THE EFFECTS OF MICROFINANCE SERVICES ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN MACHAKOS COUNTY

MWEWA NAOMI MBITHE

D61/63103/2010

A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE AWARD OF MASTERS OF BUSINESS ADMINISTRATION (MBA), SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER 2013
DECLARATION

This project is my original work and has never been presented for a degree in any other university.

Signature: ………………………… Date: ……………………………

MWEWA NAOMI MBITHE

D61/63103/2010

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

Signature: ……………………… Date: ……………………………

DR. KISAKA SIFUNJO

SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.
ABSTRACT

The Small and Medium Enterprise (SME) sector has continued to play an important role in Kenyan Economy. The sector’s contribution to the Gross Domestic Product (GDP) increased from 13.8% in 1993 to over 18% in 1999. The Economic survey 2012 estimated that the contribution to the GDP by this sector currently stands at over 25%. It is the objective of every entrepreneur to grow their businesses into large enterprises. To achieve this, most of the entrepreneurs make use of microfinance services. Many studies have been done in Kenya on SMEs and how they are influenced by microfinance services but none had focused on the effects of microfinance services on the growth of the SMEs.

The purpose of this study was to find out the effects of microfinance services on the growth of Small and Medium Enterprises in Machakos County. A quantitative descriptive design was used to study 8 types of business categories in Machakos County. Structured questionnaire was used to collect data from 100 businesses. The sample of 100 businesses from a list of 5311 was taken as a representative population in the county. The study was on dependent and independent relationship. A moderate multiple regression analysis was used. A multivariate regression model was applied to determine the relative importance of each of the three variables; microcredit, micro insurance and training, with respect to the effects of microfinance services on the growth of SMEs. The regression analysis conducted established that two of the independent variables have a positive correlation with the dependent variable. Micro credit and training contribute positively to the sales growth while micro insurance affects growth negatively. The ANOVA analysis was intended to investigate whether the variation in the independent variables explains the observed variance in the outcome – in this study the annual growth in turnover. ANOVA findings in this study showed that there was correlation between the predictor variables (Microcredit, Micro insurance and Training provided by MFIs) and response variable (Annual growth in turnover) since P-value of 0.011 is less than 0.05. This indicated that there was a strong positive relationship between the study variables.
DEDICATION

This project is dedicated to my dear husband Edward Munywoki and children; Eric Matei, Carol Mumo, Wesley Kyende and Lydia Mutanu. Their valuable encouragement and support were instrumental in the project’s completion.
ACKNOWLEDGEMENTS

I thank the Lord God for His grace and strength which He gave me in the course of writing this project. May all glory and honour be unto Him forever. Amen. I greatly acknowledge and appreciate the guidance of my supervisor, Dr. Kisaka Sifunjo, who was available and timely to read the drafts and correct me in every step in the course of writing this project. Without his assistance, the project would never have been completed. I would also like to appreciate and thank Dr. Josiah Aduda and Mr. Mirie Mwangi who played a key role towards the completion of this project. I acknowledge and highly thank the Principal and the Council of Machakos University College for the support they gave me when I was writing this project. This assistance is greatly appreciated. Lots of thanks to my husband, Edward who supported me and showed concern and understanding even when I sat late into the night working on the project. I greatly appreciate the work of my son and daughter, Eric and Carol who assisted me in typing this work. I am grateful to my last two children; Wesley and Lydia, for their moral support and humorous comments which they made as they sat around me that always kept me fresh for an extra hour of concentration. I owe a lot to my colleagues who gave me encouragement and positive criticism as I progressed with writing the project. Thank you all.
# TABLE OF CONTENTS

DECLARATION .................................................................................................................. ii  
ABSTRACT ...................................................................................................................... iii  
DEDICATION .................................................................................................................. iv  
ACKNOWLEDGEMENTS ................................................................................................. v  
TABLE OF CONTENTS ................................................................................................... vi  
LIST OF TABLES ............................................................................................................ viii  
LIST OF FIGURES .......................................................................................................... ix  
LIST OF ABBREVIATIONS ............................................................................................. x  
CHAPTER ONE .............................................................................................................. 1  
INTRODUCTION ............................................................................................................. 1  
  1.1 Background to the study .......................................................................................... 1  
  1.1.1 Growth of Small Medium Enterprises ............................................................... 1  
  1.1.2 Micro-Finance Services ..................................................................................... 3  
  1.1.3 SMEs scenario in Kenya .................................................................................... 5  
  1.2 Research Problem .................................................................................................. 6  
  1.3 Research Objective ................................................................................................. 7  
  1.4 Importance of the study .......................................................................................... 7  
CHAPTER TWO ............................................................................................................ 9  
LITERATURE REVIEW ................................................................................................. 9  
  2.1 Introduction ............................................................................................................ 9  
  2.2 Micro financing ..................................................................................................... 9  
  2.2.1 Overview ......................................................................................................... 9  
  2.2.2 Theories of Micro-Finance .............................................................................. 10  
  2.2.3 Small and Medium Enterprises ..................................................................... 12  
  2.2.3.1 Overview of SMEs .................................................................................... 12  
  2.2.3.2 Small and medium Enterprises in Kenya. ............................................... 13  
  2.2.3.3 Microfinance services and Entrepreneurship. ........................................... 14  
  2.3 Empirical Literature review .................................................................................. 16  
  2.3.1 Global empirical evidence .............................................................................. 16  
  2.4 Local empirical Evidence ..................................................................................... 18  
  2.5 Summary ............................................................................................................... 19  
CHAPTER THREE ...................................................................................................... 21  
RESEARCH METHODOLOGY .................................................................................. 21  
  3.1 Introduction .......................................................................................................... 21  
  3.2 Research Design ................................................................................................... 21  
  3.3 Population and Sample Size ................................................................................ 21  
  3.3.1 Population ....................................................................................................... 21  
  3.3.2 Sample Size .................................................................................................... 22  
  3.4 Data and Data Collection Instruments ................................................................ 23  
  3.5 Data Analysis ....................................................................................................... 23  
  3.5.1 Conceptual Model ........................................................................................... 23  
  3.5.2 Analytical Model ............................................................................................ 24  
CHAPTER FOUR ....................................................................................................... 25  
DATA ANALYSIS, RESULTS AND DISCUSSION .................................................. 25  
  4.1 Introduction .......................................................................................................... 25
LIST OF TABLES

Table 3.1: Sample Size Selection from each category ..................................................22
Table 4.2.0: Response rate ..............................................................................................25
Table 4.3.1.7: Value of Business .......................................................................................30
Table 4.2.1.8: Savings for the last One Year ..................................................................31
Table 4.2.1.9.5: Average Monthly Sales ........................................................................32
Table 4.2.2.0.6a): Full Time Employees .........................................................................32
Table 4.2.2.0.7(b): Temporary/Casual Employees .........................................................33
Table 4.2.2.1.8: Business/Company experienced Growth ..............................................34
Table 4.2.2.2.9: Percentage of growth in the following areas ........................................34
Table 4.2.2.3.10: Factors Contributing to the Growth ......................................................35
Table 4.2.2.4.11: Disposed any Assets in the last Four years ..........................................36
Table 4.2.2.5.12: The Proportion of Asset Disposed .........................................................36
Table 4.2.2.6.13: Use the Profits ......................................................................................37
Table 4.2.2.7.14: Overall growth of business .................................................................38
Table 4.2.2.8.15: Micro Insurance ...................................................................................38
Table 4.2.2.9.16: Total Cost spent on Training .................................................................39
Table 4.3.17: Model Summary .........................................................................................40
Table 4.3.2.18: Regression Coefficients ........................................................................41
Table 4.3.3.19: ANOVA ..................................................................................................42
LIST OF FIGURES

Figure 4.2.1.1: Form of Ownership ................................................................. 26
Figure 4.2.1.2: Location of the Business .......................................................... 27
Figure 4.2.1.3: Age in years ............................................................................. 27
Figure 4.2.1.4: Gender of Entrepreneur ............................................................ 28
Figure 4.2.1.5: Education Level of the Managers ............................................. 29
Figure 4.2.1.6: The main business activity ....................................................... 30
## LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMFIs</td>
<td>Association of Microfinance Institutions</td>
</tr>
<tr>
<td>IEA/SED</td>
<td>Institute of Economic Affairs &amp; Society for Economic Development</td>
</tr>
<tr>
<td>LSEs</td>
<td>Large Scale Enterprises</td>
</tr>
<tr>
<td>MFIs</td>
<td>Micro-Finance Institutions</td>
</tr>
<tr>
<td>MSE</td>
<td>Micro and Small Enterprise</td>
</tr>
<tr>
<td>MSEs</td>
<td>Micro and Small Enterprises</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organizations</td>
</tr>
<tr>
<td>SHGs</td>
<td>Self Help Groups</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium Enterprises</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

1.1 Background to the study

Small businesses are generally regarded as the driving force of economic growth, job creation, and poverty reduction in developing countries. They have been the means through which accelerated growth and rapid industrialization have been achieved. Koech (2011). Micro and Small Enterprises (MSEs) have been recognized as socio-economic and political development catalysts in both developed and developing economies. Mwangi (2011). Maalu, et. al. (1999) discussed the role of Micro and Small Enterprises in the economy of Kenya and noted the important role it has played and continues to play. In addition to the employment creation and income generation, the study noted other important roles in the economy such as production of goods and services and development skills. A study by Cooper (2012) on the impact of microfinance services on the growth of SMEs in Kenya found a strong positive relationship between microfinance services and growth of SMEs. The Kenya Government’s commitment to foster the growth of MSEs emerged as one of the key strategies in 1986 report. It was reinforced as a priority in 1989 report, a document that set out the mechanisms for removing constraints to growth of MSE sector. In 1992, the government published the MSE policy report. This report was reviewed in 2002, leading to a new policy framework that provides a balanced focus to MSE development in line with the national goals of fostering growth, employment creation, income generation, poverty reduction and industrialization. (Kenya Agency for the Development of Enterprises and technology (2005). Vision 2030 had also emphasized the importance of Micro and Small Enterprises in Kenya. Micro and Small Enterprises are noted as a crucial catalyst for achieving the vision 2030

1.1.1 Growth of Small Medium Enterprises

One of the most important themes that come up in discussions about business is the subject of growth. Majority of studies on growth have been undertaken based on the law of Proportionate Effects or Gibrat’s law. Gibrat’s law states that firm growth rate is independent of firm size. The studies have therefore categorized businesses into three categories: small, medium and large enterprises. The available studies on growth have
also used varied metrics to measure growth. Howard (2006) laid out a framework describing how businesses grow. While he identifies seven stages of organizational growth, the first three stages are of particular importance and interest to small businesses. Howard (2001). The first stage is that of new venture, which is when a small business is just beginning. Markets and products are being developed in this stage. The second stage is expansion and can focus on increased sales, revenues, market share, and ultimately the number of employees. Howard, (2006). The third stage is professionalization, and focuses on formalizing the goals, processes and functions of the organization and is considered to be closely related to expansion. Howard, (2001). Stage four is consolidation, and focuses on issues faced by firms once they have made the transition to professionally managed organizations with working systems in place, focusing more on managing its corporate culture. Diversification is the fifth phase, focusing on developing new products for markets for which the organization is already providing goods and services. The sixth stage is integration, focusing on developing an infrastructure to support multiple business units. The final stage is that of decline and revitalization and focuses on rebuilding the organization at all levels, to ensure continued survival. Howard(2006).

Business growth is typically defined and measured using absolute or relative changes in sales, assets, employment, productivity, profits and profit margins. Therefore, sales growth need not correspond to or underpin other dimensions of growth in which policy makers might also be interested; for instance, sales can increase while employment and/or profits fall. This is partly related to contextual or structural issues such as sector or age of business but also to the strategic choices made by principal decision makers in the firm. Sales and/or employment growth is a better measure of new and small business performance than accounting based measures such as profits, return on investment or market share. Sales dates are usually readily available and business owners themselves attach high importance to sales as an indicator of business performance. In practice, sales growth is also easier 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 that market.
Business owners themselves often treat sales as key motivator and indicator of performance rather than, for example, job creation. Koech (2011).

The small and medium enterprises (SMEs) sector has continued to play an important role in the economy of this country. The sector’s contribution to the gross domestic product (GDP) increased from 13.8% in 1993 to about 20% in 2007. The (SME) or informal sector provided 78% of total employment and contributed over 57% of the new jobs created in 2005/2006 according to the economic survey of 2007. The Economic Survey of 2012 estimated that the contribution to the GDP by this sector currently stands at over 25%. The sector therefore plays a key role in employment creation, income generation and is the bed rock for industrializing the country in the near future. In Kenya, there are about 2.2million micro, small and medium enterprises [Strategic Business Advisers (Africa) Limited. SME banking sector report 2007] of which 88% are non registered.

1.1.2 Micro-Finance Services

The concept of micro-financing arose out of the need to provide to the low-income earners who were left out by formal financial institutions. The practice of micro-credit dates back to as early as 1700 and can be traced to Irish Loan Fund System which provided small loans to rural poor with no collateral. Over the years, the concept of micro-finance spread to Latin America, then to Asia and later to Africa. The today use of the expression micro-financing has its roots in the 1970s when organizations, such as Grameen Bank of Bangladesh with the micro-finance pioneer Mohammad Yunus, were starting and shaping the modern industry of micro-financing. Mwangi (2011). In Kenya, micro-finance movement gained momentum in the late 1980s as a result of exclusion of large proportion of the population from the formal financial institution mainly banks. Micro-finance emerged with the aim of filling the gap left by banks in providing credit to individuals, micro, small and medium enterprises which were on the rise during this period. Ogindo (2006). In the early 1990s with the opening up of political space and ensuing economic disturbances, the need for credit by individuals, micro, small and medium enterprises increased and this led to the recognition of micro-finance institutions in Kenya. Among the pioneer MFIs in Kenya are Equity Building Society (currently

MFIs in Kenya were established using either an NGO or a Savings and Credit Cooperative Society Framework. MFIs have been important sources of credit for a large number of low income households and MSEs in the rural and urban areas of Kenya. Wambugu (2007). MFIs gained prominence in Kenya due to the fact that the formal banking sector since independence up to late 2000 regarded the informal sector as risky and not commercially viable. Ogindo (2006). The MFIs developed and offered new, innovative and pro-poor modes of financing low-income households and MSEs based on sound operating principles. Since their inception, MFIs have greatly contributed to social-economic empowerment to the beneficiaries and their dependants. Kamau (2010).

Robinson,(1998) defines microfinance as a development tool that grants or provides financial services and products such as very small loans, savings, micro leasing, micro insurance and money transfer to assist the very or exceptionally poor in expanding or establishing their businesses. It is mostly used in developing economies where SMEs do not have access to other sources of financial assistance. The term microfinance can also be defined as provision of financial services to low income clients including the self employed. Financial services generally include savings and credit; however some finance organizations also provide insurance and payment services. In addition to financial intermediation, many MFIs provide social intermediation services such as group formation, development of self confidence and training in financial literacy and management capabilities among members of a group. Ledgerwood (1999). Microfinance activities include: small loans generally for working capital, informal approval of borrowers and investments, collateral substitutes such as a group guarantee or compulsory savings, access to repeat and large loans based on repayment performance, streamlined loan disbursements and monitoring and secure saving products. The services provided to Microfinance clients can be categorized into four different categories. These are financial intermediation, or provision of financial products and services such as savings, credit, insurance, credit cards and payment system which should not require ongoing subsidies. Social intermediation is the process of building human and social
capital needed by sustainable financial intermediation for the poor. Enterprise development services or non-financial services that assist micro entrepreneurs include skills development, business training, marketing and technology. Social services that focus on advancing the welfare of micro entrepreneurs include education, health, nutrition, and literacy training. These services require ongoing subsidies and are always provided by NGOs or the state. Ngehnevu and Nembo (2010).

MFIs have the following characteristics: Loans are usually relatively short – less than 12 months in most instances and are generally for working capital with immediate regular weekly or monthly repayments. They are also disbursed quickly after approval, particularly for those seeking repeat loan. The traditional lenders requirements for physical collateral such as property are usually replaced by a system of collective guarantee where members are mutually responsible for ensuring that their loans are repaid. Khan (2008)

1.1.3 SMEs scenario in Kenya

Small and Medium Enterprises (SMEs) is an important sub sector for the Kenyan economy like many other developing countries since it employs about 85% of the Kenyan workforce (about 7.5 million Kenyans of the current total employment). The current constitutional framework and the new Micro and Small Enterprise Act 2012 (MSE Act 2012) provide a new window of opportunity through which the evolution of SMEs can be realized through the devolution framework. However, the impact of devolution on SMEs development depends on the architecture of the regulatory and institutional framework inclined to support SMEs in an economy. Ong’olo and Odhiambo (2013).

Lack of access to credit is a major constraint inhibiting the growth of SMEs sector. The issues and problems limiting SMEs acquisition of financial services include lack of tangible security coupled with inappropriate legal and regulatory framework that does not recognize innovative strategies for lending to SMEs. Limited access to formal finance due to poor and insufficient capacity to deliver financial services to SMEs continues to be a constraint in the growth and expansion of the sector. Formal financial institutions perceive SMEs as high risk and commercially unviable. As a result, only a few SMEs
access credit from formal financial institutions in the country. Various types of assistance
have been provided to SMEs to boost their growth and development by making them
more profitable. (Institute of Economic Affairs & Society for Economic Development[IEA/SED] 2000). Several Organizations including business associations, voluntary organizations and other non-governmental organizations have set up programs to enhance the factors that influence development of SME especially as it relates to enterprise growth and development. Despite the large number of assistance programs, the growth and development of SME has not been satisfactory. Ventures have collapsed as soon as assisting organizations pull out of the project and remaining ones have remained small. Memba, et. al (2012)

1.2 Research Problem

The concept of business growth is still a grey area as there is yet to be a conclusive approach and definite indicators of business growth despite the fact that it is every entrepreneur’s wish to have their businesses grow. Thus the subject of business growth is a fertile area for a study in the Kenyan context. Kemei (2011). Reviews examining impacts of microfinance have concluded that, rigorous quantitative evidence on the nature, magnitude and balance of microfinance impact is still scarce and inconclusive. It is widely acknowledged that no well known study robustly shows any strong impacts of microfinance (de Aghion and Morduch (2010).

Various studies have been done in Kenya on SMEs and how they are influenced by microfinance services. Mutuku (2010) studied on the impact of microfinance institutions on MSMEs in Kenya and found out that they had a great impact on employment creation and poverty alleviation. Mbugua (2010) studying on the impact of micro finance services on financial performance of SMEs in Kenya found that micro finance services enhance financial performances of SMEs. Ngugi (2009); Kioko (2009); Makena (2011) studied on the financial challenges faced by SMEs and found that inadequacies in access to finance are key obstacles to SMEs growth. Kemei (2011) studied on the relationship between microfinance services and financial performance of SMEs. The findings were that positive and significant relationships have been established between MFI loans and SMEs performance. Kimoro (2011) in a study on the impact of microfinance services on
women empowerment found that microfinance has led to expansion of freedom of choice of women. A survey of the financial constraints hindering growth of SMEs by Koech(2011) found that the factors affecting growth were capital market, cost, capital access, collateral requirements, capital management and cost of registration. Coopper(2012) studied on the impact of microfinance services on the growth of SMEs in Nairobi and found a strong positive impact. No study had focused on the effects of microfinance services on the growth of SMEs in Kenya. The researcher felt that there was need for a study on this area and thus this study intended to bridge this gap and focus on the effects of microfinance services on the growth of SMEs in Machakos County. To achieve the research objective, the study was guided by the following research question: how do microfinance services influence the growth of SMEs?

1.3 Research Objective

The objective of the study was to find out the effect of micro finance services on the growth of SMEs in Machakos County.

1.4 Importance of the study.

The study is significant in the following ways:

The findings of the study is going to enable micro finance institutions to better understand their role in the growth of SMEs in Kenya in order to implement better and effective programs. The study has also exposed possible areas of improvement in micro financing activities in Kenya.

The findings of the study are of importance to the government. It is going to assist in setting up specific management policies that enhance effectiveness and sustainability of SMEs in Kenya. Potential investors in the micro finance sector as well as entrepreneurs willing to start SMEs shall find this study relevant to them. The findings have shed light on the future of micro finance institutions and SMEs thus enabling potential investors to make sound decisions.

The study is also of significance to scholars in understanding the level of SMEs development in Kenya which play a significant role in providing ancillary services to
multi-national corporations. Finally, this study contributes to the future development of this area of research, particularly in a developing country like Kenya.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter reviews various studies that have been conducted in the area of Micro
financing and SMEs. Section 2.2 reviews micro financing and the theories of micro
finance. It also looks at SMEs and the situation in Kenya and reviews micro finance
services and entrepreneurship. Section 2.3 and section 2.4 consist of empirical literature
review both from a global and local perspective. Section 2.5 summarizes the chapter.

2.2 Micro financing
2.2.1 Overview
Micro finance has been defined as a development tool that grants or provides financial
services and products such as small loans, savings opportunities, micro leasing, micro
insurance and money transfer to assist the very or exceptionally poor in expanding or
establishing their businesses. Micro finance is popular in developing economies where
majority of the population does not have access to affordable sources of financial
intermediation, some microfinance organizations provide social intermediation services
such as the formation of groups, development of self confidence and training of members
in that group on financial literacy and management. He further argues that there are
different providers of microfinance services and some of them are nongovernmental
organizations,(NGOs), savings and loan cooperatives, credit unions, government banks,
commercial banks or non-bank financial institutions. The target group of microfinance
are self employed low income entrepreneurs who are traders, seamstresses, street
vendors, small farmers, hair dressers, rickshaw drivers, artisans, blacksmiths, etc

Microfinance institutions can offer their clients who are mostly men and women slightly
below or above the poverty line a variety of products and services. The most prominent
of these services is financial that they often render to their clients without tangible assets
and these clients mostly live in the rural areas, a majority of whom may be illiterate.
Formal financial institutions do not often provide these services to small informal
businesses run by the poor as profitable investments. They usually ask for small loans
and the financial institutions find it difficult to get information from them either because they are illiterate and cannot express themselves or because of the difficulties to assess their collateral (farms) due to distance. CIDA (2001).

2.2.2 Theories of Micro-Finance

(i) Women empowerment Theory

Cheston and Kuhn (2002) talk about the theory of empowerment. The theory indicates that women account for nearly 74% of the 19.3 million of the world’s poorest people now being served by microfinance institutions. Most of these women have access to credit to invest in businesses that they own and operate themselves. The vast majority of them have excellent payment records in spite of the daily hardships they face. Contrary to conventional wisdom, they have shown that it is a very good idea to lend to the poor and to women.

Financial self sustainability paradigm: The main consideration in programme design is provision of financially self sustainable microfinance services to large numbers of people particularly micro and small entrepreneurs. The focus is on setting of interest rates right to cover costs, to separate microfinance from other interventions, to enhance separate accounting, to expand programmes so as to capture economies of scale to use group to decrease cost of delivery. Gender lobbies argue that targeting women on grounds of high women repayment rate, it is assumed that increasing women access to microfinance services will in itself lead to individual economic empowerment, well being and social and political empowerment.

Poverty alleviation paradigm: The main considerations are poverty reduction among the poorest, increased well being and community development. The focus is on small savings and loans, provision for consumption and production, group formation, etc. This paradigm justifies some level of subsidy for programmes working with particular clients group or in particular context. Some programmes have developed effective methodologies for poverty targeting and or operating in remote areas. Gender lobbies in this context have argued for that targeting women because of women’s responsibility for households well being. Poverty alleviation and women empowerment are seen as two sides of the same coin. The assumption is that increasing women’s access to microfinance
will in itself increase household income which will then translate into improved well
being and enable women to bring about wider change in gender inequality.

Feminist empowerment paradigm: The underlying concern is gender equality and
women’s human rights. Microfinance is promoted as an entry point in the context of a
wider strategy for women’s economic and social political empowerment. The focus here
is gender awareness and feminist organization. Khan (2008).

(ii) Games Theory of Microfinance.

The microfinance games theory also supports the idea of group lending among micro
finance institutions. Many of the new mechanisms rely on groups of borrowers to jointly
monitor and enforce contracts themselves. It is based on Grameen lending model of
microfinance which is based on group peer pressure whereby loans are made to
individual groups of four to seven. Group members collectively guarantee loan
repayments and access to subsequent loans is dependent on successful repayment by all
group members. Payment is usually made weekly. The groups have proved effective in
deterring defaults as evidenced by loan repayment rates attained by organizations such as
Grameen Bank (Bangladesh) that use this type of microfinance model. The model has
also contributed to broader social benefits because of their mutual trust arrangement at
the heart of group guarantee system and the group itself often becomes the building block
to a broader social network. Ledgewood (1999). However, group based mechanisms tend
to be vulnerable to free riding and collusion. Inefficiencies are well known to emerge in
similar contexts. Gruber (2005)

(iii) Uniting theory of microfinance

The uniting theory of microfinance emphasizes on joint liability. Ghatak and Guinnane
(1999) reviewed the key mechanisms proposed by various theories through which joint
liability could improve repayment rates and the welfare of credit constrained borrowers.
They established that all the theories have in common the idea that joint liability can help
alleviate the major problems facing lenders i.e. screening, monitoring, auditing and
enforcement by utilizing the local information and social capital that exists among
borrowers under explicit joint liability, when one borrower cannot repay a loan, group
members are contractually required to repay instead. Such repayments can be enforced through the threat of common punishment typically the denial of future credit to all members of the defaulting group or by drawing on a group savings funds that serves as collateral. Second, the perception of joint liability can be implicit. That is borrowers believe that if a group member defaults, the whole group will become ineligible for future loan even if the lending contract does not specify this punishment.

(iv) **Financial sustainability theory**

Long-term survival and sustainability is critical for an MFI in being able to reach its target clientele and cover administrative and other costs. While social goals of reaching the poorest and poverty alleviation are valid, sustainable standing on one’s own feet is as true for low income households receiving microfinance as for microfinance itself. Sustainability for the microfinance has internal and external implications. Internal in terms of deposit and savings mobilization, financial performance, staff motivation, loan administrative costs etc. while external in terms of availability of funds for loan disbursement, grant for community organizing etc. Morduch (2002).

(v) **Poverty alleviation Theory**

The pressing need for rural economy is to create jobs for a large unemployed and under employed labour force. It is customarily argued that jobs can be created either by generating wage employment or by promoting self employment in nonfarm activities. Creation of employment requires investments in small working capital. Unfortunately income from other sources is so low that they cannot generate investible surplus on their own. Thus obtaining credit under certain circumstances can help the poor accumulate their own capital and thus improve their living standard through the income generated from investments. Wahid (1994).

**2.2.3 Small and Medium Enterprises**

2.2.3.1 **Overview of SMEs**

The SMEs nomenclature is used to mean micro small and medium enterprises,(MSMEs). The SMEs cover nonfarm economic activities mainly manufacturing, mining, commerce and services. There is no universally accepted definition of SME. Different countries use
various measures of size depending on their level of development. The commonly used yard sticks are total number of employees total investment and turnover. MIT (2002).

SME’s play a certain role in the European economy. They are a major source of entrepreneurial skills, innovation and employment. In the enlarged European Union and 25 countries, some 23 million SME’s provide around 75 million jobs and represent 99% of all the enterprises. However they are often confronted with market imperfections. SME’s frequently have difficulties in obtaining capital or credit particularly in the early start-up phase. Their restricted resources may also reduce access to new technologies of innovation EC (2005).

2.2.3.2 Small and medium Enterprises in Kenya.

In Kenya the lenders generally accepted definition is that SME is a business with six to fifty employees or with annual revenue below Ksh. 50 million. Kihuro (2012). The small and medium Enterprises (SME’s) plays an important role in the Kenyan Economy. According to the Economic survey (2006) the sector contributed over 50% of new jobs created in 2005. Despite their significance, past statistics indicate that three out of five businesses fail within the first few months of operation. Kenya National Bureau of statistics (2009). According to Koech (2011) the factors affecting growth were capital market, cost, capital access, collateral requirements, information access, capital management and cost of registration. Capital market, cost and capital access had the highest contribution to constraining SMEs growth into large businesses. As noted by Amyx (2005) one of the most significant challenges is the negative perception towards SME’s. Potential clients perceive small business as lacking the ability to provide quality services and are unable to satisfy more than one critical project simultaneously. Often larger companies are selected and given business for their clout in the industry and name recognition alone.

As with many developing countries there is limited research and scholarly studies about the SME sector in Kenya. The 1999 Baseline Survey conducted by central Bureau of statistics and K-rep holdings provided the most comprehensive picture of SME in Kenya. Mead (1998) observes that the health of the economy as a whole has strong relationship with the health and nature of micro and small enterprises sector. When the state of the
macro economy is less favorable by contract the opportunities for profitable employment expansion in SMES are limited. This is true especially for those SME’s that have linkages to larger enterprises and the economy at large. Given this scenario an understanding of the dynamics of SMES is necessary not only for the development of support programmes for SMES but also for the growth of the economy as a whole. In view of the importance of small businesses to the Kenyan economy and exposure to risks owing to their location, there is need to conduct an empirical enquiry to investigate on the effects of microfinance services on the growth of SMES in Machakos County and how they access those services.

2.2.3.3 Microfinance services and Entrepreneurship.

The concept of microfinance dates back in the 19th Century when money lenders were informally performing the role currently performed by financial institutions. The informal financial institutions constitute; village bank, co-operate credit unions, state owned banks, and social venture capital funds to help the poor. These institutions are those that provide savings and credit services for small and medium size enterprises. They mobilize rural savings and have simple and straight forward procedures that originate from local cultures and are easily understood by the population. Germidis et..al (1991). These funds are to finance the informal sector (Small and medium size businesses) in developing countries and it is known that these small and medium size businesses are more likely to fail. Maloney (2003). The creation of small and medium size businesses generate employment but these enterprises are short lived and consequently are bound to die after a short while causing those who gain job position to lose them and even go poorer than how they were.

The services provided by nonfinancial MFIs are marketing and technology services, business training, production training and subsector analysis and interventions. Ledgerwood (1999). Enterprise development services can be sorted out into two categories. The first is enterprise formation which is the offering of training to persons to acquire skills in a specific sector such as weaving as well as persons who want to start up their businesses. The second category of enterprise development services rendered to its clients is the enterprises transformation program which is the provision of technical
assistance training and technology in order to enable existing SMESs to advance in terms of production and marketing. Yunus (2007). The main approach used by lenders in the past has been the promotion of such system through training in group formation constitution development, record keeping etc. Getting groups off to a good start is certainly important but problems that later arise are often still difficult for groups to resolve for themselves, and ongoing systems of support and supervision are usually lacking. The sustainability of these services has not been a focus. Johnson et. al( 2005).

Grameen Bank is known for successfully implementing the system of group-lending though there have been organization concentrating on offering loans and saving opportunities to needy people before. Counts,(2008). Yunu (2007) argued that global poverty does not emerge from market failure, but from capitalism as a theoretical concept which does not fully model real economic structures in general and economic behavior of each individual in particular. Access to capital is indeed crucial for development, and the concept of free markets has also the capacity to contribute to poverty reduction but the idea missing is to incorporate a social component into economic systems to meet observed behavior. The idea of microfinance meets both requirements. They provide access to capital on smaller scale and ideally act as social business realizing economic behavior augmented by social preferences. Armendariz de Aglion & Morduch (2005). They enable poor people to engage in productive economic activities and thus contribute to development in low income population strata.

Morduch (1999) and standard financial systems note that microfinance is not a panacea but it is a main tool that fosters development in developing countries. MFI provide small scale financial services to poor people who are otherwise “excluded from the formal banking sector.” Operating merely in developing and emerging countries, they have specialized in offering loans of minor scale to enable individuals to start small productive businesses and enhance entrepreneurship which generally includes SMEs on very large scale especially in rural areas of developing countries, the development of financial systems is often poor, sometimes they have not fully emerged at all. In this case microfinance institutions often represent a first opportunity for the local population to participate in financial systems and to benefit from access to business and capital.
Kenya has adapted the definition of micro insurance given by the international insurance supervisors as the “insurance that is accessed by or accessible to the low income population potentially provided by a variety of different providers and managed in accordance with generally accepted insurance practice”. The insurance regulation authority has within its mandate a developmental role and specific targets towards increasing penetration of insurance in Kenya. A specific concern is that the insurance sector is only serving 8.4% of the total population under long term insurance business (inclusive of those insured under group life). Over 90% of the population in Kenya is exposed to many risks in life, many of which are insurable and the poor are the most exposed. Currently, less than ten insurance companies are offering micro-insurance products on a ‘window’ basis as part of their portfolio. The insurance companies offering micro-insurance are mainstream companies selling the conventional insurance products. Cooper (2012)

2.3 Empirical Literature review

2.3.1 Global empirical evidence

A number of studies have been conducted on microfinance services. Copstake, et.al (2000) did a study on the impact of microcredit on poverty in Zambia. The programme was not directed towards the poorest business operators but one third of the clients who were below national poverty line. Those who graduated from their first to a second loan on average experienced significant higher growth in their profit and household income, as compared with otherwise similar business operators. The borrowers also diversified their business activities more rapidly. However some borrowers were worse off especially among the 50% or so who left the programme after receiving only one loan.

Alarape (2007) did a study to examine the impact of owners/managers of small business participating in entrepreneurship programs on operational efficiency and growth of small enterprises in Nigeria. The study was a cross-sectional analysis of impact of exposure of owners managers of small businesses on their performance of operational efficiency and growth rate. The data was collected from primary and secondary sources. Both descriptive and inferential statistics were employed for the analysis. The findings were that small business whose owners, managers had experience of participating in
entrepreneurship programs exhibited superior managerial practice, had higher gross margin rate of growth than small businesses whose owner managers did not have superior experimental learning. This had a practical implication that there is need to improve managerial practice of small businesses through exposure of owners/managers to entrepreneurship programs in order to enhance their performance and transition to medium and large business.

Nilsson (2010) conducted a study to investigate the impact of micro finance institutions (MFIs) on the development of small and medium size businesses (SMEs) in Cameroon. The study adopted a case study approach that involved CAMCCUL – (Cameroon Cooperative Credit Union League). The study concluded that microfinance is an important asset to developing countries since it is able to cater for financing needs of the very poor in the society.

Bran and Woller (2010) carried out a study to establish the effects of microfinance in India. The study concluded that microfinance has brought better psychological and social empowerment than economic empowerment. The study further recommended that the impact of microfinance is commendable in courage, self confident, self-worthiness, skill development, awareness about environment, peace in the family, reduction of poverty improving rural savings, managerial ability decision making process and group management. In other variables the impact is moderate. As a result of participation in microfinance, there is observed a significant improvement of managerial skills, psychological well being and social empowerment. It is recommended that the SHGs may be granted legal status to enhance the performance.

Olu (2009) conducted a study on the impact of microfinance on entrepreneurial development of small scale enterprises that are craving for growth and development in a stiffened economy of Nigeria. The study used a questionnaire as an instrument of primary data collection. Table and simple percentages were used in data presentation. The study revealed that microfinance institutions are evident tools for entrepreneurship development due to the various services they offer and the role they play towards the development of the economy. Not overlooking the various challenges that affect microfinance i.e. operations, the current banking reforms introduced by the Central Bank
of Nigeria (C.B.N.) Governor is a welcome development as its employment is set to fortify the microfinance institutions world over and especially in Nigeria are identified to be one of the key players in the financial industry that have positively affected individuals, business organizations, other financial institutions, the government and the economy at large through the services they offer and the functions they perform in the economy. It is expected that with the current reforms put in place by the Federal Government through its regulatory authorities, microfinance institutions in Nigeria will be able to compete favorably in the global market and gainfully increase entrepreneurship development in Nigeria. The study further established that micro finance institutions have a positive relationship with the Nigerian economy represented by the expanded GDP. Although interest rate is not significantly influential, the results of the findings of the study can be summarized that the microfinance institutions and their activities go a long way in determination of the pattern and level of economic activities and development in the Nigerian economy.

2.4 Local empirical Evidence

Memba et. al, (2012) conducted a study to establish the impact of venture capital on growth of SMEs in Kenya. The study used 200 SMEs that have been financed by Venture capital as the target population. The SMEs were drawn from various major urban centers in Kenya. The SMEs were stratified according to their locality and a random sampling was carried out by assigning numbers to each stratum. A sample of 100 firms was picked at random from which data was collected using a semi-structured questionnaire as the main tool for data collection. Data was analyzed using descriptive statistics with the help of SPSS computer software. The variables used to measure growth were sales per annum, net assets, profit per annum, and number of workers among others. They were analyzed before and after use of venture capital. The study established that SMEs made significant growth after accessing the financing and recommended that other SMEs should follow suit if the country has to achieve its vision 2030. It was argued that lack of finance has been stated as one of the main reasons for SMEs poor performance in most developing countries.
Cooper (2012) conducted a study on the impact of micro-finance services on the growth of SMEs in Kenya. The study targeted 50 SMEs in Nairobi. The researcher used self-developed questionnaire as an instrument of data collection and analyzed the data using quantitative analysis. The study established that SMEs largely depend on micro financing for growth. A significant percentage of SMEs was found to have access and do seek micro credit for their businesses. The study also established that microfinance services have assisted enterprises to change their status through growth in sales level from micro to small and from small to medium. Though SMEs have easy access to micro finance services, the study indicated that they have no exemption from strict requirements when applying for loans. The study also established that most SMEs in Nairobi do not demand for micro-insurance services and that Microfinance Institutions offer minimal training to SMEs. The study concluded that microfinance services have a strong positive impact on the growth of SMEs in Kenya. SMES in Nairobi depend on micro financing for growth. The study recommends that there is need to relax the requirements for loan application and that the government of Kenya should provide a favourable environment that can allow MFIs to thrive not only in Nairobi but also in other parts of the country.

Koech (2011) conducted a study to find out the financial constraints that hinder growth of SMEs in Kenya. The researcher adapted the case study approach and targeted SMEs in Kamukunji District. The study used structured questionnaires as the main tool for data collection. Data was analyzed by exploratory factor analysis and descriptive analysis with the help of SPSS to obtain percentages and frequency distribution tables. The factors hindering growth of SMEs were identified as capital access, cost, capital market collateral requirements information access, capital management and cost of registration. The study recommended that business financiers through loans consider reducing collateral requirements to facilitate SMEs easy access to loans.

2.5 Summary

Micro finance organizations provide financial services to their clients such as savings and credit services to finance the informal sector in developing countries. They provide access to capital on smaller scale and enable poor people to engage in productive economic activities and thus contribute to the development in low income population
strata. Micro finance organizations also provide social intermediation services such as formation of groups, development of self confidence and the training of members in that group on financial literacy and management. They also provide micro insurance services to SMEs to enable them manage their business risks.

The growth of SMEs in Kenya has been attributed to the availability of micro credit and micro insurance opportunities in the country. Microfinance services have made it possible for the poor to start small and medium enterprises. Micro insurance too has enabled poor people to afford business related insurance payments as well as health micro insurance. The studies reviewed are a clear indication that the micro finance and micro insurance concepts are rapidly gaining popularity not only in Kenya but also in most developing countries where majority of the population is believed to have no access to main stream banking and insurance services due to strict requirements.

Theories of micro finance include women empowerment theory, Games theory of microfinance, Uniting theory of microfinance, Financial sustainability theory and Poverty alleviation theory. According to Alarape, (2007) exposure of owners managers of small businesses who participate in entrepreneurship programmes exhibited superior managerial practice and had higher gross margin rate of growth than small businesses whose owner managers did not have superior experimental learning. Nilsson,(2010) concluded that microfinance is an important asset to developing countries since it is able to cater for the financial needs of the very poor. Memba et.al (2012) established that SMEs made significant growth after accessing financing from MFIs. According to Cooper (2012) Microfinance services have a strong positive impact on the growth of SMEs in Kenya. Koech (2011) identified the factors hindering growth of SMEs as capital access, cost, capital market, collateral requirements, information access, capital management and cost of registration. From the above literature review, it was evident no research had been conducted on the effects of microfinance services on the growth of SMEs. This study intended to fill this gap and investigate on the effects of microfinance services on the growth of SMEs in Machakos County.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

In this chapter the researcher has discussed the methodology that was used to conduct this study. Section 3.2 describes the research design that was used. Section 3.3 describes the population and sample size and how it was selected. Section .3.4 discusses data and data collection instruments. Section 3.5 identifies the method of data analysis and the model used.

3.2 Research Design

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. A descriptive study is concerned with determining the frequency with which something occurs or the relationship between variables (Cooper and Schindler, 2003). For the purpose of this study, the researcher employed descriptive research design. This approach was appropriate for this study, since the researcher intended to collect detailed information through descriptions and is useful for identifying variables and hypothetical constructs. The research applied descriptive methods to study the effects of microfinance services on the growth of SMEs in Machakos County whereby both quantitative and qualitative approaches to analyze the data were employed. Questionnaire was the main instrument of collecting data. This instrument was preferred because of its low cost even when the population is large, its free from the biases of the interviewer, and respondents have more time to give well thought answers. Kothari (1984). It also saved time on the part of the researcher.

3.3 Population and Sample Size

3.3.1 Population

According to Cooper and Schindler (2003), a population is the total collection of elements about which we wish to make some inferences. The idea is not far from Mugenda & Mugenda’s view as they define a population as the entire group of individuals, events or objects having a common observable characteristic. The target population consisted of the 5,311 SMEs operating in Machakos Municipality. The SMEs
in Machakos are not homogeneous and thus stratified sampling was used. The strata are the business categories from which the sample was selected. (See Appendix 11)

3.3.2 Sample Size

Sample size is a given number of members or cases from the accessible population which is carefully selected so as to be a representative of the whole population with the relevant characteristics. A sample is therefore a smaller group obtained from the accessible population. Mugenda & Mugenda (2003). The researcher used simple random sampling to pick 100 SMEs that was involved in the study. This number was considered appropriate due to time and cost constraints. The simple random sampling procedure was preferred because this concept allows unbiased sampling and accords the research work more scientific feature thereby making the validity of the research findings more concrete. Sample size in each business category was determined by the proportion of the total in each category to the total population (with slight variation allowed) as shown in the table below.

Table 3.1: Sample Size Selection from each category

<table>
<thead>
<tr>
<th>Business Category</th>
<th>Business Code</th>
<th>Population</th>
<th>Sample Size</th>
<th>Category Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>110,115,120</td>
<td>2,469</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>200</td>
<td>205,210,215</td>
<td>972</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>300</td>
<td>315,320,330,335,365,375,395</td>
<td>376</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>400</td>
<td>410,415,425,495</td>
<td>128</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>500</td>
<td>506,512,515,517,518,524,527,543,546,555,</td>
<td>427</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>600</td>
<td>610,615,620,630,635,695</td>
<td>416</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>700</td>
<td>715,720,760,795</td>
<td>144</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>800</td>
<td>815,825,830,895</td>
<td>211</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,311</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s computation.
3.4 Data and Data Collection Instruments

This study employed a self-administered questionnaire as a sole means of data collection from respondents. The instrument was of five point Likert scale format. The instrument was divided into two sections. First section contained questions on the business type. The second section was on growth of SMEs.

3.5 Data Analysis

Gay (1992) observed that data analysis involves organizing, accounting for and explaining that data; that is making sense out of data in terms of respondent’s definition of the situation noting patterns, themes, categories and regularities. Data was analyzed using descriptive statistics. Closed questions were analyzed using quantitative analysis while open ended questions were analyzed using qualitative methods.

3.5.1 Conceptual Model

The conceptual model that was used in this study was in the form of a mathematical expression. It was in the form:

\[ Y = f(X_1, X_2, X_3) \]  

(1)

Where:

\( Y \) = Growth in sales

\( X_1 \) = Microcredit

\( X_2 \) = Micro-insurance

\( X_3 \) = Training provided to SMEs by the MFIs

The variables in the model were measured using the ratio scale. The dependent variable was determined by rate of change of sales per annum from the year 2009 to 2012. Microcredit was measured by the proportion of total loans received by the SME to its net assets. Micro-insurance was measured by the proportion of total insurance policies taken to net assets and training was measured by total expenditure on training provided to net assets. Multiple regression and Partial Correlation analysis were carried out to determine the coefficients and establish the nature of relationship between the dependent variable
and each of the independent variables and its strength. It was expected that there would be a strong positive relationship between the dependent variable and the independent variables as established by Cooper (2012).

3.5.2 Analytical Model

The analytical model that was used was in the form of a multiple regression model. The effect of microfinance services was determined by the equation below:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon \]  

(2)

Where:

- \( Y \) = Annual growth in turnover
- \( \alpha \) = Constant/the intercept point of the regression line and the y-axis
- \( \beta \) = the slope/gradient of the regression line
- \( X_1 \) = Microcredit
- \( X_2 \) = Micro insurance
- \( X_3 \) = Training provided by MFIs
- \( \epsilon \) = Error term

Annual growth in turnover= \( \alpha + \beta_1(\text{Microcredit})+\beta_2(\text{Micro-insurance})+\beta_3(\text{Training})+\epsilon \)

The strength of the relationship between the dependent and the independent variables was measured by carrying out f-test and student’s t-distribution test at 5% level of significance and 95% level of confidence. The test was determine whether the coefficients \( \beta_1 \), \( \beta_2 \), and \( \beta_3 \) were significantly different from zero and this being so, it would be concluded that there is a strong positive relationship between the dependent and independent variables.
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study which was analysed, interpreted and discussed under thematic and sub thematic areas in line with study objectives. Section 4.2 describes the summary statistics of the SMEs. Section 4.3 presents the results of the regression analysis carried out and the effects of Microfinance services on the growth of SMEs in Machakos County. Section 4.4 is a discussion of the outcome. Section 4.5 presents a summary of the chapter.

4.2. Summary Statistics

4.2.0 Response Rate

Out of the intended 100 respondents, only 66 returned fully completed and returned the questioners giving a response return rate of 66%. This return rate is acceptable as recommended by Mugenda & Mugenda (1999). This reasonable response rate was realized after the researcher made personal calls and visits to remind the respondents to fill and return the questionnaires.

Table 4.2.0: Response rate

<table>
<thead>
<tr>
<th>Business Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>25</td>
<td>37.9</td>
</tr>
<tr>
<td>200</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>300</td>
<td>7</td>
<td>10.6</td>
</tr>
<tr>
<td>400</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>500</td>
<td>9</td>
<td>13.6</td>
</tr>
<tr>
<td>600</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>700</td>
<td>7</td>
<td>10.6</td>
</tr>
<tr>
<td>800</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013
4.2.1 Demographic information

4.2.1.1 Forms of Ownership

The respondents were asked to indicate the form of ownership of their businesses. The results are summarized in the figure below which show the distribution of the respondents by ownership of respondent business. From the figure, it is clear that most of the respondednt’s businesses 49 (74.2%) were in sole proprietorship, 8 (12.1%) were in company, 6 (9.1%) were in partnership and 3 (4.5%) were in other forms of ownership.

**Figure 4.2.1.1: Form of Ownership**

![Bar chart showing ownership distribution](chart.png)

**Source:** Author’s Computation 2013

4.2.1.2 Location of the Business

The respondents were asked to indicate the location of their business. The results are summarized in Figure 4.2.1.2 The results in the figure show the distribution of respondents by location of the business. From the figure, the study found that most respondents have their business at Central business districts area at 78.8% and the others at 21.2% off the Central business districts area.
Figure 4.2.1.2: Location of the Business

![Pie chart showing location of business]

Source: Author’s Computation 2013

4.2.1.3 Age of business

The respondents were asked to indicate the time when their businesses were established. The results are summarized in figure 4.1.3. The results show the distribution of respondent by age in years. From the figure, the study found that most respondents businesses have between 11-20 years since they were established at 45.5%, 6-10 years at 27.3%, over 20 years 22.7% and 0-5 years 4.5%. Figure 4.2.1.3(c) shows better.

Figure 4.2.1.3 : Age in years

![Bar chart showing age distribution]

Source: Author’s Computation 2011

From the figure, it seems that at their early years businesses are enthusiastic to start and struggle with their growth objectives to keep in operation. As they age and challenges
become stiff, they die out of the business as shown in the figure (tending to a normal curve.)

4.2.1.4 Gender of Entrepreneur

The study determined the gender of the managers of the respondents. The results are summarized in the figure below. The figure 4.2.1.4 shows the respondent distribution by gender of their managers. The findings indicate that most managers of the SMEs 47 (71.2%) are males while only 19 (28.8%) are females.

Figure 4.2.1.4: Gender of Entrepreneur

Source: Author’s Computation 2013

4.2.1.5 Education Level of the Manager

The study also determined the education level of the manager of the respondents. The results are summarized in the figure below. The figure shows the respondent distribution in terms of the highest level of education of their managers. From the figure, it can be seen that the majority of the managers of the respondents 24 (36.4%) were form four graduates whereas 20 (30.3%) had basic university education, 17 (25.8%) were diploma graduate, 4(6.1%) were postgraduate managers. Only 1 (1.5%) had primary level of education. This shows that the SME’s are being manned by personnel of higher qualifications.
4.2.1.6 The Main Business Activity

The study also determined the main business activity of the respondents. The results are summarized in the figure below. The figure is a pie chart showing the respondents' distribution in terms of their main business activity. It can be seen from the figure that the majority of the respondent at 55% were in products SME’s while only 45% are in services SME’s. Among those businesses that were sampled and were in products are Retail goods: Retail Hawking, Retailing of basic commodities, Sale of agricultural chemicals and veterinary medicine, Sale of basic commodities, Sale of buttons and ribbons, Sale of cakes and bread and Sale of construction materials. Those businesses that were sampled and were in services are Accommodation and conferences, Baking and Hotel Services, Consultancy services, Dealing with petroleum products, lubricants and car accessories, Dry cleaning, Educational Services, Financial products, Giving of loans to civil servants, Health Services, Hire Purchase Sales and Hotel and conference services. The figure below is a pie chart showing the main business activity.
Source Author’s Computation 2013

4.2.1.7 Growth

4.2.1.7 The Value of Business in Total Assets

The respondents were asked to indicate the value of their businesses in total assets. The results are summarized in Table 4.2.1.7.

Table 4.3.1.7: Value of Business

<table>
<thead>
<tr>
<th>Value of business Kshs &quot;'000&quot;</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-1000</td>
<td>26</td>
<td>39.4</td>
</tr>
<tr>
<td>2000-10000</td>
<td>37</td>
<td>56.1</td>
</tr>
<tr>
<td>20000-50000</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>over 50000</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013
The results in the above Table show the respondent distribution in terms of their Value of business. From the table, it can be seen that the majority of the respondent’s business are valued between two millions and ten millions representing 56.1%, 39.4% are at between ten thousand and one million, 3.0% are valued between twenty and fifty million and 1.5% are over fifty millions.

4.2.1.8 Savings for the last One Year

The researcher requested the respondents to estimate their savings for the previous one year. The results are summarized in Table 4.2.1.8

Table 4.2.1.8: Savings for the last One Year

<table>
<thead>
<tr>
<th>Savings for the last one year Kshs &quot;000&quot;</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-100</td>
<td>15</td>
<td>22.7</td>
</tr>
<tr>
<td>200-1000</td>
<td>35</td>
<td>53</td>
</tr>
<tr>
<td>2000-10000</td>
<td>14</td>
<td>21.2</td>
</tr>
<tr>
<td>Over 10000</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013

The results in the above Table 4.2.1.8 show the respondent distribution in terms of their Savings for the last one year. From the table, it can be seen that the majority of the respondent’s business saved between two hundred thousand and one million had saved for the last one year at 53%, 22.7% had saved between ten thousand to one hundred thousands, 21.2% had saved two millions to ten millions and 3% saved over ten millions.

4.2.1.9. Average Monthly Sales

The study also determined the average monthly sales of the respondents. The results are summarized in Table 4.2.1.9
Table 4.2.1.9.5: Average Monthly Sales

<table>
<thead>
<tr>
<th>Average monthly sales(Kshs &quot;000&quot;)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-100</td>
<td>24</td>
<td>36.4</td>
</tr>
<tr>
<td>200-1000</td>
<td>31</td>
<td>47</td>
</tr>
<tr>
<td>2000-10000</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>over 10000</td>
<td>5</td>
<td>7.6</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013

The results in the above Table 4.2.1.9.5 show the respondent distribution in terms of their average monthly sales. From the table above, majority of the business, 31 forming 47% had average monthly sales of two hundred thousand to one million, 36.4% had average monthly sales of ten thousand to one hundred thousand and 9.1% had average monthly sales of two millions and above.

4.2.2.0 Full Time Employees

The study determined the full time employees of the respondents. The results are summarized in Table 4.2.2.0.

Table 4.2.2.0.6a): Full Time Employees

<table>
<thead>
<tr>
<th>Full time employees</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>56</td>
<td>84.8</td>
</tr>
<tr>
<td>21-40</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>Over 60</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source Author 2013
The results in the above Table 4.2.2.0.6 show the respondent distribution in terms of their full time employees. From the table, it can be seen that majority of the businesses had 1-20 full time employees at 84.8%, 9.1% had 21-40 full time employees and 6.1% had over 60 full time employees.

4.2.2.0(b) Temporary/Casual Employees

The study also determined the temporary/casual employees of the respondents. The results are summarized in Table 4.2.2.0

Table 4.2.2.0.7(b): Temporary/Casual Employees

<table>
<thead>
<tr>
<th>Temporary/casual employees</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>52</td>
<td>78.8</td>
</tr>
<tr>
<td>21-40</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>RTA</td>
<td>12</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’ Computation 2013

The results in the above Table 4.2.2.0 show the respondent distribution in terms of their temporary/casual employees. The table, shows that majority of the business had 1-20 temporary/casual employees representing 78.3%, 3% had 21-40 temporary/casual employees and 18.2% refused to answer.

4.2.2.1 Growth in terms of Sales, Assets, Employees, New Branches and Size in the last four years

The respondents were asked to indicate whether their business/company experienced growth in terms of sales, assets, employees, new branches, size in the last four years of the respondents. The results are summarized in Table 4.2.2.1.8
Table 4.2.1.8: Business/Company experienced Growth

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>63</td>
<td>95.5</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013

The results in the above Table 4.2.1.8 show the respondent distribution in terms of their business/company experienced growth in terms of sales, assets, employees, new branches, size in the last four years. The respondents’ responses show that majority of the business 63 representing 95.5% had experienced growth and only 4.5% did not experienced growth.

4.2.2.2 Percentage of Growth in the following areas

The study also determined the percentage of growth in various areas of the respondents businesses. The results are summarized in Table 4.2.2.9

Table 4.2.2.9: Percentage of growth in the following areas

<table>
<thead>
<tr>
<th>Area of Growth</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>3.6</td>
<td>3.8</td>
<td>4.1</td>
<td>3.6</td>
<td>3.775</td>
</tr>
<tr>
<td>Employment</td>
<td>3.7</td>
<td>3.6</td>
<td>3.5</td>
<td>3.4</td>
<td>3.55</td>
</tr>
<tr>
<td>New branches/business</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>16</td>
<td>13.25</td>
</tr>
<tr>
<td>Technology improvement</td>
<td>3.6</td>
<td>4.5</td>
<td>5.2</td>
<td>10</td>
<td>5.825</td>
</tr>
<tr>
<td>Skill improvement</td>
<td>3.7</td>
<td>3.8</td>
<td>5.5</td>
<td>8.7</td>
<td>5.425</td>
</tr>
<tr>
<td>Average</td>
<td>4.92</td>
<td>5.54</td>
<td>6.66</td>
<td>8.34</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013
The results in the above Table 4.2.2.9 show the respondent distribution in terms percentage of growth in sales, employment, new branches, technology and skill improvement. From the table, it can be seen that introduction of new branches/business had highest average at 13.25%, technology improvement at 5.825%, skill improvement at 5.425%, sales at 3.775% and employment had the least at 3.55%

4.2.2.3 Factors contributing to the Growth

The study also determined the attributed to the growth of the respondents. The results are summarized in Table 4.2.2.3.10.

Table 4.2.2.3.10: Factors Contributing to the Growth

<table>
<thead>
<tr>
<th>Attributed to the growth</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans</td>
<td>52</td>
<td>78.8</td>
</tr>
<tr>
<td>New Markets</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td>New Products</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td>Re-investment of profits</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>97</td>
</tr>
<tr>
<td>RTA</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013

The results in the above Table 4.2.2.3.10 show the respondent distribution in terms factors that attributed to the growth. From the table, it can be seen that majority of the respondents at 78.8% their growth was attributed to loan, 9.1% their growth was attributed to re-investing of profit, 4.5% their growth was attributed to new markets and new products.
4.2.2.4 Disposed any Assets in the last Four years?

The study also determined the assets disposed in the last four years of the respondents’ operation. The results are summarized in Table 4.2.2.11.

Table 4.2.2.11: Disposed any Assets in the last Four years

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9</td>
<td>13.6</td>
</tr>
<tr>
<td>No</td>
<td>57</td>
<td>86.4</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source Author’s Computation 2013

The results in the above Table 4.2.2.11 show the respondent distribution in terms of assets disposed in the last four years. From the table, it can be seen that majority of the respondents at 86.4% had not disposed any assets in the last four years while only 13.6% had disposed any assets in the last four years.

4.2.2.5 The Proportion of Asset Disposed

The study also determined the proportion of asset disposed of the respondents. The results are summarized in Table 4.2.2.12.

Table 4.2.2.12: The Proportion of Asset Disposed

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last one year</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>In the last two years</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>In the last three years</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>In the last four years</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013
The results in the above Table 4.2.2.5.12 show the respondent distribution in terms proportion of asset disposed. As seen from the table above, majority of the respondents at 33.3% disposed assets in the three years and in the last four years while only 22.2% and 11.1% had disposed assets in the last two years and one year respectively.

4.2.2.6 Use the Profits for the last Two Years

The study also determined the use the profits for the last two years of the respondents. The results are summarized in Table 4.2.2.6.13.

Table 4.2.2.6.13: Use the Profits

<table>
<thead>
<tr>
<th>Use the profits</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased assets</td>
<td>9</td>
<td>13.6</td>
</tr>
<tr>
<td>Business expansion</td>
<td>36</td>
<td>54.5</td>
</tr>
<tr>
<td>Used as working capital</td>
<td>21</td>
<td>31.8</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

Source : Author’s Computation 2013

The results in the above Table 4.2.2.6 show the respondent distribution in terms of how they used the profits for the last two years. From the table, it can be seen that majority of the respondents 36, representing 54.5% used their profits for business expansion, 21, representing 31.8% used their profits as working capital and 9, representing 13.6% used their profits to purchase assets.

4.2.2.7 Overall Growth of Business

The study also determined the overall growth of your business of the respondents. The results are summarized in Table 4.2.2.7.14
**Table 4.2.7.14: Overall growth of business**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>52</td>
<td>78.8</td>
</tr>
<tr>
<td>High</td>
<td>11</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** Author’s Computation 2013

The results in the above Table 4.2.7.14 show the respondent distribution in terms overall growth of their business. From the table, it can be seen that majority of the respondents 52, representing 78.8% overall growth of business are moderate, 11 representing 16.7% overall growth of business are high, 2, representing 3.0% overall growth of business are low and 1.5% overall growth of business at very low.

**4.2.2.8 Micro Insurance**

The study determined the percentage micro insurance policies taken each year by the respondents. The results are summarized in Table 4.2.8.15

**Table 4.2.8.15: Micro Insurance**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>10</td>
</tr>
<tr>
<td>2010</td>
<td>12</td>
</tr>
<tr>
<td>2011</td>
<td>15</td>
</tr>
<tr>
<td>2012</td>
<td>18</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>13.75</strong></td>
</tr>
</tbody>
</table>

**Source:** Author’s Computation 2013
The results in the above Table 4.2.8.15 show the respondents’ percentage of micro insurance policies taken each year. From the table, it can be seen that highest percentage of micro insurance policies 18% was taken in 2012, 15% of micro insurance policies taken in 2011, 12% was taken in 2010 and 10% taken in 2009. This shows that the SMEs are increasing their use of micro insurance.

4.2.2.9 Total Cost spent on Training

The study respondents were asked to indicate the total cost spent on training each year for the four years. The results are summarized in Table 4.2.9.16.

Table 4.2.9.16: Total Cost spent on Training

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>9</td>
</tr>
<tr>
<td>2010</td>
<td>13</td>
</tr>
<tr>
<td>2011</td>
<td>20</td>
</tr>
<tr>
<td>2012</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Source: Author’s Computation 2013

The results in the above Table 4.2.9.16 show the respondent percentage total cost spent on training. From the table, it can be seen that majority of the respondents at 22 total cost spent on training in 2012, 20% total cost spent on training in 2011, 13% total cost spent on training in 2010 and 9% total cost spent on training in 2009.
4.3 Results of Regression analysis

Table 4.3.17: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.353a</td>
<td>.125</td>
<td>.065</td>
<td>.822</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Microcredit, Micro insurance and Training provided by MFIs

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variables, from the findings in the above table the value of adjusted R squared was 0.065 an indication that there was variation of 65% on the Growth in sales due to changes in Microcredit, Micro insurance and Training provided by MFIs at 95% confidence interval. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.353. The study was mainly on dependence and independent relationship, a moderate multiple regression analysis was used. The multiple regression analysis is mathematically expressed as shown below: A multivariate regression model was applied to determine the relative importance of each of the four variables with respect to the effects of microfinance services on the growth of SMEs in Machakos county.
4.3.2 Regression Equation and the Predictor Relationship

The table below shows the determination of the coefficients for the regression equation.

Table 4.3.2.18: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.644</td>
<td>.884</td>
<td>.729</td>
<td>.470</td>
</tr>
<tr>
<td>Microcredit</td>
<td>.024</td>
<td>.010</td>
<td>.373</td>
<td>2.403</td>
</tr>
<tr>
<td>Micro-insurance</td>
<td>-.035</td>
<td>.027</td>
<td>-.216</td>
<td>-1.317</td>
</tr>
<tr>
<td>Training provided to SMEs by the MFIs</td>
<td>.765</td>
<td>.882</td>
<td>.130</td>
<td>.868</td>
</tr>
</tbody>
</table>

Source: Author 2013

The established multiple linear regression equation becomes:

\[ Y = 0.644 + 0.024 X_1 - 0.035 X_2 + 0.765 X_3 \]

**Where**

Constant = 0.644, shows that if Microcredit, Micro insurance and Training provided by MFIs were all rated as zero, Annual growth in turnover rating would be 0.644

\( X_1 = 0.024 \), shows that one unit change in Microcredit results in 0.024 units increase in Annual growth in turnover

\( X_2 = -0.035 \), shows that one unit change in Micro insurance results in -0.035 units decrease in Annual growth in turnover

\( X_3 = 0.765 \), shows that one unit change in Training provided by MFIs, results in .0765 units increase in Annual growth in turnover
4.3.3 Analysis of Variance

The probability value (p-value) of a statistical hypothesis test is the probability of getting a value of the test statistic as extreme as or more extreme than that observed by chance alone, if the null hypothesis H0 is true. The p-value is compared with the actual significance level of the test and, if it is smaller, the result is significant. The smaller it is the more convincing is the rejection of the null hypothesis. ANOVA findings in table 25 shows that there is correlation between the predictors variables (Microcredit, Micro insurance and Training provided by MFIs) and response variable (Annual growth in turnover) since P-value of 0.011 is less than 0.05

Table 4.3.3.19: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.247</td>
<td>3</td>
<td>1.416</td>
<td>2.094</td>
<td>.011b</td>
</tr>
<tr>
<td>Residual</td>
<td>29.753</td>
<td>44</td>
<td>.676</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>34.000</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: df = degrees of freedom; F = Anova; α = level of significance; F_o = calculated value of F; F_c = the critical value of F; α_o = calculate value of α; and α_c = the critical value of α.

a. Dependent Variable: Annual growth in turnover

b. Predictors: (Constant), Microcredit, Micro insurance and Training provided by MFIs

The above summary of the basic logic of ANOVA is the discussion of the purpose and analysis of the variance. The purpose of the analysis of the variance is to test differences in means (for groups or variables) for statistical significance. The accomplishment is through analyzing the variance, which is by partitioning the total variance into the component that is due to true random error and the components that are due to differences between means. The ANOVA analysis is intended to investigate whether the
variation in the independent variables explain the observed variance in the outcome – in this study the Annual growth in turnover. The ANOVA results indicate that the independent variables significantly (F=2.094, p=0.011) explain the variance in Annual growth in turnover. In this context, as have been presented in the table above, the dependent variable is the level of performance whiles the independent or the predictors, Microcredit, Micro insurance and Training provided by MFIs.

4.4 Discussion

From the results of regression analysis the coefficient of determination, the R squared of 0.065 in table 4.3.1 tells us the variation in the dependent variable due changes in the independent variables. From the findings of the study, the regression analysis indicated micro insurance and training provided by MFIs at 95% confidence interval. R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in table 4.3.1, there was a strong positive relationship between the study variables as shown by the correlation coefficient R of 0.353. The study was on dependence and independence relationship A multivariate model was applied to determine the relative importance of each of the four variables with respect to the effects of microfinance services on the growth of SMEs in Machakos County. From table 4.3.2, the constant of 0.644 shows that if Microcredit, Micro insurance and training provided by MFIs were rated as zero, annual growth in turnover would be 0.644. X₁ = 0.024, shows that one unit change in Microcredit results in 0.024 units increase in annual growth in turnover. X₂ = -0.035, shows that one unit change in Micro insurance results in -0.035 units decrease in annual growth in turnover. This means that micro insurance has a negative effect on the growth of SMEs. X₃ = 0.765, shows that one unit change in training provided by MFIs results in 0.765 units in annual growth in turnover. This implies that training has the greatest positive impact on the growth in sales followed by Microcredit.

The ANOVA analysis was intended to investigate whether the variation in the independent variables explain the observed variance in the outcome – in this study the annual growth in turnover. ANOVA findings in table 4.3.3 shows that there is correlation between the predictors variables (Microcredit, Micro insurance and Training provided by MFIs) and response variable (Annual growth in turnover) since P-value of
0.011 is less than 0.05. This indicated that there was a strong positive relationship between the study variables. The coefficient of determination R- explains the extent to which change in the dependent variable can be explained by change in the independent variable. The outcome of this study concurs with the findings of Cooper(2012) who studied on the impact of microfinance services on the growth SMEs in Kenya and found a strong positive relationship between microfinance services and the growth of SMEs. However the findings in this study indicate that micro insurance has a negative effect on the growth of SMEs. This probably explains why most SMEs do not demand for micro insurance as most of the respondents said that they do not insure their businesses because of the difficulties involved in providing the information required by the Microfinance Institutions to process their claims in the event of an insured risk. It can also be concluded that the findings concurs with Koech (2011) that the factors affecting growth were capital market, cost, capital access, collateral requirements, information access, capital management and cost of registration

4.5 Summary

The study revealed that most respondents (74.2%) were in sole proprietor, (12.1%) of the respondents are in company, (9.1%) of the respondents are in partnership and 4.5%) of the respondents were in an income generating wing of a public institution. Most respondents have their business at Central business district areas, at 78.8% and the others at 21.8% off the Central business districts area. Most respondents businesses have between 11-20 years since they were established at 45.5%, 6-10 years at 27%, over 20 years 22.7% and 0-5 years 4.5%. The study showed that managers of SMEs are mostly men with a proportion of 71%. The management is done by personnel of high qualifications. The majority 24 (36.4%) of the respondents managers were form four graduates whereas 20 (30.3%) had basic university education, 17 (25.8%) were diploma graduate, 4(6.1%) were post graduate managers. Only 1 (1.5%) had primary level of education.

The study also revealed that, the majority of the respondents, at 55% were in products SME’s while only 45% are in services. It can be noted from the findings that the majority of the respondent’s business are valued between two millions and ten millions, 56.7%,
Majority of the business had 1-20 full time employees at 84.8%, and 1-20 temporary/casual employees, 78.8%. Most of the business, 95.5% had experienced growth, majority of the respondents at 78.8% their growth was attributed to loan, 9.1% their growth was attributed to re-investing of profit, 4.5% their growth was attributed to new markets and new products. The study revealed that majority of the respondents at 86.4% had not disposed any assets in the last four years while only 13.6% had disposed assets in the last four years, majority of the respondents at 33.3% disposed assets in the three years and in the last four years while only 11.1% had disposed any assets in the last two years and one year, majority of the respondents at 54.5% used their profits for business expansion, 31.8% used their profits as working capital and 13.6% used their profits to purchase assets. Majority of the respondents at 78.8% overall growth of business was moderate, 16.7% overall growth of business was high, 3% overall growth of business was low and 1.5% overall growth of business was very low. Most of the respondents at 18% received micro insurance in 2012, 15% received micro insurance in 2011, 12% received micro insurance in 2010 and 10% received micro insurance in 2009. Majority of the respondents at 22 total cost spent on training in 2012, 20% total cost spent on training in 2011, 13% total cost spent on training in 2010 and 9% total cost spent on training in 2009.

The study was on dependence and independent relationship. A moderate multiple regression analysis was used. A multivariate regression model was applied to determine the relative importance of each of the three variables with respect to the effects of microfinance services on the growth of SMEs. From table 4.3.2, the constant of 0.644 showed that if Microcredit, Micro insurance and training provided by MFIs were rated as zero, annual growth in turnover would be 0.644. $X_1 = 0.024$, showed that one unit change in Microcredit results in 0.024 units increase in annual growth in turnover. $X_2 = -0.035$, showed that one unit change in Micro insurance results in -0.035 units decrease in annual growth in turnover. This means that micro insurance has a negative effect on the growth of SMEs. $X_3 = 0.765$, showed that one unit change in training provided by MFIs results in 0.765 units in annual growth in turnover. This implied that training has the greatest positive impact on the growth in sales followed by Microcredit.
The probability value (p-value) of a statistical hypothesis test is the probability of getting a value of the test statistic as extreme as or more extreme than that observed by chance alone, if the null hypothesis H0 is true. The p-value is compared with the actual significance level of the test and, if it is smaller, the result is significant. The smaller it is the more convincing is the rejection of the null hypothesis. ANOVA showed that there was correlation between the predictor variables (Microcredit, Micro insurance and Training provided by MFIs) and response variable (Annual growth in turnover) since P-value of 0.011 is less than 0.05. The ANOVA results indicate that the independent variables significantly (F=2.094, p=0.011) explain the variance in Annual growth in turnover. In this context, as have been presented in the table above, the dependent variable is the level of performance whiles the independent or the predictors, are Microcredit, Micro insurance and Training provided by MFIs.
CHAPTER FIVE
SUMMARY AND CONCLUSION

5.1 Introduction

This chapter summarizes the findings of the study. Section 5.2 is a summary of the findings. Section 5.3 discusses the conclusion. Section 5.4 explains the limitations of the study and Section 5.5 gives the recommendations for further research.

5.2 Summary of the Study

The Small and Medium Enterprise (SME) sector has continued to play an important role in Kenyan Economy. The sector’s contribution to the Gross Domestic Product (GDP) increased from 13.8% in 1993 to over 18% in 1999. The Economic survey 2012 estimated that the contribution to the GDP by this sector currently stands at over 25%. It is the objective of every entrepreneur to grow their businesses into large enterprises. To achieve this, most of the entrepreneurs make use of microfinance services.

Various studies have been done in Kenya on SMEs and how they are influenced by microfinance services but none had focused on the effects of microfinance services on the growth of the SMEs. The purpose of this study was to find out the effects of microfinance services on the growth of Small and Medium Enterprises in Machakos County. A quantitative descriptive design was used to study 8 types of business categories in Machakos County. Structured questionnaire was used to collect data from 100 businesses. The sample of 100 businesses from a list of 5311 was taken as a representative population in the county.

The study was on dependence and independent relationship. A moderate multiple regression analysis was used. A multivariate regression model was applied to determine the relative importance of each of the three variables; microcredit, micro insurance and training, with respect to the effects of microfinance services on the growth of SMEs. The regression analysis conducted established that two of the independent variables have a positive correlation with the dependent variable. Micro credit and training contribute positively to the sales growth while micro insurance affects growth negatively.
The ANOVA analysis was intended to investigate whether the variation in the independent variables explains the observed variance in the outcome – in this study the annual growth in turnover. ANOVA findings in this study showed that there was correlation between the predictor variables (Microcredit, Micro insurance and Training provided by MFIs) and response variable (Annual growth in turnover) since P-value of 0.011 is less than 0.05. This indicated that there was a strong positive relationship between the study variables.

The probability value (p-value) of a statistical hypothesis test is the probability of getting a value of the test statistic as extreme as or more extreme than that observed by chance alone, if the null hypothesis H0 is true. The p-value is compared with the actual significance level of the test and, if it is smaller, the result is significant. The smaller it is the more convincing is the rejection of the null hypothesis. ANOVA showed that there was correlation between the predictor variables (Microcredit, Micro insurance and Training provided by MFIs) and response variable (Annual growth in turnover) since P-value of 0.011 is less than 0.05. The ANOVA results indicate that the independent variables significantly (F=2.094, p=0.011) explain the variance in Annual growth in turnover.

5.3 Conclusion

Based on the findings, the study concludes that the growth in sales is due to changes in Microcredit, Micro insurance and Training provided by MFIs. The results show the relationship between the micro finance services and the growth of SMEs. There is a strong positive relationship between the micro finance services and the SMEs Growth. The study further concludes that Microcredit and Training provided to SMEs leads to their high growth. It can also be concluded that there is a major effect of the micro finance services on the growth of SMEs in Machakos County. This concurs with Koech (2011) that the factors affecting growth were capital market, cost, capital access, collateral requirements, information access, capital management and cost of registration. Capital market, cost and capital access had the highest contribution to constraining SMEs growth into large businesses. It also agrees with the findings of Cooper(2012) that microfinance services had a strong positive impact on the growth of SMEs. The study
further concluded that effect of microcredit, micro insurance and training on the growth of SMEs in Machakos county was high positive performance (p = 0.011).

5.4 Limitations of the Study

The study focused on SMEs in Machakos County and the time limit was not adequate to collect data from the whole county. Cost constraint was also a limiting factor and hence the sample of 100 SMEs from the whole county was on the lower side. Most business owners were reluctant to fill the questionnaires after reading and establishing that financial information about their businesses was required in the questionnaire. They said that information was very sensitive and confidential and that giving it to anybody amounted to uncovering themselves. Many of the entrepreneurs argued that they do not keep records. They admitted that they lack basic bookkeeping/record keeping skills.

Sales figures could not form a reliable basis to analyze the growth since the figures were not provided from audited published financial statements. Most respondents could not be interviewed and as a result the validity of their responses could not be confirmed. Majority of the sole proprietors said they get their family financing from the businesses and were satisfied as long as the businesses continued to operate and were not threatened to close down. The micro enterprises owners said they do not get any formal financial services from formal financial institution because of the strict requirement conditions put in place i.e collaterals, guarantors, and repayment terms. They said they only depend on round table banking for their financial needs.

5.5 Recommendations for further research

Since the study focused on micro finance services on the growth of SMEs in Machakos County, it is suggested that further studies be done on other Counties. This is because different counties have unique characteristics and diverse contextual realities that might affect micro finance services offered to SMEs. It is also recommended that a study be done to find out why many SMEs do not make use of the micro insurance. The study further recommends that for studies requiring information about business growth and business records the data collection tools be designed to seek both facts and opinions.
REFERENCES.


Cheston & Kuhn,L (2002) empowering woman through microfinance, UNIFORM.

CIDA, (J 2002),”Empowering women through microfinance on poverty reduction”.


Tata McGraw-Hill Inlc., New York,


Routledge.

Declaration.


51


Ministry of industry of trade, Tanzania (2002) *Small and medium enterprise development policy*.


Nelson, Jerker (2010). “*The impact of microfinance institutions (MFIs) on the development of small and medium size business (SMEs) in Cameroon.*” Swedish University of Agricultural Sciences.


APPENDIXES

APPENDIX I: LETTER OF INTRODUCTION
APPENDIX II: QUESTIONNAIRE

This questionnaire is meant to collect data on the effects of Microfinance services on the growth of SMEs in Machakos County. Any information given by the respondents during this exercise will be treated with strict confidentiality. Kindly answer the following questions by writing a brief answer statement or ticking in the spaces provided as will be applicable.

SECTION A: BACKGROUND

1. Name of the business_________________________________________
2. Nature of the business/Category________________________________
3. Tick the form of ownership
   a) Sole proprietor ( ) Partnership ( )
   b) Company ( ) Other (specify)________________________________
4. Location of the business CBD ( ) Off CBD ( )
5. When established_______________________________________________
6. Gender of entrepreneur
   Male ( ) Female ( )
7. What is the education level of the Manager?
   Std 8 ( ) Form 4 ( ) Diploma ( ) Undergraduate ( ) Postgraduate ( )
8. What is the main business activity?

SECTION B: GROWTH

1. How is your business financed? Indicate in percentage
   a) MFI (Loan) 25% ( ) 50% ( ) 75% ( ) Other (Specify)________
   b) Business income 25% ( ) 50% ( ) 75% ( ) Other (Specify)_______
   c) Friend and relatives 25% ( ) 50% ( ) 75% ( ) Other (Specify)_______
   d) Others (specify)

2. What is the value of your business in total assets___________________________
3. How much savings have you made from the last one year
   Kshs___________________________________________
4. What is the average monthly sale? Kshs_______________________________
5. How many full time employees do you have_______________________________
6. How many temporary/casual employees do you have ____________________

7. Has your business/company experienced growth in terms of sales, assets, employees, new branches, size in the last four years?
   Yes (   )  No (   )

Please indicate the percentage of growth if any in each of the following areas

<table>
<thead>
<tr>
<th>Area of Growth</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New branches/business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. What attributed to the growth above?
   Tick as appropriate
   a) Loans (   )
   b) New markets (   )
   c) New products (   )
   d) Re-investment of profits (   )
   e) Technology (   )
   f) Others (specify) ________________________________

9. Have you disposed any assets in the last four years?
   Yes (   )  No (   )
   What was the proportion of asset disposed? ________________________________
   In the last one year?
   Yes (   )  No (   )
   What was the proportion of asset disposed? ________________________________
   In the last two years?
   Yes (   )  No (   )
   What was the proportion of asset disposed? ________________________________
In the last three years?

Yes ( )  No ( )

What was the proportion of assets disposed?

10. Income from the business enterprise

<table>
<thead>
<tr>
<th>Item</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much sales did you make?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much did you spent on inputs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much did you spent on salaries?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much did you spent on rent?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much did you spent on transport?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How did you use the profits for the last two years (in percentage)
   a) Purchased assets ______________________________ %
   b) Saved ______________________________ %
   c) Business expansion ________________________ %
   d) Used as working capital __________________ %
   e) Started another business __________________ %
   f) Other(specify) ____________________________ %
12. Please give your assessment of the overall growth of your business using the response scale below
Scale: 1 : Very low
Scale: 2 : Low
Scale: 3 : Moderate
Scale: 4 : High
Scale: 5 : Very High

Sales growth for the last 4 years______________________________

Growth in workforce__________________________________________

Increase in profits___________________________________________

Increase in business size_______________________________________

Increase in product line_______________________________________

13. How much did you pay for micro insurance for:

2009:__________ 2010:__________ 2011:__________ 2012:__________

14. Indicate the total cost spent on training for:

2009:__________ 2010:__________ 2011:__________ 2012:__________

Thank you for your responses
### APPENDIX III: SMEs IN MACHAKOS MUNICIPALITY

<table>
<thead>
<tr>
<th>Business Category</th>
<th>Business Code</th>
<th>Business Description</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>110</td>
<td>Medium Trader Shops and Retail Services</td>
<td>423</td>
</tr>
<tr>
<td></td>
<td>115</td>
<td>Small Trader Shops and Retail Services</td>
<td>849</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>Kiosks</td>
<td>167</td>
</tr>
<tr>
<td>200</td>
<td>205</td>
<td>Hawkers with Motor Vehicles</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>210</td>
<td>Hawkers without Motor Vehicles</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>215</td>
<td>Small information Sector Trader/Service Provider</td>
<td>825</td>
</tr>
<tr>
<td>300</td>
<td>315</td>
<td>Small Transport Company</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>320</td>
<td>Independent Transport operators</td>
<td>303</td>
</tr>
<tr>
<td></td>
<td>330</td>
<td>Medium Petrol filling Station</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>335</td>
<td>Small Petrol filling Station</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>365</td>
<td>Small Storage facility</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>375</td>
<td>Medium Communication Company</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>395</td>
<td>Micro Transport Storage and Communication</td>
<td>20</td>
</tr>
<tr>
<td>400</td>
<td>410</td>
<td>Medium agricultural producer, processor/Dealer/Export.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>415</td>
<td>Small agricultural producer/processor/dealer</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>425</td>
<td>Medium mining or natural resources extraction operation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>495</td>
<td>Micro agricultural forestry and natural resources</td>
<td>13</td>
</tr>
<tr>
<td>500</td>
<td>506</td>
<td>Medium – High standard Lodging Hotel D class</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>512</td>
<td>Medium Eating Houses/ Snack Bar, Tea House</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>515</td>
<td>Medium Lodging Hotel with Restaurant/Bar B/C class</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>517</td>
<td>Small Night Clubs/Casino</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>518</td>
<td>Small Lodging House with Restaurant or/B/C class</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>524</td>
<td>Medium Lodging House B/C class</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>527</td>
<td>Small Lodging Houses</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>543</td>
<td>Medium Restaurant with Bar/ Membership club</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>546</td>
<td>Medium Restaurants with Bar – (10 customers)</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>555</td>
<td>Small Eating Houses</td>
<td>260</td>
</tr>
<tr>
<td>600</td>
<td>615</td>
<td>Small Professional Services</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>620</td>
<td>Independent Technical operator</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Medium Financial Services</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>635</td>
<td>Small Financial Services</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>695</td>
<td>Other Professional and Technical Services</td>
<td>338</td>
</tr>
<tr>
<td>700</td>
<td>715</td>
<td>Medium Private Education Institutions</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>720</td>
<td>Small Private Education Facility</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>760</td>
<td>Small Entertainment Facility</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>795</td>
<td>Other Educational, Health and Entertainment Services</td>
<td>39</td>
</tr>
<tr>
<td>800</td>
<td>815</td>
<td>Small Industrial Plants</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>825</td>
<td>Medium Workshops/ Service Repair Contractor</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>830</td>
<td>Small Workshops/ Service Repair Contractor</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>895</td>
<td>Other Manufacturers, factory and contractors</td>
<td>20</td>
</tr>
</tbody>
</table>

**Total**                       |                                             | 5,311|

Source: Municipal Council of Machakos; Licensing Department