuously improving quality of service delivery were found to be the strategies used to overcome the challenges faced by SMEs. Further, the research concludes that business success is a consequence of embracing a mix of strategies.

A study by Mwobobia (2012) sought to identify the challenges facing small scale women entrepreneurs in Kenya and initiatives put in place to counter the challenges. The study employed desktop research. The MSEs National Baseline survey, recorded that there are 612,848 women in Micro and Small Enterprises (MSEs) in Kenya, accounting for 47.4 per cent of all those in MSEs. The study showed that women tended to operate enterprises associated with traditional women's roles, such as hairstyling. The small and micro enterprises (SMEs) play an important role in the Kenyan economy such as creating jobs. However they face serious challenges such as lack of finance, discrimination, problems with the city council, multiple duties, poor access to justice, lack of education, among others. The study established that many stakeholders from both public and private sector are helping empower women entrepreneurs in Kenya: such as formation of women enterprise fund, establishing of women's university of science and technology, formal and informal financial support, and donor initiatives among others have been put in place. The study recommends that women in entrepreneurs need to be accepted and supported financially, legally and more capacity building should be made available. Further research was recommended in this area.

A study by Koech (2011) examined the financial factors affecting growth of SMEs in Kenya, she found out that the SME Sector has continued to play an important role in the Kenyan

economy. 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.

A study by Thuranira, (2009) examined the factors affecting accessibility of credit facilities among the small and micro-enterprises in Meru CBD. He found out that literacy, the number of credit lending institutions available, interest rates charged on loan and the demand for collateral affect accessibility of credit facility among the SME's. Due to low level of literacy few read news and financial publications where these services are advertised. They feared the loan application since they did not understand the process. High interest rates charged by banks lead them to prefer personal savings and family sources of income. Since majority did not own assets they could not provide collateral for loans which is requirement to access loans. Majority of the respondents thought there were less financial institutions, compared to demand for loan facilities. Therefore, most respondents resulted to other sources of finances. Descriptive research design was applied with questionnaires as the main instrument of data collection from the SMEs in Meru CBD with a revenue of under Shillings five million. The researcher was unable to obtain the exact number of SME traders in the meru CBD, since there is no existing database, as most of them are neither registered nor licensed by the local authorities. Therefore, a randomly selected sample size of fifty SME's were selected from across every street to maintain objectivity.

2.3.1 International Empirical Review

A study by Olawale and Garwe (2010) investigated the obstacles to the growth of new SMEs in South Africa using the principal component approach. Even though SMEs were seen as a significant component of the solution to South Africa's development issues, most new SMEs do not grow; their failure rate in South Africa at 75% is one of the highest in the world. The

objective of the study was to investigate the internal and external environmental obstacles to the growth of new SMEs. As a new business develops, it exists and survives in an environment characterized by both internal and external factors which impact negatively on the new business' survival. Thirty variables were identified as obstacles. The principal component analysis with varimax rotation was used to reduce the variables to five clusters. The most important obstacle was termed Financial which is largely an internal factor. The other obstacles respectively as determined by the PCA were Economic (external), Markets (external) Management (internal) and Infrastructure (external).

A study by Olusola (2011), on accounting skill as a performance factor for small businesses in Nigeria found out that small businesses are vehicles for growth and development of a nation thus require much attention. Further, small businesses are affected by several many factors with major emphasis on funding. A Survey research design was used for this research and data was collected from a sample of small business owners to determine the relationship between accounting skill and small business performance in Nigeria. Despite the increased number of small businesses in Nigeria, the rate of business failure is alarming. It is expected that small businesses entrepreneurs possess distinct skills found to have greater effect on their performances for their development. The study investigated the effect of accounting skill on entrepreneur performance for the success of small businesses in Nigeria. Accounting skill was found to be contributory to entrepreneurial performance and as such, owner entrepreneurs are advised to embark on capacity building in accounting skill in the area of financial management and record keeping while the government makes preparation of financial statement for performance monitoring mandatory for small business owners.

Nkonoki (2010) studied the factors limiting the success and/or growth of small businesses in Tanzania. Corruption, in access to finances/capital constraint, government policy, unfavorable economic conditions, people factor/ lack of needed talent, lack of proper record keeping, lack of or improper professional advice and consultation, theft/cheating and lack of trust in doing business, lack of a proper business plan/vision for the business, Inadequate education and training and lack of background and experience in the business have emerged as the key constraints to business the growth of small firms in Tanzania. The author saw it as

a merit to group the results into two groups; limiting factors that are internal to the firm (Inadequate education and training, lack of a proper business plan and capital constraint) and those that are external to the firm (comprising of corruption, government policy and bureaucratic processes). An empirical study model was used and nine interviews were conducted which included six small business owners and three officials representing three organizations (Bank M Tanzania Ltd, Small industries Development Organisation and Tanzania Harbors Authority) . A number of factors identified as the reasons as to why small firms in Tanzania fail to grow were identified and discussed in light of literature concerning factors influencing growth of small firms and barriers to growth in small firms. Interviews were conducted to evaluate the major factors influencing small business growth.

2.4 Summary

While we can gather from the literature and empirical review that finance is the major constraint to SME growth, other factors also play a major role in constraining the growth of a firm. SMEs are affected more due to their lack of economies of scale, lack of professional management, ignorance from the government, low or no credit rating, less diversification and high dependence on credit. SMEs will continue to perform poorly if the issues of capital access and cost, production costs and efficiency are not addressed. There is therefore the need for more effort to be put into growing SMEs into large companies and multinational players if Kenya is to grow into a middle class income economy as envisaged by Vision 2030. The government commitment to foster the growth of SMEs emerged as one of the key strategies in the 1986 report Economic Management for Renewed Growth. It was reinforced as a priority in the 1989 report, The Strategy for Small Enterprise Development in Kenya, a document that set out the mechanisms for removing constraints to growth of the SME sector. In 1992, the government published the SME policy report, Sessional Paper No. 2, Small Enterprises and Jua Kali Development in Kenya. This report was reviewed in 2002, leading to a new policy framework that provides a balanced focus to SME development in line with the national goals of fostering growth, employment creation, income generation, poverty reduction and industrialization. The current development plan, Vision 2030, aims at creating a globally competitive and prosperous nation with a high quality of life by 2030. This blue print aims at transforming Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens in a clean and secure environment and has

also laid a major emphasis on SMEs as agents for economic growth and development. The vision is anchored on three key pillars; economic, social and political governance.

Complete information on the growth of the SMEs is not readily available, and when available, it is too general. There is therefore a need to research sector related issues to ensure there is no generalization when developing programs for developing SMEs.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that was used for the study, the research design and target population and how data collection and analysis was done. It presents a description of how the study was approached and planned.

3.2 Research Design

Research design is a plan outlining techniques and strategies on how information is to be gathered for an assessment or evaluation that includes identifying the data gathering method, the instruments to be used, how the instruments will be administrating and how the information will be organized and analysed (Lawrence et al., 2012). According to Chandran (2004), descriptive study describes the existing conditions and attitudes through observation and interpretation techniques. Robson, (2002) revealed that descriptive research portrays an accurate profile of persons, events, or situations. The descriptive research design is one of the best methods for conducting research in human contexts because of portraying accurate current facts through data collection for testing hypothesis or answering questions to conclude the study and was used for this research.

3.3 Population

According to the Nairobi County Government, there are 54 garages in Industrial Area, a population not large enough to warrant sampling and a census was therefore conducted. Primary data collected from the census is more reliable, accurate and up-to-date and hence the choice of this method. This ensured that the findings are accurate, valid and reliable as possible regarding the responses on the growth of SMEs.

3.4 Data Collection

The study used primary data. A formal list of questionnaire on the factors that affect the growth of SMEs was prepared and the researcher used interviews to obtain data from the respondents as required by the questionnaire. The method was preferred because the face to face encounter encourages the respondents to be more co-operative in providing the

information and the researcher will clarify and elaborate the purpose of research and answer any other questions from the respondents.

3.5 Data Analysis

Cooper & Schindler (2003) points out that data analysis is a process of bringing order, structure and meaning the mass information. The questionnaire responses were grouped into various categories for analysis using descriptive statistics. Statistical data analysis packages such as Ms. Excel and SPSS were used in the analysis of the information obtained and the results presented in tables and graphs.

3.6 Analytical model

A Likert scale model with five levels of measurement namely no effect, low effect, medium effect, high effect and very high effect was used to measure the independent variable. The growth of the firm was measured through sales growth. According to Koech (2011), sales growth is easier to measure compared with some other indices as it is much more likely to be recorded by SMEs.

The relationship between dependent variable G and independent variables A is illustrated below.

$$\mathbf{G=f(A_1+A_1+A_3+A_4+A_5+A_6+A_7+A_8)}$$

Where:

G: Growth of the firm

A1: Interest Rates	A5: Cost of Machinery
A2: Collateral for Loans	A6: Cost of Raw Materials
A3: Transaction Costs	A7: Technology utilization
A4: Cost of Energy	A8: Business skills

The expected relationship of the factors is a positive linear relationship; when the above factors are favorable the SMEs will experience growth and stagnate or exit from operation when the factors are not favorable.

After factoring in autonomous growth and error, the model will be as follows;

$$G=\alpha+\beta_1A_1+\beta_2A_2+\beta_3A_3+\beta_4A_4+\beta_5A_5+\beta_6A_6+\beta_7A_7+\beta_8A_8+\varepsilon$$

Where:-
α: Autonomous growth **β**:Slope **ε**:Error

In order to determine the strength of the relationship, independent t-tests and analysis of variance were calculated at the 95% confidence interval to establish if there exist significant differences.

3.7 Data Reliability and Validity

Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are (Joppe, 2000). Validity is high if the study contains what one wants to study and nothing else. Validity takes three forms: construct, internal and external. Construct validity refers to data collection, internal validity is a link between theory and empirical research and external validity refers to the domain to which the findings can be generalized. Construct validity was addressed by administering the questionnaires to the SMEs which were being studied. Internal validity was addressed by considering existing theories and external validity was be addressed by studying all the firms in the research area.

Reliability demonstrates that the study can be repeated with the same outcome. Joppe, (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study. If the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. The researcher used clear and well defined questionnaire as a method of data collection. Questions by the respondents were also clarified. This is easily applicable to another sample to test the reliability of the results. However, subjectivity that may distort responses cannot be over ruled.

CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter shows the findings of the study and also discusses them in depth. The study targeted the 54 motor vehicle garages operating in Industrial Area of Nairobi and registered by the Nairobi County Government. A census was done on all this firms.

4.2 Summary of Statistics

4.2.1 Age of the Businesses

Most of the motor vehicle garages (70%) have been in operation for more than five years. The garages in operation for one year, two years, three years, four years and five years were 6%, 9%, 7%, 4% and 4% respectively.

Table 4.2: Number of years in business

NUMBER OF YEARS	NUMBER OF FIRMS	PERCENTAGE
1	3	6
2	5	9
3	4	7
4	2	4
5	2	4
Above 5 yrs	38	70
Total	**54**	**100**

Source: Research findings

4.2.2 Form of ownership

Most of the garages operate as companies. Only 19% operate as sole proprietorships while 4% are partnerships, with companies at 78%.

Table 4.3: Form of Business ownership

OWNERSHIP	NUMBER OF FIRMS	PERCENTAGE
Sole Proprietorship	10	19
Partnership	2	4
Company	42	78
Others	0	0
Total	**54**	**100**

Source: Research findings

4.2.3 Day to day management of the operations of the business

Most of the owners run their businesses, whether companies or sole proprietorships. Only 28% of the businesses are run by professional managers and 13% by others. It is worthwhile to note that all businesses run by 'others' are run by a member of the family of the owner.

Table 4.4: Management of the business

BUSINESS MANAGER	NUMBER OF FIRMS	PERCENTAGE
Owner	32	59
Professional Manager	15	28
Others	7	13
Total	**54**	**100**

Source: Research findings

4.2.4 Level of training of the business manager

Only 6% of the management has university education. Majority of the managers at 59% have technical college education, 22% secondary school education while 13% have other form of training.

Table 4.5: Level of training of managers

LEVEL OF TRAINING	NUMBER OF FIRMS	PERCENTAGE
Secondary School	12	22
Technical College	32	59
University	3	6
Others	7	13
Total	**54**	**100**

Source: Research findings

4.2.5 Gender of the entrepreneur/ main shareholder

Table 4.6: Gender of the entrepreneur

GENDER	NUMBER OF FIRMS	PERCENTAGE
Male	48	89
Female	2	4
Others	4	7
Total	**54**	**100**

Source: Research findings

Most of the garages are owned by men, at 89%. Women owned 4% of the garages while 7% of the firms were owned by other companies.

4.3. Constraints to growth

This research aimed at establishing the constraints to growth of SMEs. Respondents were given a list of constraints picked by the researcher and asked to rank their effect on their firms' growth. The ranking scale ranged from 1-5 with 1,2,3,4 and 5 being no effect, low effect, medium effect, high effect and very high effect respectively.

Table 4.7: Factors affecting growth

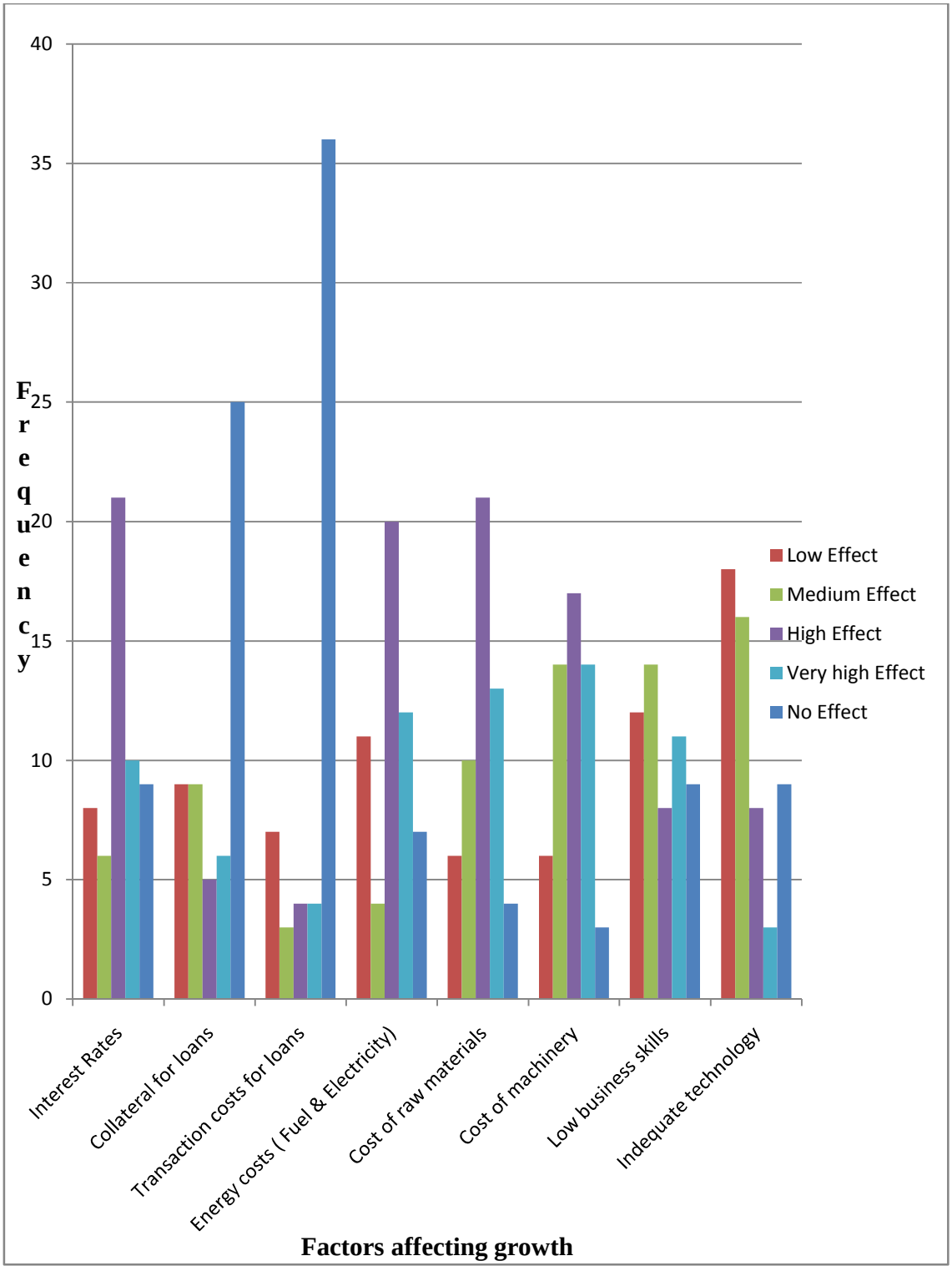
FACTOR\SCALE	No Effect	Low Effect	Medium Effect	High Effect	Very high Effect	Grand Total
Interest Rates	9	8	6	21	10	**54**
Collateral for loans	25	9	9	5	6	**54**
Transaction costs for loans	36	7	3	4	4	**54**
Energy costs (Fuel & Electricity)	7	11	4	20	12	**54**
Cost of raw materials	4	6	10	21	13	**54**
Cost of machinery	3	6	14	17	14	**54**
Low business skills	9	12	14	8	11	**54**
Inadequate technology	9	18	16	8	3	**54**

Source: Research findings

Interest rates had a high effect on the growth of SMEs with 57% of the respondents ranked its effect on SME growth as above average. Interest rates had no effect on the growth of 17% of the respondents and low effect on 15% of the respondents. It had medium effect on 11% of the respondents.

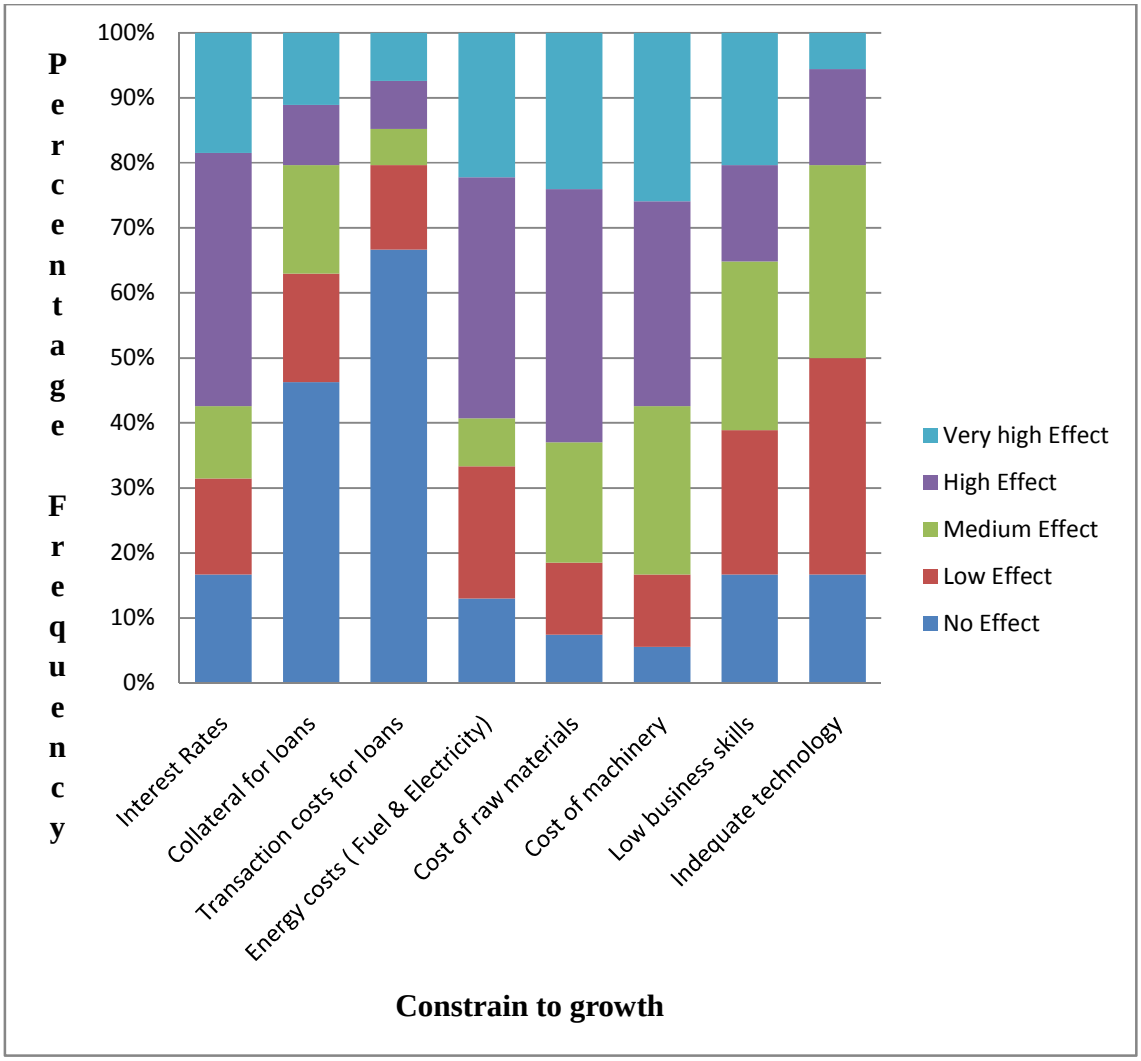
Collateral for loans had little effect on the growth of the respondents. The demand for collateral had below average effect on 63% of the respondents and above average effect on 20% of the respondents. Demand for collateral had an average effect on 17% of the respondents. Most of the respondents had enough machinery to pledge as security.

Figure 4.1: Frequency Polygon on Factors Affecting Growth



Source: Research findings

Figure 4.2: Percentage Frequency polygon on Factors Affecting Growth



Source: Research findings

Transaction cost had low effect on the growth of the SMEs. It had below average effect on 80% of the respondents and average effect on 6% of the respondents. It had above average effect on only 14% of the respondents. The transaction costs were negligible to affect the growth of the SMEs.

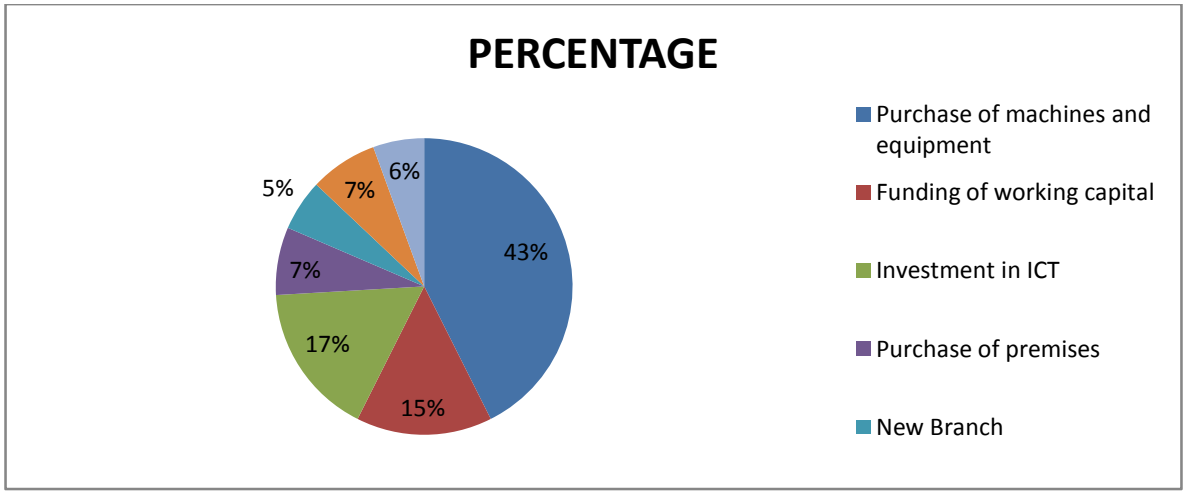
Costs of energy affect the growth of most of the SMEs. It had above average effect on 59% of the respondents, an average effect on 7% of the respondents and below average effect on 33% of the respondents. Cost of energy had a lot of effect on the growth of the garages that

were mechanized while it had little or no effect on the garages that were manual or partly mechanized. The cost of raw materials had an effect on the growth of most of the SMEs. It had an above average effect on 63% of the respondents, average effect on 19% of the respondents and below average effect on 18% of the respondents. Cost of machinery had above average effect on 57% of the respondents, average effect on 26% of the respondents and below average effect on 17% of the respondents. Most of the machinery is imported and hence the high effect as the machinery is expensive. Business skills had above average effect on 35% of the respondents. Most of the businesses had acquired enough skills through training and experience. It had below average effect on 39% of the respondents and average effect on 26% of the respondents. Inadequate technology had low effect on the growth of the respondents. This is because most of the garages were mechanized. It had below average effect on 50% of the respondents, average effect on 30% of the respondents and above average effect on 20% of the respondents.

4.4 Major investment in the last five years

Only 6% of the respondents have not made a major investment. This 6% are firms that have been in the market for only one year. Most of the firms, at 43% have purchased machines and equipment, 15% have invested in extra working capital, 17% have invested in ICT, 7% have purchased premises, 6% have opened new branches and 7% have made other types of investment.

Figure 4.3: Investments in the last five years

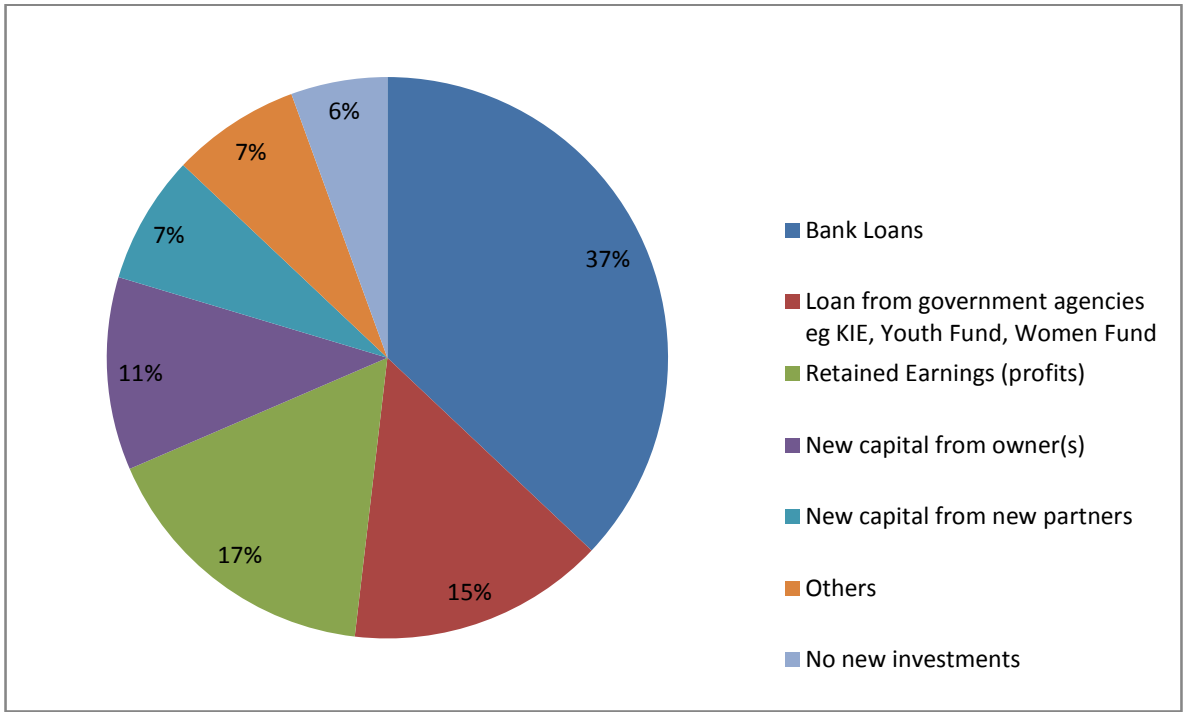


Source: Research findings

4.5 Major sources of finance for new investments

Most of the garages used bank loans to finance the new investments. This explains why interest rates had an above effect on the growth. 37% of the garages used bank loans to finance new investments, 17% of the garages used retained earnings, 15% used loans from government agencies, 11% used new capital from owners, 7% of the garages got new capital from new shareholders, 7% used other types of finances and 6% of the garages had no new investments.

Figure 4.4: Sources of finance



Source: Research findings

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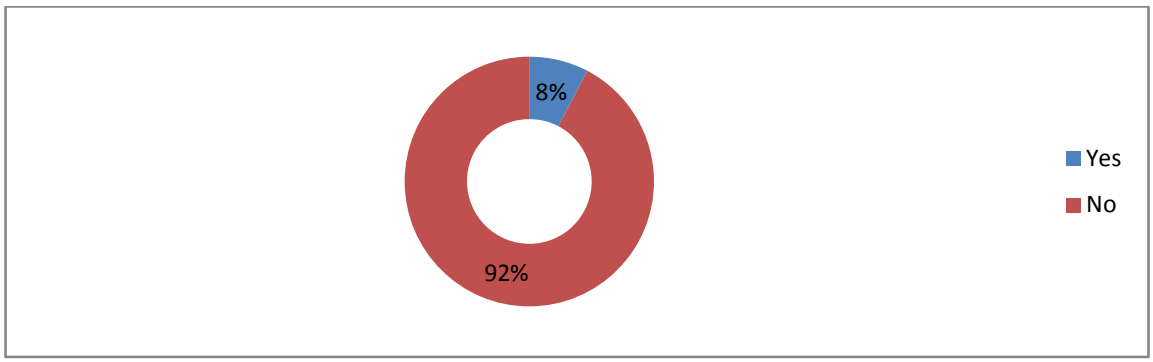
4.6 Implementation of desired investments.

Only 8% of the garages have been able to implement all their desired investments. 92% of the garages have not been able to implement their strategies. Most of them attributed their failure to invest as planned to lack of finances.

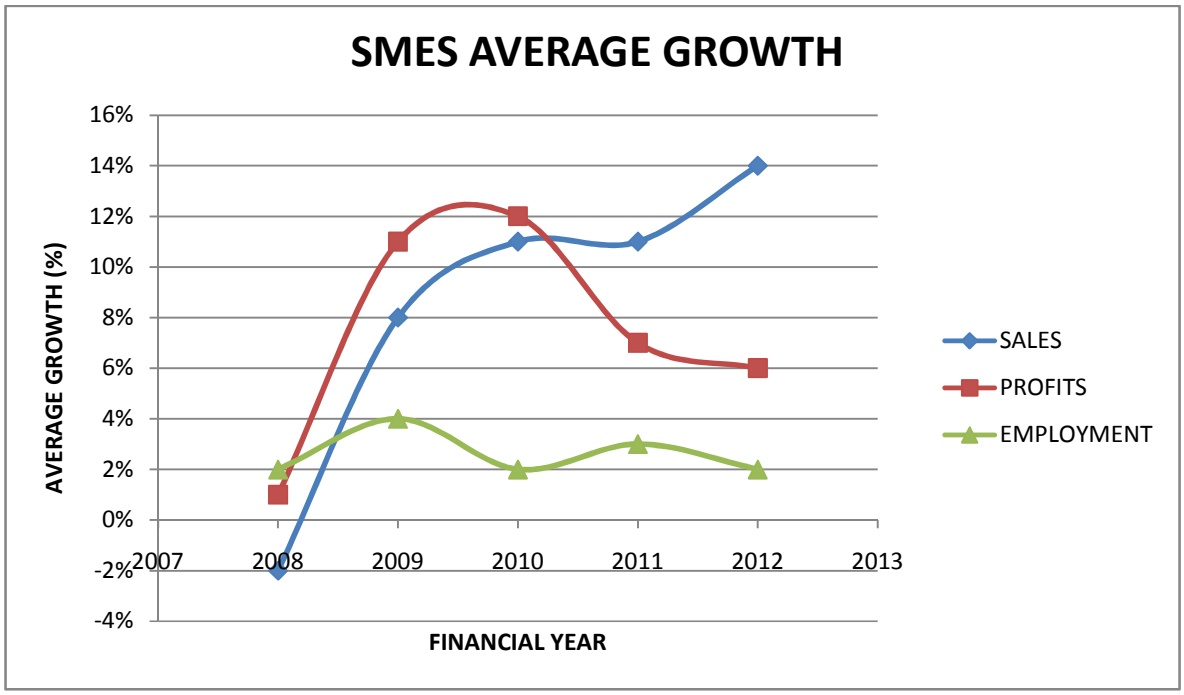
Figure 4.5: Implementation of desired investments



Source: Research findings

4.7 Average growth in sales, Profits and Employment

Figure 4.6: Average growth rate of the SMEs



Source: Research findings

In the year 2008, sales dropped by 2% while profit and employment grew by 1% and 2% respectively. The drop in sales could be attributed to the effects of the post election violence that rocked the country that year. In the year 2009, sales grew by 8% while profits and employment grew by 11% and 4% respectively. In the year 2010, sales grew by 11% while profits and employment grew by 12% and 2% respectively. The year 2011 also showed positive growth with sales, profits and employment increasing by 11%, 7% and 3%. In the year 2012, sales grew by 14% and profits and employment grew by 6% and 2% respectively. The reduction in growth in profitability in the year 2011 and 2012 could be attributed to the high interest rates that banks were charging for the loans and also the high inflation in the two years that led to sharp increases in the prices of raw materials and sharp increases in prices of fuel.

4.8 Regression Analysis

Multiple regression was used for statistical analysis with dependent variable being sales growth and independent variable being financial constraints factors.

Table 4.8: Regression statistics

Regression Statistics	
Multiple R	0.78
R Square	0.6084
Adjusted R Square	0.5388
Standard Error	5.2102
Observations	54

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	1897.674	237.2092	8.738162	0.000000414
Residual	45	1221.586	27.14635		
Total	53	3119.259			

Source: Research findings

The column labeled F gives the overall F-test of H0: $\beta_2 = 0$ and $\beta_3 = 0$ versus Ha: at least one of β_2 and β_3 does not equal zero. Since 0.00000041 < 0.05, we do reject H0 at significance level 0.05. We therefore conclude that the parameters are jointly statistically insignificant at significance level of 95%.

R-square measures the proportion of the variation in the dependent variable that was explained by variations in the independent variables.

The values of R^2 lie between zero and unity.

$0 \leq R_2 \geq 1$

A value of unity implies that 100 per cent of the variations of dependent variable have been explained by the variations in the explanatory variables. On the other hand, a value of zero implies that no variations in the dependent variable are explained by the variations in the independent variable. From the study, a value of 0.6084 is attained for the coefficient. This means that 60.84 per cent of the variations of the dependent variable have been explained by the explanatory variations and only 39.16 per cent of the variations are unexplained and are taken care of by the error term. The regression model therefore has a good fit.

Table 4.9: Regression Coefficient Matrix

		Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
B_i	Intercept	48.06	4.64	10.35	0.00	38.71	57.41
B1	Interest Rates	-0.60	0.55	-1.08	0.28	-1.71	0.51
B2	Collateral for loans	-0.45	0.55	-0.82	0.42	-1.55	0.65
B3	Loans transaction cost	-0.83	0.59	-1.42	0.16	-2.01	0.35
B4	Energy costs	-1.30	0.55	-2.34	0.02	-2.41	-0.18
B5	Cost of raw materials	-1.07	2.36	-0.45	0.65	-5.82	3.69
B6	Cost of machinery	-2.23	2.41	-0.93	0.36	-7.09	2.62
B7	Low business skills	-1.73	0.54	-3.21	0.00	-2.82	-0.65
B8	Inadequate technology	-2.88	0.69	-4.15	0.00	-4.28	-1.48

Source: Research findings

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

$$\mathbf{G=48.06-0.6A_1-0.45A_2-0.83A_3-1.3A_4-1.07A_5-2.23A_6-1.73A_7-2.88A_8}$$

Column "Coefficient" gives the least squares estimates of β_j. Column "Standard error" gives 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: $\beta_j \neq 0$. 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-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. 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.

Test of Statistical Significance

The coefficient of Interest Rates has estimated standard error of 0.55, t-statistic of -1.08 and p-value of 0.28. It is therefore statistically significant at significance level of 95% as p-value>t-statistic. The coefficient of collateral for loans estimated standard error is 0.55, t-statistic of -0.82 and p-value of 0.42. It is therefore statistically significant at significance level of 95% as p-value>t-statistic. The coefficient of loan transaction cost has a standard error of 0.59, t-statistic of -1.42 and p-value of 0.16. It is therefore statistically significant at significance level of 95% as p-value>t-statistic. The coefficient of energy cost has an estimated standard error of 0.55, t-statistic of -2.34 and p-value of 0.02. It is therefore statistically significant at significance level of 95% as p-value>t-statistic.

The coefficient of cost of raw materials has a standard error of 2.36, t-statistic of -0.45 and p-value of 0.65. It is therefore statistically significant at significance level of 95% as p-value>t-statistic. The coefficient of cost of machinery has estimated standard error of 2.41, t-statistic of -0.93 and p-value of 0.36. It is therefore statistically significant at significance level of 95% as p-value>t-statistic. The coefficient of low business skills has estimated standard error of 0.54, t-statistic of -3.21 and p-value of 0. It is therefore statistically significant at significance level of 95% as p-value>t-statistic. The coefficient of inadequate technology has an estimated standard error of 0.69, t-statistic of -4.15 and p-value of 0. It is therefore statistically significant at significance level of 95% as p-value>t-statistic.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of key findings, the research conclusions, explains limitations of the study and recommendations for further research.

5.2 Key findings

The objective of the study was to find out the factors that affect the growth of SMEs. Data was collected using a questionnaire from all the garages in Industrial Area, Nairobi. The data was checked for completeness and it was coded and formatted before being analyzed to be understandable.

Of all the garages in Industrial Area, 70% have been in operation for more than five years. The garages in operation for one year, two years, three years, four years and five years were 6%, 9%, 7%, 4% and 4% respectively. Only 19% operate as sole proprietorships while 4% are partnerships, with companies at 78%. Only 28% of the businesses are run by professional managers and 13% by others, with owner running 59% of the garages are run by their owners. Majority of the managers at 59% have technical college education, 22% secondary school education while 13% have other form of training. Only 6% of the management has university education. Most of the garages are owned by men, at 89%. Women owned 4% of the garages while 7% of the firms were owned by other companies.

Only 6% of the respondents have not made a major investment in the last five years. This 6% are firms that have been in the market for only one year. Most of the firms, at 43% have purchased machines and equipment, 15% have invested in extra working capital, 17% have invested in ICT, 7% have purchased premises, 6% have opened new branches and 7% have made other types of investment. Bank loans were used by the highest number or garages to finance growth. Most of the garages used bank loans to finance their new investments. While 37% of the garages used bank loans to finance new investments, 17% of the garages used retained earnings, 15% used loans from government agencies, 11% used new capital from

owners, 7% of the garages got new capital from new shareholders, 7% used other types of finances and 6% of the garages had no new investments. Only 8% of the garages have been able to implement all their desired investments. 92% of the garages have not been able to implement their strategies. Most of them attributed their failure to implement their desired investments to lack of finances.

Except for the year 2008, sales have been increasing for all the other years. The drop in sales in the year 2008 could be attributed to the effects of the post election violence that rocked the country that year. From the year 2008 to 2012, sales have increased at an increasing rate except for the year 2010 and 2011 when the growth was constant at 11%. Profits increased at an increasing level between 2008 and 2010, and increased at a decreasing rate between 2011 and 2012. The reduction in growth in profitability in the year 2011 and 2012 could be attributed to the high interest rates that banks were charging for the loans and also the high inflation in the two years that led to sharp increases in the prices of raw materials and sharp increases in prices of fuel. The growth in employment has been at a much lower rate than the growth in sales and profits. Employment grew at 2% in 2008 despite the drop in sales. It also grew at 4%, 2%, 3%, and 2% in the year 2009, 2010, 2011 and 2012 respectively.

This research aimed at establishing the constraints to growth of SMEs. Respondents were given a list of constraints picked by the researcher and asked to rank their effect on their firms' growth. The ranking scale ranged from 1-5 with 1,2,3,4 and 5 being no effect, low effect, medium effect, high effect and very high effect respectively. Interest rates had a high effect on the growth of SMEs with 57% of the respondents ranked its effect on SME growth as above average. Collateral for loans had little effect on the growth of the respondents. The demand for collateral had below average effect on 63% of the respondents and above average effect on 20% of the respondents. Demand for collateral had an average effect on 17% of the respondents. Most of the respondents had enough machinery to pledge as security. Transaction cost had low effect on the growth of the SMEs. It had below average effect on 80% of the respondents and average effect on 6% of the respondents. It had above average effect on only 14% of the respondents. The transaction costs were negligible to affect the growth of the SMEs. Costs of energy affect the growth of most of the SMEs. It had above average effect on 59% of the respondents, an average effect on 7% of the respondents and

below average effect on 33% of the respondents. Cost of energy had a lot of effect on the growth of the garages that were mechanized while it had little or no effect on the garages that were manual or partly mechanized. The cost of raw materials had an effect on the growth of most of the SMEs. It had an above average effect on 63% of the respondents, average effect on 19% of the respondents and below average effect on 18% of the respondents. Cost of machinery had above average effect on 57% of the respondents, average effect on 26% of the respondents and below average effect on 17% of the respondents. Most of the machinery is imported and hence the high effect as the machinery is expensive. Business skills had above average effect on 35% of the respondents. Most of the businesses had acquired enough skills through training and experience. It had below average effect on 39% of the respondents and average effect on 26% of the respondents. Inadequate technology had low effect on the growth of the respondents. This is because most of the garages were mechanized. It had below average effect on 50% of the respondents, average effect on 30% of the respondents and above average effect on 20% of the respondents.

5.3 Conclusions

The researcher identified eight factors that constrain the growth of SMEs. The factors, from high effect to no effect are inadequate technology, cost of machinery, low business skills, cost of energy (fuel and electricity), cost of raw materials, loan transaction cost, Interest rates and collateral for loans. Some factor had little or no effect at all on some of the garages, while some of the factors had very high effect. Transaction cost for loans had no effect on the highest number of garages, while cost of machinery had very high effect on most of the garages.

It is also worthwhile to note the growth in SMEs does not lead to a proportional growth in sales, which is a pointer of economies of scale. Growth in sales does not lead to a proportional growth in profits. It is also notable that some of the firms have opened new branches, and others have even acquired the premises they operate in. Whereas the sales have been growing in the period reviewed, it is advisable that the firms diversify to move from motor vehicle repairs to body building and finally to assembly. The firms can also join hands and incorporate a big company to enjoy the economies of scale.

It is also notable that most of the entrepreneurs run their businesses. Whereas their qualification, whether from education or experience is not doubtable, hiring an external party to run the businesses could lead to more growth. It is also worrying to note the low level of women entrepreneurs in this sector. The government and development partners should at the forefront to inform women of the opportunities available in this sector to encourage them to invest in the sector. It is however notable that most of the entrepreneurs have realized the importance of incorporation and are running their businesses as a company.

5.4 Limitations of the Study

This researcher faced various limitations when conducting this research. The major problem was business owners' suspicion that we were KRA officers. We were also turned away at various business enterprises as the owners or managers were not available at the time. Other respondents thought we would leak out their trade secrets and others asked for compensation. There were also issues with communication, as some of the officers assigned to us could not really comprehend some of the questions we had.

Some of the businesses did not have formal records and had to do computations to give us the figures we wanted. In some businesses, I had to go back after a day or two to allow the oners or managers get the data I wanted.

5.5 Recommendations for Further Research

There needs to be initiatives to have a common ground on what really constitutes SMEs in Kenya. This will enable more comparability of studies in the future. All the information on SMEs needs to be consolidated and a proper research carried out on all the factors affecting the growth of SMEs, and also on how the factors affect SMEs. Simulations can also be done eg through provision of capital, cheap loans, training etc and see how this affects the small businesses. There should also be a study to determine the reason for the low number of women entrepreneurs in this sector.

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APENDICES

SURVEY QUESTIONNAIRE

Part one: General Information

1. Company Name_____
2. Number of years in operation_____
3. Form of ownership: Sole proprietorship( ) Partnership ( ) Company ( ) Others; Specify_____
4. Number of employees: Permanent ( ) Casual ( ) Other; Specify_____
5. Who runs the business: Owner ( ) Professional Manager ( ) Others; Specify_____
6. What is the level of training of the person in 7 above: Primary School ( ) Secondary School ( ) Technical College( ) University Degree ( ) Others; Specify_____
7. Gender of the entrepreneur / main shareholder: Male ( ) Female ( ) Others; Specify_____

Part two: Determinants of 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
Interest Rates					
Collateral for Loans					
Transaction costs for loans					
Energy costs (Fuel & Electricity)					
Cost of raw materials Eg Paint,					
Cost of Machines					
Low Business Skills					
Inadequate Technology e.g ICT					

2. Which has been your major investment in the last five years?

TYPE OF INVESTMENT	PERCENTAGE
Purchase of machines and equipment	
Funding of working capital	
Investment in ICT	
Purchase of premises	
New Branch	
Others	
None	
TOTAL	**100 %**

3. What was your main source of funds for the above investment?

SOURCE OF FINANCE	
Bank Loans	
Loan from government agencies eg KIE, Youth Fund, Women Fund	
Retained Earnings (profits)	
Other types of loans eg from friends Merry go round etc	
Owners funds	
New capital to shareholders	
Others _____	
TOTAL	

4. Have you been able to implement all your desired investments: Yes ( ) No ( )
5. If no in 5 above, what was the main reason you did not execute your plan

   _____

6. What has been the sales, profit and number of employees in your business in the years indicated below?

YEAR	SALES	PROFITS	EMPLOYMENT
2008			
2009			
2010			
2011			
2012			

7. In your opinion, what has hindered the growth of your firm?

   _____

LIST OF GARAGES

	NAME	LOCATION
1	Action Auto Spares	Likoni Rd
2	Automotive solutions ltd	Enterprise Rd
3	Axel Body Builders & Engineering	KNTC Godowns Off Nanyuki
4	Bizzy Beat Auto Centre Ltd	Enterprise Rd
5	Calzmotor Services Ltd	Baricho Rd
6	Concorde Motors Ltd	Enterprise Rd
7	Dalex Motors Ltd.	Chepkorio Road, Off Lusaka Rd. Ind Area
8	Dhanjal motor works	Bondo Rd
9	Dhruv Auto Clinic	Pokomo RD
10	Dodi Auto tech	Nanyuki Rd
11	Echo Kenya Ltd	Kitui Rd
12	Emel motors Ltd	Lusaka Rd
13	Executive Auto Services Ltd	Dakar Rd
14	Four Wheel Drive Ltd	Bondo rd
15	Four Runners	Chepkorio Road, Off Lusaka Road
16	G T I Auto Services Ltd	Likoni Rd
17	Gari Motors Ltd	Lusaka Close – off Lusaka Rd. Ind Area
18	Gari Panel beaters Ltd	Lusaka Rd
19	Gicard Enterprises	Likoni Rd
20	Goldex Enterprises	Pate Rd
21	Hazina Motors ltd	Busia RD
22	Huade Motors	Off Enterprise Road, next to Isiolo Road
23	Ihururu Technical services	Shimo la Tewa Rd
24	J. B. Motors Ltd.	Lusaka Road, Industrial Area
25	Kavia Panel Beaters and Painters	Enterprise Rd
26	Kenhar Motor Service Ltd	Lusaka rd
27	Kenya Coach Industries	Addis Ababa Road, Industrial area
28	Kenya Motors & Equipment	Gilgil Road Industrial Area

29	Leo Auto Works Ltd	Enterprise Rd
30	Mars Auto Garage Ltd	Butere Rd
31	Mash Auto	Busia Rd
32	Master fit	Enterprise/Falcon Rd
33	Midland Autocare	Busia Rd, Off Enterprise, Industrial Area
34	Motormania	Dunga Rd. Industrial Area
35	Motorways (K) Ltd.	Bamburi Road, Industrial Area
36	Nanak car parts & Service Ltd	Dar Es Salaam Rd
37	Palric Enterprises	Dakar Rd
38	Paramount Auto care ltd	Sotik Rd
39	Parklane Motors Ltd	Enterprise Rd
40	Perfomance Auto Centre Ltd	Hombe Rd
41	Pioneer Auto Services (1986) Ltd	Chogoria Rd
42	Pratts Auto Services	Factory Street
43	Quick Fit Kayaba Centre Ltd	Hola Rd
44	Rallye Service Enterprise	Butere Rd
45	Rana Bodyshop Ltd	Bamburi Road, Industrial Area
46	Romageco (K) Ltd	Enterprise Rd
47	Silverano Motors Ltd.	Pembe Rd. Off Lusaka, Ind. Area
48	Southend Motors Ltd.	Corner of Dunga & Daresalaam, Ind Area
49	Splendid Motor Servies Ltd	Kampala Rd
50	Stantech Motors Ltd	Off Msa Rd
51	Taifa Motors ltd	Butere rd
52	Unity Auto Garage	Kampala Rd, Ind. Area
53	Vas Auto Centre Ltd.	Industrial Area
54	Verona Auo Engineering Ltd	Likoni Rd

Source: Nairobi County Government