

**FINANCIAL LITERACY AND GROWTH OF SMALL AND MEDIUM  
ENTERPRISES IN NYERI COUNTY, KENYA**

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## **DECLARATION**

This research project is my original work and has not been presented for a degree in any other university or for any other award.

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## **DEDICATION**

This work is dedicated to my family for their support and encouragement in every step of the way.

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## **ABBREVIATIONS & ACRONYMS**

<b>GDP</b>	Gross Domestic Product
<b>KWFT</b>	Kenya Women Finance Trust
<b>MAR</b>	Marshall Arrow Romer
<b>MSE:</b>	Micro and Small Enterprises
<b>ROE:</b>	Return on Equity
<b>ROA:</b>	Return on Asset
<b>ROI:</b>	Return on Investment
<b>ROS:</b>	Return on Sales
<b>SMEs:</b>	Small and Medium Enterprises
<b>SPSS</b>	Statistical Package of Social Sciences
<b>ST</b>	Stakeholders Theory
<b>US</b>	United States
<b>USD</b>	United states Dollar

## OPERATIONAL DEFINATION OF TERMS

<b>Growth</b>	Refers to the increase in net income, number of employees and asset base.
<b>Debt Management Literacy</b>	Refers to the knowledge on loans, ability to calculate interest and debt implication in the firm
<b>Book Keeping Literacy</b>	It refers to the ability to prepare financial statements, ability to prepare tax returns and the accounting skills level
<b>Budgeting Skills</b>	it is the Knowledge on preparation of budgets, doing sales forecast and reduction on cost
<b>Banking Knowledge</b>	Refers to the knowledge on the banks products, the level of banks product uptake and bank reconciliation abilities.
<b>Financial Literacy</b>	The ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.
<b>Small and Medium Enterprises</b>	This are non-subsidiary and independent firms which employ fewer than a given number of employees.

## ABSTRACT

Despite the significant contribution of Small and Medium Enterprises (SMEs) to the economy, SMEs have been faced by a number of issues affecting their growth. One of the issues relates to inadequate financial literacy which hinders their flexibility to diversify risk thus preventing them from growing and attaining economies of scale. Consequently, the growth of SMEs is inhibited in terms of liquidity and being unable to attend to their daily operations and investments commitments thus losing on business opportunities which makes it difficult to achieve their growth in terms of size and wealth accumulation. The general objective of the study was to establish the effects of financial literacy on growth of small and medium enterprises in Nyeri County, Kenya. The study aimed at determining the effect of debt management literacy, book keeping, budgeting skills and banking knowledge on growth of SMEs. The study was anchored on stages of growth theory, MAR knowledge spillover theory and dual process theory. The research design used was descriptive research design. The target population of the study was 841 SMEs. Stratified random sampling was used to select a sample of 168 SMEs. 168 questionnaires were dispatched with 132 being filled and returned yielding a response rate of 78.6%. The study found that debt management literacy and book keeping literacy have a positive and significant effect on growth of SMEs studied with p value of 0.001 and 0.000 respectively. Budgeting skills and banking knowledge literacy were found to have positive but insignificant effect on the growth with p value of 0.354 and 0.698 respectively. In addition, descriptive analysis findings indicate that accumulation of debt (through multiple borrowings and failure to adhere to the purpose of the loan) adversely affect debt repayment which may hinder growth of SMEs. Further the findings indicate that proper book keeping enables SMEs to meet debt obligations in time and manage stock effectively. The study further found that book keeping knowledge was not sufficient enough to enable SMEs to file the tax returns without engaging consultant and the SMEs were rated below average on aspect of reconciling cashbook with the bank statements. This study concludes that SMEs need to be trained on book keeping, budgeting and debt management. The study also conclude that SMEs should avoid diverting the amount borrowed to from intended purpose as well as accumulating debts through multiple borrowings from both formal and informal sector. Further the study conclude that SMEs should be encourage to prepare annual budget in order to enhances coordination of various financial functions with ultimate goal of meeting the agreed performance levels.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

The driving forces on financial escalation & employment are Small and Medium Enterprises (SMEs), they have a n outstanding significance in both industrial and the emerging economies (Lockea, 2012). SMEs are constrained in several areas in most countries such as access to finance, technology complexity, managerial constraints, low output and dictatorial burdens in their operations. Developed and developing economies continue to rely on small businesses to catalyze the economic growth and inequitable progress which is a major role played by the SMEs in keeping the currency circulating. Mills and MCarthy (2014) acknowledge the huge segment of employment catered by the private sector and estimated that 60 to 80 percent new employment is created every year in the USA. United Nations Industrial Development Organization (UNIDO, 1999) estimates that SMEs constitutes above 90% of private sector and above 50% of GDP (gross domestic product) in most African countries.

Abor and Quartey (2010) identified that in South Africa 91% of prescribed firms are the SMEs and they generate 52%-57% of the GDP and provides a substantial number of employment about 61%. The Kenya Institute of Public Policy Research and Analysis (KIPPRA) estimates that the SMEs sector employs 42 per cent of the operational population, and accounted for 75 per cent of all modern establishments (KIPPRA, 2012). SME sector that is physically powerful contributes significantly to the economy through job creation, bulky production of goods and services, increasing exports, sharpens entrepreneurship skills and enhances creativity.

Despite, SMEs high contribution to the market growth they are faced by challenges worldwide which make them exit the market before their third anniversary. (Turyahebwa, Sunday, & Ssekajugo, 2013; Fatoki, 2014; GOK, 2005; Oluoch, 2014). These studies shows the high rate of market exit of SMEs reason being they lean to vulnerability due to their economic redaduncy and simple management mistakes as compared to large enterprises. This denies SME managers room for improvement due to lack of benchmark platform of the past challenges as a result of resources inadequacy and outstretched capital base which cannot accommodate any far losses.

There is an escalating revelation that majority of the SMEs depend on managers on matters of financial skills execution apart from capital admittance and a hospitable environment. Those with financial literacy skills have a tendency to make sound fiscal decisions with less administration oversights than their equivalents who are financially ignorant (Njoroge, 2014; Fatoki, 2014). The firms growth is greatly influenced by fiscally literate skills and business judgments on entrepreneurship, Penrose (1959).

### **1.1.1 Financial Literacy**

Atkinson and Messy (2005) define financial literacy as the ability of an individual to compacts facts in order to make sound financial decisions by use of financial resources available. Fiscal decisions have a long term consequences as far as the finance costs are concerned therefore, making the right decision is very important in the life of individuals and the businesses as well. Management of financial of a firm is not an easy task; SMEs need to make a choice out of a large menu of financial needs of which many have complicated features. SME Act (2011) was passed to push the credit accessibility and build the capacity of small and medium enterprises in the grassroot levels in the direction of eradicating poverty and to achieve vision 2030 (Republic of Kenya, 2012). By being financially literate, individuals are able to provide facts and sensitize financial concepts. Skills, motivation and confidence to apply such knowledge and sensitivity in the business, makes a manager to be efficient and effective across a range of financial contexts and improves the financial growth of SMEs (Hogarth, 2002).

Mutegi et al., (2015) affirms that financial literacy enables the firm to meet their shortterm as well as long term obligations through informed decision making processes such as settling of bills timely, proper book keeping, improved budgeting skills, which positions the business strategically in the market. This welcomes a vibrant economy with integrated and inclusive systems thus boosting business as well as creating employment. This will make the firm to have strong internal controls of its financial future and to maximize on economies of scale. (Sunday & Ssekajugo, 2013). According to Miller et al., (2009) facing a well-read lot, financial controllers are supposed to position themselves competitively in the market, to enable them to

deliver quality services. Money-wise investors are aggressive on financial institutions to offer better rated priced products and services, by evaluating options available, and bargaining more efficiently. Investors on the other hand are able to assess and judge against financial products, such as investments, saving products, credit and loan options, bank accounts, payment instruments, insurance coverage, so as to make the most optimal decisions.

According to Siekei (2013) credit management skills, debt management skills, budgeting skills acquired through financial literacy programme enhance growth of the firm due to adequate administration of investment portfolios which minimizes the finance cost. Budgeting skills are extremely major in increasing sales, profits and ensuring downy operation of the business. Financial literacy disputes that the people with a high level of financial literacy performance, may depend on the commonness of the dual process theories which are; intuition and cognitive theories (Evans, 2008).

### **1.1.2 Growth**

Growth is habitually over a period of time taken as an indicator of a firm's economic fitness. There are various ways to measure the growth of a firm which arrests a slightly dissimilar aspect of presentation such as cash inflows and expected returns. Productivity of the firms is also measured in terms of transactions and the market jurisdiction (Fatoki, 2014). These different measures rate the Growth of SMEs by use of profitability (return on investment, return on equity), liquidity (quick ratio, current ratio), and solvency (gearing). Such growth measures are indicators of commercial success (growth, market share) while others are indicators of financial success (profitability) (Miller, 2013).

SMEs growth is measured by both internal and external factors as indicated by some studies. They cited sales proceeds, quality of administration and capability to attend to daily commitments of the firm (Pisa, 2013). Nevertheless, there are only few studies based on growth measurement of the SMEs in developing countries (Muthoni, 2015). SMEs are the catalysts of the economic growth which are the engines to most economies. Researcher suggests that, businesses and SMEs account for 95% of firms

in most countries. They satisfy industrial growth, support jobs creation, embraces innovation which contributes to GDP.

### **1.1.3 Small and Medium Enterprises in Nyeri County, Kenya**

SMEs in this area are comprised of professional services such as lawyers and doctor, farming, hospitality, hawking, and public transport services (bodaboda). Mainly, farming segment takes place in rural areas while the rest takes place in urban areas. SMEs is all round demographically in Nyeri County (Njoroge, 2012). Nearly all small scale enterprises in this area are owned by relatives and run by two or more employees. The financial training bodies are microfinance lending institutions such as Faulu, KWFT and SMEP (Small and Micro-Enterprise Programme), commercial banks such as Barclays Bank, Diamond Trust Bank, Cooperative Bank, Standard Chartered Bank, Kenya Commercial Bank (K.C.B), National Bank of Kenya, Equity Bank and SACCOs. SMEs are controlled and licensed by County government.

The county government of Nyeri has embraced and acknowledged the importance of training SMEs, in Nyeri county to create employment and to eradicate poverty. SMEs in Nyeri county have been given some incentives to propel their growth by being funded through Women Enterprise Fund, The Uwezo fund and The Youth Enterprise Development Fund just to mention a few. (Kabue, 2016). National government, NGOs and private sector have also advanced on several initiatives towards improving the SMEs sector in Nyeri county to enable affordable credit admittance and effective operations of the business.

### **1.2 Statement of the Problem**

Despite the significant contribution of SMEs to the economy, it's been subjected to a number of challenges one of them being lack of financial information and business records. Wanjohi (2011) refer to lack of sufficient financial business skills as a major challenge in the enlargement and growth of SMEs. Major contributor to these challenges is inadequate financial education foundation and unkept business records.. The CMA (2010) recognized that SMEs in Kenya do not enjoy economies of scale which inhibits their elasticity.s Challenges related to access of financial information are inhibited by both internal and external factors. Consequently this constrains

financial health of SMEs in terms of liquidity, profitability, gearing etc such gives rise to opportunity cost and hinders growth (Badagawa, 2011).

However, empirical studies on financial literacy on growth of SMEs in Kenya are limited. Mutegi et al., (2015) found that Banks such as Equity and Micro Finance such as Faulu, SMEP and KWFT came up with specialized segment of SMEs clients to offer tailor made solutions for their unique environment and help them overcome their obstacles which hinder performance due to lack of information and improper records (Phelister, 2015). Banks and micro finance institutions allocated budgets to train SMEs personnel's and to build capacity through training and workshops (Equity Bank, 2012).

Despite the attention given to issues affecting growth of SMEs, very little concentration has been given to the financial literacy on such growth. On contrary a study by Wachira and Kihui, (2012) found that those who are financial illiterate tend to borrow too much and generally use more expensive sources of finance that may impact negatively on their business performance and are also likely to report excessive debt position or inability to measure their debt position. Liedholm and Mead (2005), estimated that in the review of national surveys conducted in several African countries, between 17% - 27% of the people working in SMEs are financially literate, being nearly twice the employment of big companies and the government. A research dealing with this area shows existence of challenges on financial literacy effects which are very significant on growth of SMEs. Hence, the fundamental question is to establish the connection of financial literacy and growth of SMEs in Kenya and this study seeks to address the same.

### **1.3 Objectives of the study**

The study sought to achieve the following objectives:

#### **1.3.1 General Objective**

The general objective of the study was to determine the effects of financial literacy on growth of small and medium enterprises in Nyeri County, Kenya.

### **1.3.2 Specific Objectives**

The specific objectives of the study were:

- i. To establish the effect of debt management literacy on growth of SMEs in Nyeri County.
- ii. To determine the effect of budgeting skills on growth of SMEs in Nyeri County.
- iii. To establish the effect of book keeping skills on growth of SMEs in Nyeri County.
- iv. To establish the effect of knowledge of banking services on growth of SMEs in Nyeri county, Kenya.

### **1.4 Research Hypotheses**

The study sought to test the following null hypotheses:

- i. **H<sub>01</sub>:** Debt management literacy has no significant effect on growth of SMEs in Nyeri County, Kenya.
- ii. **H<sub>02</sub>:** Budgeting Skills has no significant effect on growth of SMEs in Nyeri County, Kenya.
- iii. **H<sub>03</sub>:** Book keeping literacy has no significant effect on growth of SMEs in Nyeri County, Kenya.
- iv. **H<sub>04</sub>:** Knowledge of banking services has no significant effect on growth of SMEs in Nyeri County, Kenya.

### **1.5 Significance of the Study**

The study will be beneficial to the following: The results of this study will help improve the management of SMEs and also the Nyeri county government to lay emphasis on how to improve on financial literacy of SMEs. The national government will access relevant information on the expectations the SMEs as regards financial literacy. This will enable the formulation of customer focused policies and regulations in the Ministry of Devolution in the aim of achieving the goals of Vision 2030 and Sustainable Development Goals. Future finance researchers, academicians and scholars will refer to the findings of this study for comparison in their future studies.

## **1.6 Scope of the Study**

The study was undertaken in Nyeri County, Kenya. Data was collected from the registered SMEs in Nyeri County. Respondents selected for the study consisted of managers and SMEs owners. The study focused on the four variables variables: debt management literacy, budgeting skills, book keeping skills and banking services knowledge. The effects of the four variables on growth of SMEs was explored. The study was undertaken in the following 8 sub counties; Kieni East, Othaya, Mathira East, Mathira West, Kieni West, Nyeri Town, Mukurweini, and Tetu.sub-counties. Data was collected from the SME licensed by the county government of Nyeri. The time scope was five years (2013-2016).

## **1.7 Organization of the Study**

The rest of the project is organized as follows: in chapter one the objectives of the study and the problem statement is highlighted, in chapter two theories guiding the study were outlined, the variables used in the study were empirically reviewed and depicted in a conceptual framework. In chapter three methodologies of the study were outlines and the findings of the results were presented in chapter four while chapter five provides the conclusions and recommendations of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter explains the prose on financial literacy and growth of SME. It brings forth the theories relevance on financial literacy. The discussions seek to identify, evaluate and present relevant empirical information relating to financial literacy and SMEs growth. The relationship between independent variables and dependent variable is depicted in the conceptual framework.

#### **2.2 Theoretical Review**

The study reviews several theories pertinent to the study

##### **2.2.1 The Agency Theory**

There are two types of conflicts as identified by Jensen and Meckling (1976). The first conflict links the shareholders and managers and the one second is between the equity-holders and debt holders. Disagreements which arise between shareholders and managers mostly are due to failure of optimizing the shareholders wealth as a result of managers serving their own interest by not capturing the entire gain towards value maximizing activities. The second category of conflict, is as a result of give equity holders investing sub optimally as per the expectation of the debt holders (Mandell, 2008). Most benefits are taken into custody by the equity holders in the case where the venture is profitable than the face value of the debt and the debt holder bears all the burden when the venture incur losses. This happens due to asymmetric sharing of the profits. (Skousen, 2009). As a result, at times equity holders through investing in high volatile projects, they make huge profits which does not replicate to the debt holders because such investment results in devaluing the debt. Incase of equity loss due to poor investment in most cases it is settled by the gains equity holders transfer from appreciated equity value (Bullvag, 1996).

Following such interpretation Ouchi (2002) proposes two essential supervision tactics. The tactic can be either performance or results oriented. The performance-based tactic submits to an accord between the principal and the agent which distress a specific character which will be satisfied somehow, whereas the results oriented one submits

to the principal's measurement of certain outcomes and the prize will be initiated on this measurement. According to Ouchi (2002), the option connecting the strategies is pegged on the two extents; acquaintance of transformation procedure and accessibility of productivity appraises. To use a performance-based strategy, explicitly to constantly observe the agent's behavior, the principal requires a causal acquaintance of what is expected to arrive at an ideal outcome (Greenspan, 2002).

When the principal used the performance-based strategy, for instance, to evaluate the financial illiterate agent's accomplished results, the revolution course of action need not be branded at all, but a consistent and proper determination of the preferred productions have to be accessible. In the current study, agency theory would apply as it shows the conflicts which may arise between the managers and the owners, equity-holders and debt holders of SMEs which can become an impediment towards growth of SMEs.

### **2.2.2 Stages of Growth Theory**

Stages of growth theory was built up by Larry Greiner (1972) who posits that for an enterprise to progress has to do so via five discernible stages of growth. Each stage will undergo a quiet period of evolution and is concluded by an administration revolution (Gupta *et al.*, 2013; Mckaskill, 2010). These stages of growth comprise of creativity, direction, delegation, coordination, and collaboration. The birth of an enterprise occurs at the creativity stage where production of goods and services are done. The staff work for long and salaries are modest too as they work extra hard to penetrate in the market. The next stage is direction which is marked by persistent development and good administration (Audretsch, 2006). At delegation stage, the organization is decentralized, composition of the organization is established. Line managers and employees are tasked the most.

The third stage is Coordination stage, formalization stage which expresses authority order and headquarters is established for better harmonization of activities. Collaboration is the fourth stage which marks the climax and it entails sturdy inter-personal rapports and teamwork. The enterprise basically empowers in capacity building through workshops, conferences and training (Fatoki, 2014). Greiner (1972)

disagree that growth (evolution) advanced until a calamity (revolution) happened. Each calamity requires a different management style. Communication is affected as the business matures, and communication channels lengthen. Consumer value tumbles as the customer base grows because the new ones do not have a personalized relationship with the founders.

(Gupta, 2013). setbacks rise due to lack of feasible face to face communication. Transparency is embraced by external administrators and/or shareholders, this influence the entrepreneur decision making independence. Quite a number of individuals rely on the business for their employment. Greiner agrees with Penrose that the new management style is as a result of development of each level of complexity (Mckaskill, 2010). Most business men resist change and to accept that at each level of complexity their businesses must be operated as per the rising needs and for this reason they are unable to craft the transition or they are not ready to, as a result of this they languish and finally fail. This theory is applicable in the study since it supports creativity, direction, delegation, coordination, and collaboration as the requirement for successful SME. The five phases of evolution cannot be achieved without improving the literacy level of entrepreneur (Mckaskill, 2010). This theory is applicable to the study since the SMEs go through various evolution stages before they become successful. SMEs require a lot of creativity, clear guidelines, duties to be delegated, high level of co-ordination as well as broad networks to facilitate growth.

### **2.2.3 Marshall-Arrow-Romer (MAR) Knowledge Spillover Theory**

According to Edward Glaeser and Jose Scheinkman (1992) MAR Knowledge spillover theory of entrepreneurship propound that the background in which resolutions to establish a business are made can influence one's will power to become an entrepreneur. It states that in an accumulation of a new knowledge a technological expansion opportunities comes up (Adebimpe, 2008).

This theory is applicable to the study since Entrepreneurs recognizes the arising opportunities based on their degree of the new knowledge acquired over a time with the skills gained they decides to commercialize the opportunities vis new start ups to actualize the income (Siekei, 2013). Expected income from uncommercialised

knowledge will be enhanced by the magnitude of the new knowledge exploitation. Parker (2004) implies that there is a compelling assortment of financial, institutional and individual challenges to entrepreneurship. Therefore, for SMEs to grow and be successful they need to acquire skills of the market dynamics and be proactive by understanding the trends of the same through training (Lusardi, 2009). This theory is applicable to the study in that acquiring new knowledge for SMEs which is a continuous process due to the current diverse economy and this helps them to remain relevant and competitive.

#### **2.2.4 Dual Process Theory**

Richard E. Petty and John Cacioppo in 1986 projected that a dual process theory primarily focused on the ground of societal psychology. It also goes deep and puts into consideration that economic assessments can be constrained by cognitive and intuitive processes which implies that financial literacy can not always yield best possible financial decisions (Lusardi & Mitchell, 2011). The Dual Process theory disputes that the deeds of group ranked high of financial literacy may depend on the occurrence of the two philosophy styles: intuition (system 1) and cognition (system 2) (Glaser & Walther, 2013).

The ability to achieve awareness without implication is called intuition. Intuition gives judgments, beliefs or perceptions which cannot be observed logically. Taylor (1981) states that intuition based decisions, are rationally made because the individuals are largely influenced by their emotions. Glaser and Walther (2013) identify the milestone influence on the financial education on sound investment decisions is moderated by a high dominance of intuition. Therefore, increased use of intuition results to sub optimal investment decisions. Cognition is a systematic way by which decisions are made whereby the contribution is altered, summarized, detailed, stocked up, recuperated, and used. According to Chan, & Park (2013), cognition is the psychological dispensation inclusion of understanding, conniving, interpreting, analyzing and administration. They noted that Individuals with high cognition have a keen eye, analytical and think critically as far as decision making is concerned.

This illustrates that decision making proficiency might be influenced by financial literacy workshops by use of simple and easy to understand tactics (Fatoki, 2014; Cole & Fernando 2008). In addition, intuition use might be condensed by stipulation of significant information through financial education since individuals lean on intuition where relevant information is deficient in favour of decision making (Obago, 2014). Dual process theories is applicable to this study as it implies that individuals who are high on cognition will seek out for facts and are more expected to be prejudiced by the relevant message for them to make informed decisions. SMEs operations are supposed to be supported with facts which persuades them to have a certain preference in the market.

### **2.3 Empirical Review**

This section reviews various studies on financial literacy and growth of SMEs

#### **2.3.1 Debt Management Literacy and Growth of Small and Medium Enterprises**

Lusardi and Mitchell (2011) studied the impact of literacy levels on entrepreneurs performance revealed that persons of limited financial literacy are more prone to exploitations when it comes to debt management, savings and credit, and are not able to administer their resources competitively eg investing in the money market, stock market and to perform better on their portfolio selection hence they end up planning poorly while individuals with high financial literacy are able to choose a feasible portfolio with lower finance cost. Furthermore, the study found out that the individuals with high financial literacy have the capacity to generate more wealth and be in a position to administer resources more optimally with less finance cost. FSD (2009) and Master card (2011) sought to resolve the impact of financial literacy on any personal economic running practice among employees of commercial banks in Kenya using a sample of 100 respondents, the study found that individuals who are highly skilled have an affirmative relationship with higher levels of domestic wealth and good financial decisions while poor numeracy were coupled with redundant expenses. Individuals with stronger numeracy and financial literacy are also more likely to partake financial markets and to invest in stocks.

Pisa (2013) study sought after established contributors of financial literacy levels and found that the mounting attention in finance related education is a very significant life skill because it is linked to various factors both internal and external. Such factors may include the government policies and regulations which diversify risks and further resulted to employer and individuals sharing responsibilities like the introduction of the contributory pension whereby the individuals also chip in to prepare for their future retirement and be part and parcel of their future financial security thus replacing the earlier policy where the employer contributed for the individual pension alone. Other schemes have come up like social protection in Kenya which includes the proposed reforms to health care and financing which the individuals and the business had to uphold at each level, this calls for a diversified market and its supplication thus an increased financial products and a number of financial decisions to be made. This required technical understanding of finance so as to be able to make informed decisions and come up with viable investments. Financial assessment and accountability had been transferred to the individuals who are required to be educated on finance matters so as to mitigate financial loss and cover themselves from fraudulent systems.

Siekei *et al.*, (2013) studied the access of finances and financial literacy and found that accessing funds is a key element for MSEs to produce, create employment, compete in the market, business growth and eradicate poverty in the developing countries. The study indicate the constraints by the SMEs in the financial institutions due to formalizations structure thus the fail to meet the criteria set by the financiers as a proof of their ability to repay the loans advanced and this makes them to be denied finances and tagged as a risky venture. These formal sources of external finance challenges, makes SME's investment contribution lesser than the already established firms. SMEs mostly rely of the informal sources of income such as unregulated money lenders, family and friends advances and this creates bottlenecks on their growth. However, although these informal sources are an alternative, self financing is constrained by low saving capabilities of most SME's.

Lusardi and Tufano (2009) study sought to determine debt literacy, financial occurrences, and over indebtedness among Americans. The study established that the

three quarter of the target population could not understand the conception of interest compounding to their daily business operations or be in a position to embrace effectiveness of a credit card. In addition they acknowledged that women, marginalized, elderly and single parents are the most affected due to their constrained resources and poor financial supervision.

Obago (2014) studied the impact of financial literacy on running of personal finances established that most employed individuals suffer from pressure as a result of monetary problem behaviors which include:, extravagance, credit mismanagement, over-indebtedness, meager cash management and scarce income. The above challenges makes it hard for the staff to to make ends meet which impacts negatively on their productivity at work. Problems emanating from deficiency of financial literacy have propelled many companies in the United States to introduce financial education at work places to empower their employees with self-administration skills.

The Financial capability Report of 2009 reveals that a significant population of Kenyans i.e 25% has credit difficulties and tends to borrow loans to repay loans and admit that they are not in control of their finances. Therefore acquisition of financial literacy skills would have a positive impact on an individual's behaviors in terms of increased savings, wealth accumulation and avoidance of unnecessary expenses. This would make MSE managers better customers for the banks, prudent managers of the limited financial resources in their businesses and better able to select the most suitable products for their businesses.

### **2.3.2 Budgeting Skills and Growth of Small and Medium Enterprises**

Joshi et al., (2013) scrutinized budgeting financial literacy by an analysis of 54 both medium and large businesses in Bahrain aiming on budget processes which are inclusive of the participation, planning, controlling and its overall performance the researchers identified that the expansion of a firm is linked to its growth. For the two to be in harmony they require a more detailed budget development as well as implementation so as to benefit exemplarily performance. Extent of the firm and their commitments influence the nature of the budget to be adopted. Chidi and Shadare (2011) studied the challenges tackling human resource improvement in SMEs in Nigeria and found that budgeting was the greatest challenge among SMEs. Businesses

are not being accountable, thus lack of assistance and/or participation and deficiency in budgeting plans caused by the incapability to meet timelines set thus individuals do not understand the significance of prior planning and provision of providing numbers which are not viable. As a result the studies established that budgeting skills acquired by the managers reflect on the budget procedures followed and the same will correspond with the budget implementation.

Mahmood (2008) studied the relationship between budgeting process and SMEs performance and found that, the formalization of the budget will depend on how clearly the relationship of the business and the owners is defined. Where there is a clear definition the budget is well detailed and accurate thus minimal influence on the owners at expense of the business. Studies Aimed in Africa have scrutinized the accounting systems used in the midst of businesses in the upcoming economies (Diamond & Khemani, 2006) and deduced that budget implementation and accounting procedures were done inefficiently because they lacked updated software and are maintained manually thus not keeping a detailed trail of destructions affecting the operations of the business incase of funds shortfall or late facilitation. Manual records may fail to capture each an every data and this affects budget planning, monitoring, expenditure control and the reporting. This study also found that the quality of a a system in terms of computerization reflect the budget procedures and further affects the internal control of expenditure.

Joshi et al., (2003) studied budgeting process and performance of companies found out that large companies have a susceptibility to perform an indepth budget procedure and be in a position to present it excellently. Researcher found out that the budget process is highly influenced by the magnitude and the company complexity as far as the business operations are concerned which also affect the performance of the company. Size of the company is a variable mostly used in a quantitative study. Wijewardena and DeZoysa (2011) studied contributions to SMEs towards the budget process and identified that the proper budget is compromised by the two significant aspects of the expected budget process which are the budget planning and the budget control. They realized that there are three set up of firms which are as follows, firms who do not use any type of budget, firms with ample planning process in some areas

of operations which is also referred to as the simple budgeting and the firms with an a detailed budgeting which includes all areas of operations. Administration mainly focuses on budget controls for checks and balances of the business.

Siekei *et al.*, (2013) assessed the possessions of budgeting skills on performance of SMEs and found that better presentation of SMEs in terms of sales increase and profitability is linked with proficiency on budgeting skills and business growth which is attained through finance education which enables the individuals to forecast sales and set achievable targets. Nonetheless, Fatoki (2014) indentified that small enterprises operates informally in terms of expected income and expenditure lacking financial planning and measures as well. This is confirmed by Abanis, Sunday, Burani and Eliabu (2013) who found that most small businesses do not engage in formal financial planning and control and budgeting. Warue and Wanjira (2013) researched on hicaps of the businesses in Kenya and established that poor budgeting skills among Kenyans as a major contributor to the business failure in Kenya. FinAccess survey (FSD, 2009) exposed the fact that most people above 50% are not financially independent and lack control of the same inspite of them having an idea about budgeting. The above studies discloses a positive correlation between finance education and the individual performance such as the business portfolio, healthy debt administration, accumulated wealth and the business going concern strategies. On the other hand, escalating data shows there is a low level of financial literacy among grown-up across countries worldwide. This illiteracy is also higher amongst women than men which negatively impacts on their businesses.

### **2.3.3 Book Keeping Literacy and Growth of Small and Medium Enterprises**

Frankwood (2010) studied the benefits of book keeping on SMEs performance and found out that computation of the income statement is highly dependent on the proper book keeping which also enable the business to be able to collect their debts timely and also pay on time for their obligations. The business is able to identify the opportunities available and avoid opportunity cast as well such as stock outs etc and be able to plan progressively. Ezejiofor, Ezenyirimba and Olise (2014) investigated the impact of accounting records on SMEs and found that, a good bookkeeping scheme is reflected on its reports quality to both internal and external users and a well

organized maintenance of records. Quality accounting information will be of help on financial administration and create room for a better funding. Wise (2013) found that increase in financial literacy leads to production of financial reports oftenly and the individuals who have tendency of preparation of financial reports are able to repay their debts timely and this lowers the default levels.

Ezejiofor *et al.*, (2014) sought to establish the relevance of accounting records in small business performance in Nigeria found that MSEs that kept proper books of account were able to measure accurately the performance of their businesses. They also assert that business decisions with regard to expansion, maintaining a competitive edge, prevention of business failure and filling tax returns requires documentation with reliable and relevant information, easy to understand and readily available. Researcher also caution that the bookkeeping systems should generate the information in a simple and accurate order.

Fatoki (2014); Agyei (2011); Maseko and Manyani (2011) studied the methods of accounting used by SMEs and found that most SMEs operates on manual systems which fail to capture all data relevant for accounting purposes and this results to inefficiency of accounting information. The study is in support of a computerized accounting software to improve on the quality of the accounting information, although Smes lament of unavailability of a suitable system for them. The G20 Seoul Summit (2010) also reports that low levels of financial literacy particularly book keeping skills worldwide is a major contributor of lost opportunities for a large number of SMEs. Information unevenness among SMEs due to unreliable financial reports makes it hard to determine the creditworthy of the SMEs and potential proposals are rejected due to lack of financial information which makes most lenders reluctant to fund small firms especially those with new products. Mills and McCarthy (2014) confirm this and opine that assessing creditworthiness of small businesses is difficult due to information asymmetry because their transactions are largely informal. Through business training an entrepreneur can acquire basic skills of Book keeping which increases the transparency of his business and improves his credit standing.

#### **2.3.4 Knowledge of Banking Services and Growth of Small and Medium Enterprises**

Ekanem (2010) studied the SME owner-managers in the printing and clothing manufacturing sectors in Ethiopia and identified the uniqueness of each sector in relation to the financial literacy and firm administration. The study also found that in clothing and manufacturing sector the average debt collection period was within 30 to 90days while it is within 14 days in the printing sector. The two sectors will have to apply different measures on their debt collection policies. Cashflow statements and balance sheet are also monitored with a keen eye by the managers (Kubickova and Soucek, 2013).

Djankov, McLiesh, and Shleifer (2012) studied the impact of debt administration on its repayment. The study engaged the managers of the financial institutions whose information was further analyzed using mean and standard deviation and it was concluded that financial education is significant on debt administration and its repayment too. Andoh and Nunoo (2011) assessed the services access and financial literacy and found that the finance education to SMEs owners plays a key role on amplifying the utilization of financial services where the financially literate managers have the ability to bargain constructively on the available bank products and pressurize the financial institutions to be facilitated financially at a low cost as compared to the managers with financial literacy deficiency they are not able to analyse and access the financial products at a lower cost.

Wachira and Kihui (2012) studied the family units in Kenya using the 2009 National Financial Access (FinAccess) survey data using the multinomial logit model and how significant the financial literacy was in relation to finance accessibility. They identified that there are other factors which affect the access to financial access that are individual based to mention just a few, marital status, age, the level of income, Financial literacy was also rated low as a factor in household decision making which implies that majority of individuals did not value and seek out financial information in making financial decisions although financial literacy was significant in explaining exclusion from financial services market. It was concluded that financial literacy

created an awareness and enabled more individuals about 8.5% to be included in the financial services.

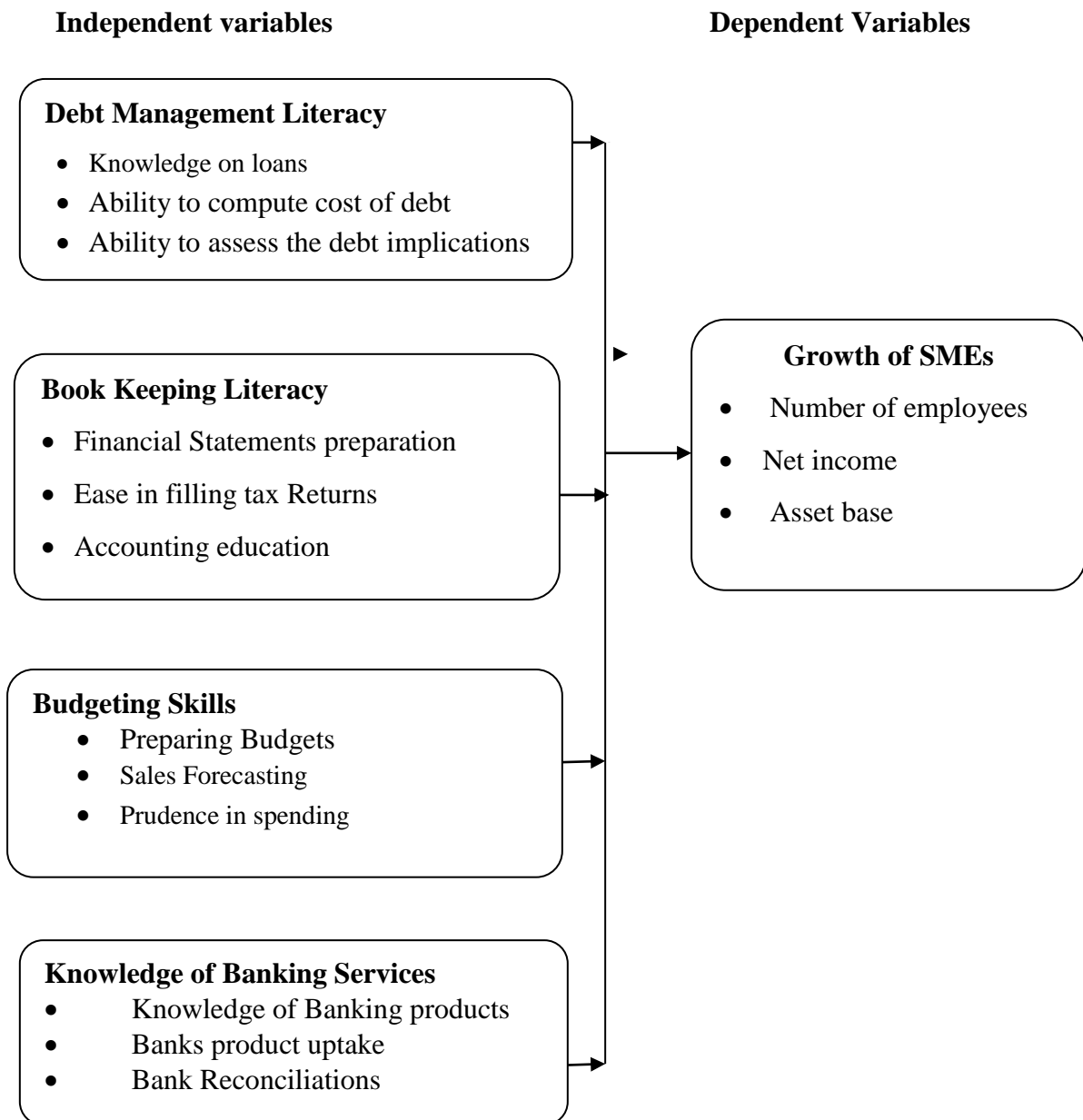
Fatoki (2014) studied causes of SMEs failure and found out that lack of finance education have adverse effects on the SMEs and especially the new start-ups. New start-ups requires a sound financial background which will create a healthy base of a successful business hence the growth of the enterprise. Duchesneau and Gartner (2010) studied factors affecting new small firms progress and established that the individuals who have emerged successful in business mostly were brought up in a business set up or were raised by successful entrepreneur parents which is a requisite for growth due to vast experience and exposure. This gives them confidence and vigour that they will make it in the ventures they start unlike the ones raised by the unsuccessful entrepreneurs who are unsuccessful. The research also identified that lead successful firms have a good communication system; individuals have the sense of belonging and have the zeal to work with less supervision. In addition these firms have clear objectives and strive to achieve their targets. Businesses which includes more than one shareholders on their formation have better chances of existence and making it in the market (Westhead et al., 2015).

#### **2.4 Summary of Literature and Research Gaps**

Financial education has been emphasized and there have been research on proper bookkeeping for the SMEs. However, there are a few studies on the impact of financial literacy on the SMEs growth. Studies mentioned above, have indicated that there are challenges on the outcomes of financial literacy on growth of SMEs. These studies have reflected a parallel relationships where some have a strong negative correspondence and others a strong positive connection. In addition the above studies have been researched on developed economies and they focused more on their performance while Kenya is among the emerging economies hence different challenges are unique to each economy.

## 2.5 Conceptual framework

The conceptual framework attempts to establish the relationship between the independent variables (debt management literacy, book keeping literacy, budgeting skills and knowledge of banking services) and the dependent variable (Growth of SMEs). The conceptual framework for the study is presented in the Figure 2.1



**Figure 2.1: Conceptual Framework**

**Source: Researcher (2018)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology presents and explains the research design and methods that were used to collect analyze and present data. It gives full details how the data was collected and processed The chapter thus, outlines into research design and the reason for such design, target population and the source, sampling techniques employed, description of research instrument, data collection procedure and data analysis technique.

#### **3.2 Research Design**

Orodho (2004) illustrate that descriptive research is used when the problem has been well designed. This study used descriptive survey design as it sought to describe and establish the effects among the study variables (Mugenda & Mugenda, 2003). The researcher used a cross-sectional study design. Aim of conducting this research was to analyze the effect of financial literacy on growth of SMEs in Nyeri County. The study was carried in the following Sub counties; Kieni East, Kieni West, Mathira, Mukurweini, Othaya and Tetu Sub counties. Seeing that SMEs is a wide grouping, it can be sub classified into several separate sub groups based on their activities. The above reasons makes a cross-sectional study design the best suited, however, other design type were committed too. The descriptive study design was applicable also since the study is aimed at providing a clearer picture of SMEs financial literacy. Similarly, element of an analytical study design were employed to establish the relationship between financial literacy and performance of SMEs.

#### **3.3 Target Population**

The target population is the subset of a large population that has similar characteristics of which the general conclusion of the study can be drawn. (Castillo, 2009). The target population of the study comprised of 841 SMEs licensed by the County government of Nyeri as at June 2018. The target respondents were the proprietors or managers of the SMEs of interest.

**Table 3.1 Target Population**

<b>Sub Counties</b>	<b>SMEs</b>
Nyeri	189
Kieni East	105
Kieni West	101
Othaya	152
Tetu	139
Mathira	155
<b>TOTAL</b>	<b>841</b>

Nyeri County Government (2018)

### 3.4 Sampling Design

Sampling as portrayed by Geteria (2012), is the representation of elements in the population which is formulated by selecting units of the targeted population to be able to have an all the fundamentals of the study included. A purposeful sampling was done where SMEs in every classification had a chance of being selected. The target respondents were managers or the proprietors of the selected SMEs since they could articulate issues considered by the study relating to growth over of SMEs over a period of time. A sample of 168 respondents was considered for the study which accounted for 20% of the target population. According to Mugenda and Mugenda (2003) 10% - 30% of the population is a good representation. The sample size was determined as shown in the table 3.2 below.

**Table 3.2 Sampling Frame**

<b>SMEs classifications</b>	<b>Target Population</b>	<b>Sample Percentage</b>	<b>Sample</b>
Service	221	20%	44
Manufacturing	95	20%	19
Retail	525	20%	105
<b>Total</b>	<b>841</b>		<b>168</b>

Nyeri County Government (2017)

### **3.5 Data Collection Instruments**

Semi-structured questionnaire was used to collect primary data. Questionnaires was preferred as it was relatively quick to collect data in a standardized and more objective way certainly more so than interviews (Saunders, Lewis & Thornhill, 2012). The Questionnaires were administered through “drop and pick later” method. The study also used secondary data gathered from reports and statements of the SMEs. A secondary data collection sheet was used to collect secondary data for the dependent variable.

### **3.6 Validity and Reliability of Research Instrument**

#### **3.6.1 Validity**

Mugenda and Mugenda, (2005) define validity as the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. Predictive validity was tested in this study. Predictive validity is the extent to which a score on a scale or test predicts scores on some criterion measure (Chen, 2015). To assess the validity, the researcher consulted the supervisors to determine the validity of the instruments who offered suggestions on content. The data collection instrument was edited appropriately based on the supervisors’ recommendations.

#### **3.6.2 Reliability**

Reliability of the research instrument is its level of internal consistency over time (Kothari, 2003). A reliable instrument therefore, is the one that constantly produces the expected results when used more than once to collect data from samples drawn from the same population. To assess the reliability, the researcher conducted a pilot study from ten SMEs who were excluded from the final study. The purpose of pre-testing the research instrument was to: verify whether the questionnaire is clear to the respondents, establish whether the questionnaire effectively addresses the data needed for the study, assess and identify any problems respondents would encounter in completing the questionnaire that may not have been foreseen when constructing the questionnaire this will be used to test the correctness of the data collection tools (Kothari,2003). Cronbach’s alpha was used to test reliability of the data collection instrument. The Cronbach alpha coefficient cut off of 0.7 and above was recommended as a strong measure of reliability. As shown in Table 3.3, Cronbach's

Alpha coefficient values of all variables were greater than 0.7. From these findings, It can be construed that the data collection instrument had adequate reliability for the subsequent stages of analysis since all the Cronbach's alpha values were greater than 0.7.

**Table 3.3: Reliability Test Results**

<b>Research variables</b>	<b>Number of items</b>	<b>Cronbach's Alpha Coefficient</b>
Growth of SMEs	3	.724
Debt Management Literacy	5	.839
Budgeting Skills	4	.731
Book Keeping Literacy	5	.868
Banking Knowledge literacy	5	.741

### **3.7 Data Collection Procedure**

The questionnaires were administered to the respondents and the introduction letter from the University to accord the questionnaires some legitimacy and declare the purpose of the study to dispel any fear from the respondents was provided. The researcher made follow ups and the fully completed questionnaires were picked from the respondents after one week aided by some research assistants because of the vast area the data was collected from.

### **3.8 Data Analysis and Presentation**

According to Marshal and Rossman (1999), data analysis is the process of bringing order, structure and interpretation to the mass of collected data. The data collected was sorted, edited, coded, cleaned and processed using Statistical Package for the Social Sciences. Descriptive statistics was used to analyse the data through computing of mean, standard deviation and percentages. In addition, regression analysis was used to establish the relationship between the independent variables and the dependent variable. Prior to running a regression model normality and multicollinearity were diagnostic tests conducted in the study to establish whether regression model met the laid down criteria. Normality test was conducted to check whether data provided by the dependent variable was normally distributed while multicollinearity test was conducted to test whether there is presence of multicollinearity.

A regression model shown below was adopted:-

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y= Growth

$\beta_0$ = Constant

$\beta_1$  to  $\beta_4$  =Coefficient

$X_1$  = Debt Management Literacy

$X_2$  = Book Keeping skills

$X_3$  = Budgeting Literacy

$X_4$  = Knowledge of Banking Services

$\varepsilon$  =Error term

Information was explained with assistance of P-values as the basis for hypothesis testing. If the P-value is less than 0.05 the variables were deemed significant in explaining the changes in the dependent variable. Correlation coefficient (R) and coefficient of determination ( $R^2$ ) were used to determine the relationship between independent and dependent variable. Data was presented by use of tables, graphs and pie charts

### **3.9 Ethical Consideration**

According to Chen (2015) ethics is moral principles that govern a person's behavior or the conducting of an activity. Before collecting data the researcher was guided by the University code of ethics and obtained authority from relevant offices and authorities. The researcher obtained an authorization letter from University Business School before data collection and a permit from NACOSTI. In addition, the researcher sought to get the consent of the respondents before administering the research instruments to them. The respondents were assured utmost confidentiality as regards their identities. They were also given an assurance that the information provided was to be used for academic research purposes only. .

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND INTERPRETATION**

#### **4.1 Introduction**

The broad objective of the study was to determine the effects of financial literacy and growth of small and medium enterprises in Nyeri County, Kenya. Questionnaires were used to collect data from the respondents operating small and medium enterprises in Nyeri County. Data was coded, analyzed and the results obtained using descriptive and inferential statistics guided by the research objectives and research hypothesis. The findings were presented in form of frequency tables, pie charts, bar charts and their implications explained. Multiple regression analysis was used to determine the extent of the relationship between the dependent and independent variables.

#### **4.2 Response Rate**

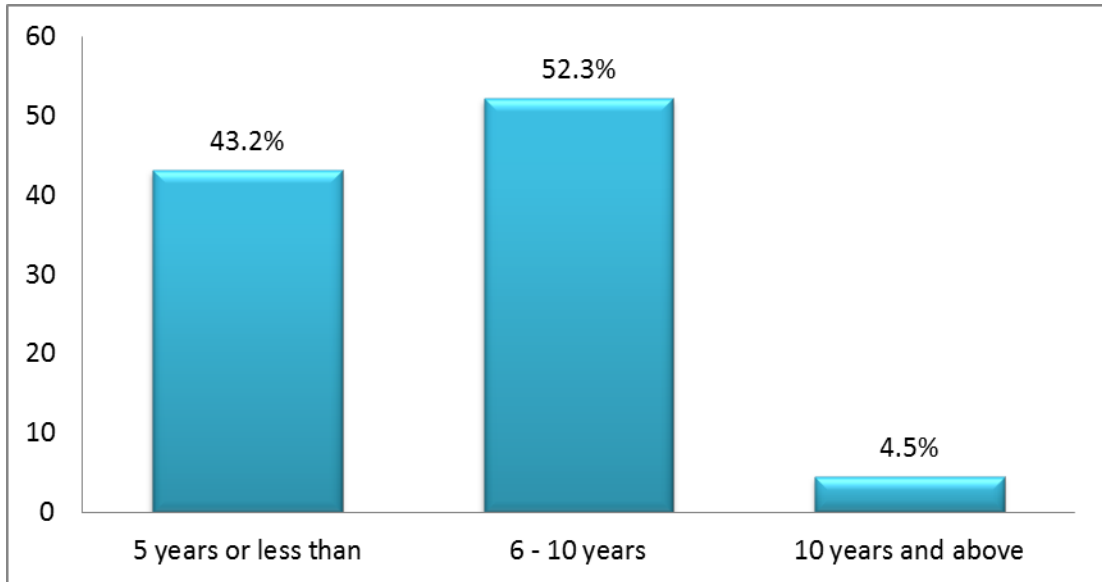
The study targeted 168 respondents who operate small and medium enterprises in Nyeri County. Out of the 168 questionnaires that were issued 132 were dully filled and returned to the researcher for analysis. This gave a response rate of 78.6% of the target sample. This response rate is within recommendation of Mugenda & Mugenda (2003) who stipulated that a response rate of 70% - 80% is referred to a very good.

#### **4.3 General Information**

The general information of respondents work experience, level of education and form of business ownership was sought to establish ability of the respondents to give satisfactory information on the effects of financial literacy on growth of small and medium enterprises in Nyeri County.

##### **4.3.1 Period of Operation**

The study sought to establish how long the respondents have operated the enterprise. This information was considered relevant given that the longer the period they had worked in SMEs, the more familiar they would be with the effects of financial literacy on growth of SMEs.



**Figure 4.1: Number of years the respondent has worked with the institution**

Based on Figure 4.1 above, more than half of the respondents indicated that they had operated SMEs for a period of more than 6 years which accounted for 56.8%. This implies that they have gained essential knowledge and experience to operate SMEs. 43.2% of the respondents alluded that they had operated SMEs for a period of less than 5 years. The findings indicated that the respondents' has been in business for a period they could be able to gauge the effects of financial literacy on growth of SMEs.

#### **4.3.2 Education Level of Respondents**

Details about the education levels of respondents were obtained in order to establish whether the respondents would fill the questionnaire and internalize the intended purpose with ease. The results are presented in the Figure 4.2

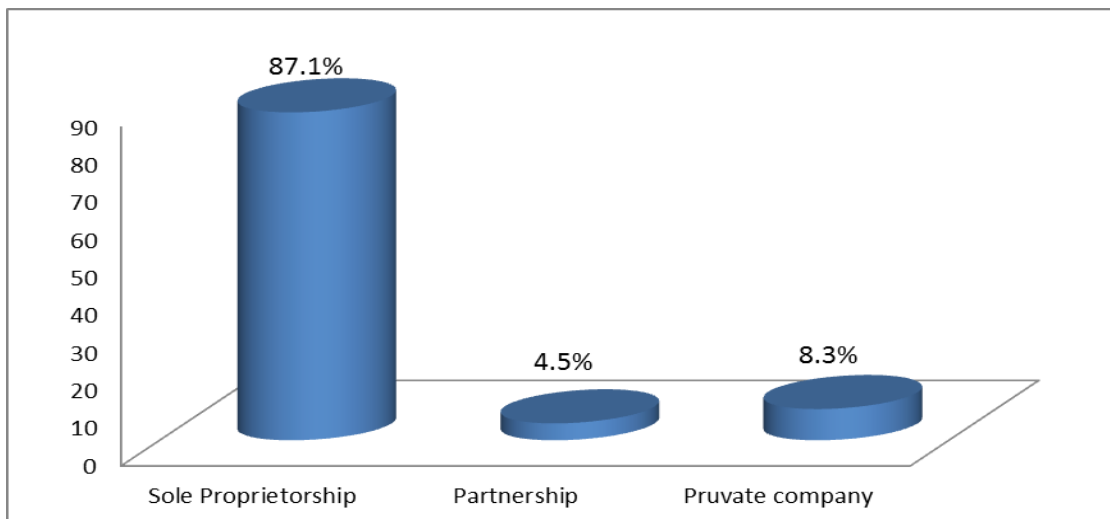


**Figure 4.2: Education Level of Respondents**

The findings in Figure 4.2 indicate that, about a third of the respondents were certificate, diploma and degree holders respectively. 7.6% were master degree holders. Based on the results of the study regarding the educational levels of the respondents, it is fair to allude that the respondents were well educated. This implies that they could read and understand the questions asked by the researcher as well as provide detailed and in depth information that would greatly improve on the results of the study on the effects of financial literacy on growth of SMEs

#### 4.3.3 Form of Business Ownership

The study sought ascertain the form of business ownership of SMEs in Nyeri County



**Figure 4.3: Form of Business Ownership**

As shown in Figure 4.3, the findings revealed that majority of the respondents 87.1% operated sole proprietorship business. This implies that most SMEs entrepreneurs prefer owning their business individually as opposed to co-ownership through partnership or incorporating into limited company which was represented by 4.5% and 8.3% respectively. This may be attributed to ease of establishing and running sole proprietorship business though the growth is limited to capital invested.

#### **4.4 Descriptive Analysis**

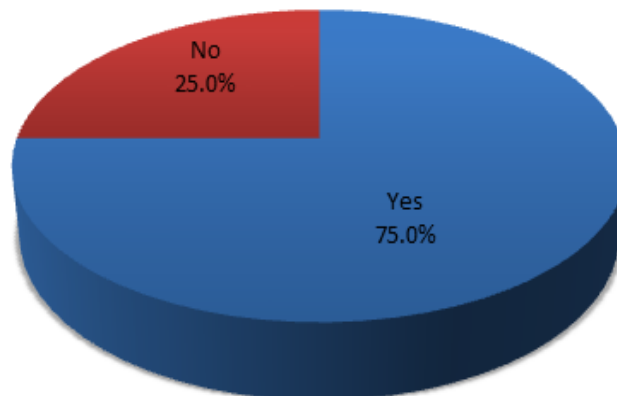
The study sought to establish the extent to which key components of financial literacy and growth of small and medium enterprises in Nyeri County. The respondents were required to indicate the extent to which each aspect of financial literacy affects the growth of small and medium enterprises in a scale of one to five. The mean score and standard deviation for parameter used were obtained using SPSS and the results of descriptive statistics analysis are discussed below.

##### **4.4.1 Debt Management Literacy and Growth of SMEs**

Objective one of the study sought to establish the effects of debt management literacy and growth of SMEs in Nyeri County. Descriptive statistical analysis was done to determine the effect of each factor of debt management literacy on the growth of SMEs.

###### **4.4.1.1 Access Credit from Financial Institutions**

The study sought to establish whether the respondents have accessed credit from financial institutions

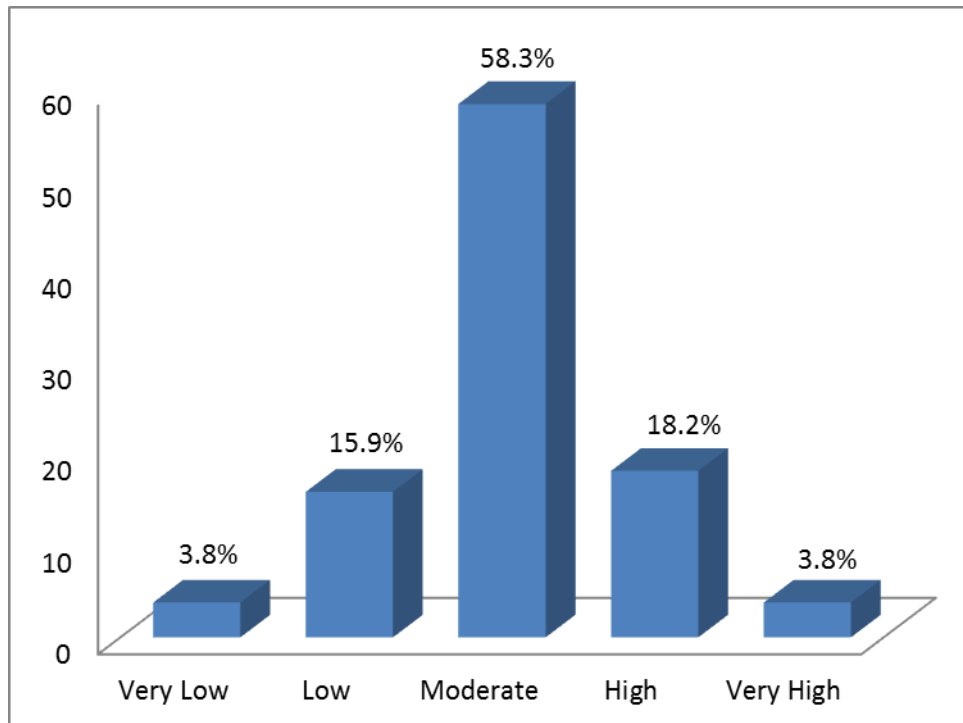


**Figure 4.4: Access credit from financial institutions**

From the results, majority of the respondents, 75.0% said that they have accessed credit from financial institutions. This implies debt management literacy would be paramount to enable SMEs manage the funds accessed through credit effectively.

#### 4.4.1.2 Level of Knowledge on Debt Management Literacy

The study sought to establish whether the level of knowledge on debt management literacy



**Figure 4.5: Level of knowledge on debt management Literacy**

From Figure 4.5, the results indicate that majority of the respondents 58.3% eluded that their level of knowledge on debt management literacy is moderate. This implies that SMEs know very little about debt management hence a deliberate effort is required to equip SMEs with adequate debt management skills to enable them to borrow and repay wisely.

#### 4.4.1.3 Debt Management Literacy and Growth of SMEs

This section provides results and discussions of the findings of parameters used to ascertain the level of debt management literacy. Questionnaire items per objectives were written in the form of statement using a 5-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree. The mean score for each parameter was

obtained using SPSS and the associated standard deviation based on the range of responses. The results of the findings were discussed below

**Table 4.1 Descriptive Statistics showing Debt Management Literacy**

<b>Debt management literacy</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev</b>
I acquired all the necessary knowledge on all the loans offered by the banks	1.00	5.00	3.3788	1.1293
I have the ability to calculate the loan interest on a monthly basis	1.00	5.00	2.2348	1.3917
I know the implication of accumulating debts in my business	1.00	5.00	4.3409	.9949
I am able to adhere to the purpose of the loan once loan is disbursed	1.00	5.00	2.4394	1.4317
Multiple borrowing from formal and informal sectors affect my debt repayment	2.00	5.00	4.1818	.7599

**Valid N (listwise)**

The results of the study as shown in Table 4.1, revealed that the majority of the respondents of the study concurred that they know the implication of accumulating debts in their business. In addition, most of the respondents eluded that multiple borrowing from formal and informal sectors affect debt repayment. A number of respondents were indifference on whether they acquired all the necessary knowledge on all the loans offered by the banks and their ability to adhere to the purpose of the loan once loan is disbursed was questionable. This implies that accumulation of debt through multiple borrowings and failure to adhere to the purpose of the loan adversely affect debt repayment which may hinder growth of SMEs.

The finding of this study is in line with Obago (2014) studied the impact of financial literacy on running of personal finances and established that most employed individuals suffer from pressure as a result of monetary problem behaviors which include: extravagance, credit mismanagement, over-indebtedness, meager cash management and scarce income. Obago opined that the above challenges make it hard for the staff to make ends meet which impacts negatively on their productivity at

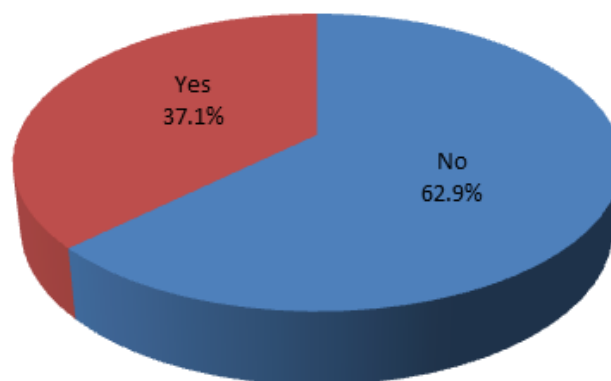
work. Lusardi and Tufano (2009) study sought to determine debt literacy, financial occurrences, and over indebtedness among Americans. The study established that the three quarter of the target population could not understand the conception of interest compounding to their daily business operations or be in a position to embrace effectiveness of a credit card. In addition they acknowledged that women, marginalized, elderly and single parents are the most affected due to their constrained resources and poor financial supervision.

#### **4.4.2 Budgeting Skills and Growth of SMEs**

Objective two of the study sought to determine the effects of budgeting skills and growth of SMEs in Nyeri County. Descriptive statistical analysis was done to determine the effect of each factor of budgeting skills on the growth of SMEs.

##### **4.4.2.1 Preparation of Budget for the Business**

The study sought to establish whether the respondents do prepare budget for their businesses

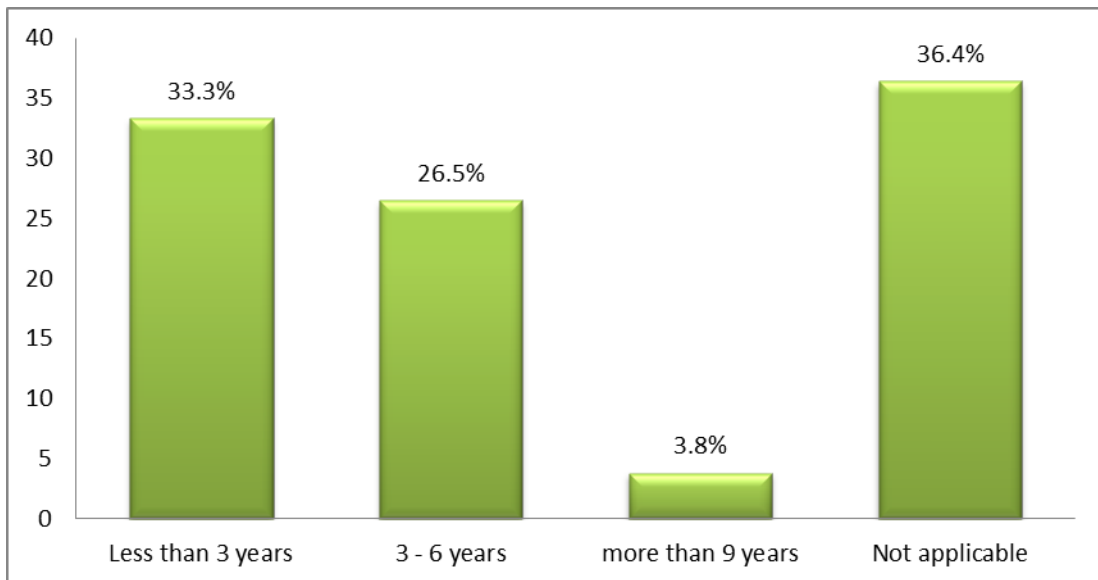


**Figure 4.6: Preparation of Budget for the Business**

The results of the finding as indicated in Figure 4.6 indicated that majority of the respondents 62.9% do not prepare the business annual budget. The finding of the study that most of SMEs do not prepare budget the earlier finding by Fatoki (2014) who identified that small enterprises operates informally in terms of expected income and expenditure lacking financial planning and measures as well. He noted that most small businesses do not engage in formal financial planning and control and budgeting.

#### 4.4.2.2 The Period the Budget Have Been Prepared

The study sought to establish how long the respondents have been preparing budgets

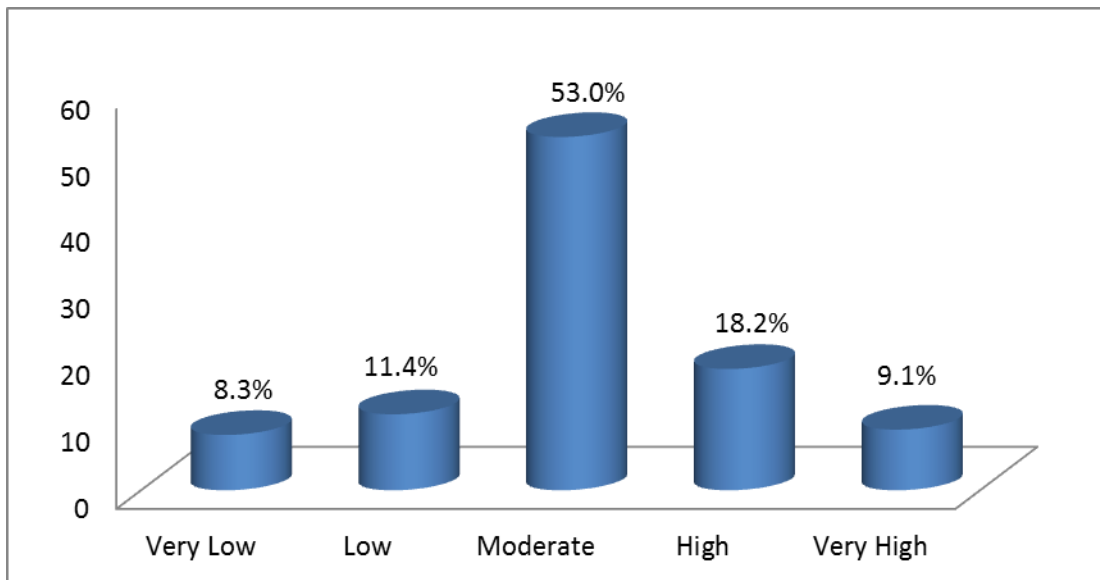


**Figure 4.7: The Period the Budget Have Been Prepared**

As shown in Figure 4.7, when the respondent were asked how long they have been preparing budgets a third indicated a period of less than three years while a quarter indicated a period of between 3-6 years. This implies that even the SMEs that are currently preparing budget this process has been implemented for the last three years. Mutegi et al., (2015) affirms that financial literacy enables the firm to meet their shortterm as well as long term obligations through informed decision making processes such as settling of bills timely, proper book keeping, improved budgeting skills, which positions the business strategically in the market.

#### 4.4.2.2 Level of Knowledge on Budget Preparation

The study sought to establish whether the respondents have prerequisite knowledge on budget preparation



**Figure 4.8: Level of knowledge on budget preparation**

From Figure 4.8, slightly more than half of the respondents 53.0% eluded that their level of knowledge on budget preparation is moderate. Slightly above quarter of the respondent 27.3% indicate that their level of knowledge on budget preparation is high. The finding of the study reaffirm earlier study by Warue and Wanjira (2013) who researched on hicaps of the businesses in Kenya and established that poor budgeting skills among Kenyans as a major contributor to the business failure in Kenya. In addition, they also noted that there is a low level of financial literacy among SMEs across countries worldwide which negatively impacts on their businesses.

#### **4.4.2.3 Budgeting Skills and Growth of SMEs**

This section provides results and discussions of the findings of parameters used to ascertain the level of knowledge on budgeting. Questionnaire items per objectives were written in the form of statement using a 5-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree. The mean score for each parameter was obtained using SPSS and the associated standard deviation based on the range of responses. The results of the findings were discussed below

**Table 4.2: Descriptive Statistics showing Budgeting Skills**

<b>Budgeting Skills</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev</b>
Managers have acquired the knowledge regarding the preparations of annual budgets	1.00	5.00	2.4621	1.4325
Manager/s of the SMEs has the sales forecasting experience and knowledge	1.00	5.00	2.7576	1.5089
We are very careful on our spending and we emphasize on reduction of cost	1.00	5.00	3.6439	1.0639
The set budget is effectively implemented	1.00	5.00	2.4545	1.4269
<b>Valid N (listwise)</b>				

Based on the finding of the study in Table 4.2 above, a number of the respondents indicated that they are very careful on spending as they emphasize on reduction of cost. Slightly above average of the respondents eluded that manager/s of the SMEs had the sales forecasting experience and knowledge although they could not adequately tell whether managers had acquired the knowledge regarding the preparations of annual budgets. The finding of the study supports Chidi and Shadare (2011) who studied the challenges tackling human resource improvement in SMEs in Nigeria and found that budgeting was the greatest challenge among SMEs. As a result the study established that budgeting skills acquired by the managers reflect on the budget procedures followed and the same will correspond with the budget implementation.

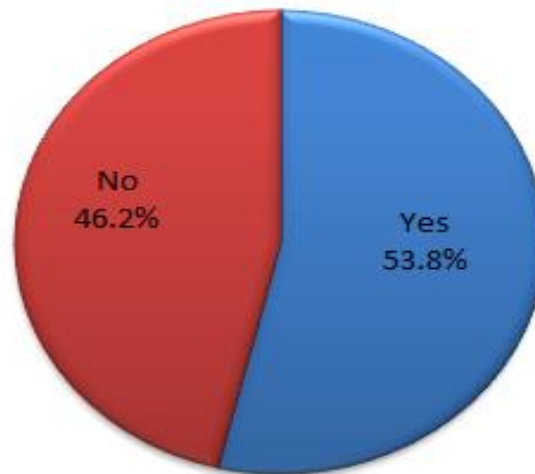
Mahmood (2008) studied the relationship between budgeting process and SMEs performance and found that, the formalization of the budget will depend on how clearly the relationship of the business and the owners is defined. Joshi et al., (2003) studied budgeting process and performance of companies found out that large companies have a susceptibility to perform an in-depth budget procedure and be in a position to present it excellently. Researcher found out that the budget process is highly influenced by the magnitude and the company complexity as far as the business operations are concerned which also affect the performance of the company.

#### 4.4.3 Book Keeping Literacy and Growth of SMEs

Objective three of the study sought to establish the effects of book keeping skills and growth of SMEs in Nyeri County. Descriptive statistical analysis was done to determine the effect of each factor of book keeping skills on the growth of SMEs.

##### 4.4.3.1 Training on How to Keep Record

The study sought to establish whether the respondents have been trained on how to keep record of business related transactions

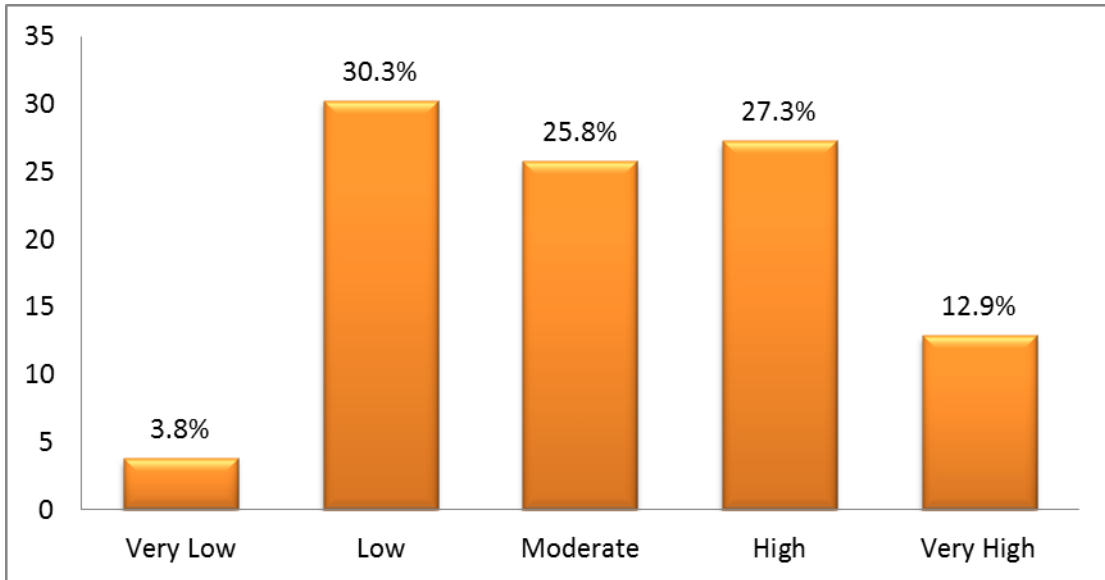


**Figure 4.9: Training on how to keep record**

As shown in Figure 4.9, 53.8% of the respondents indicated that they have been trained on how to keep record of business related transactions. Slightly below half of the respondents 46.2% indicated that they have not been trained on record keeping. This implies that deliberate effort are necessary to train SMEs on how to keep records as they act as a source of all financial information required to make prudent financial decision.

##### 4.4.3.1 Level of Knowledge on Book Keeping

The study sought to establish the respondents would rate their level of knowledge on book keeping

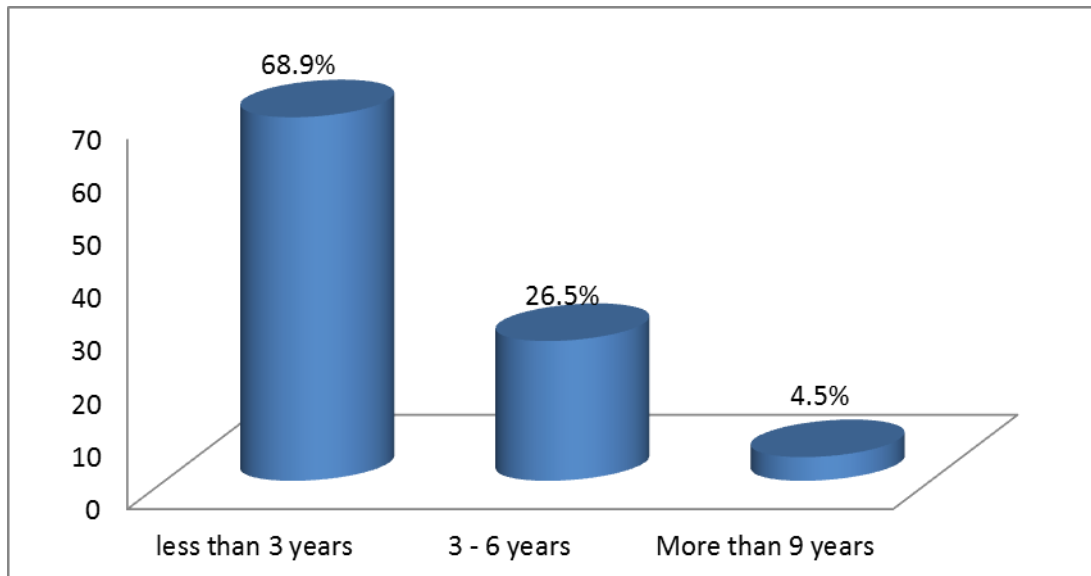


**Figure 4.10: Level of knowledge on book keeping**

From Figure 4.10, about third of the respondent which accounted to 34.1% rated their level of knowledge on book keeping to be low, quarter of the respondents 25.8% rated their level as moderate while 40.2% rated their level to be high. The study revealed that SMEs level of knowledge in book keeping is wanting and they need to be trained to enable them prepare the books of accounts to enable management make informed decision based of financial performance.

#### **4.4.3.2 Period of Time SMEs Have Kept Accounting Records**

The study sought to establish how long the respondents have kept accounting records in their enterprise



### Figure 4.11: Period of time SMEs have kept accounting records

As shown in Figure 4.11, majority of the respondents 68.9% eluded that they have maintained accounting records in their current enterprise for a period of less than 3 years. About a quarter of the respondents 26.5% eluded that they have maintained the record for a period of 3 – 6 years. The finding implies that even those companies which indicated that they maintained records, this has taken place for a period of less than three years.

#### 4.4.3.3 Book Keeping Literacy and Growth of SMEs

This section provides results and discussions of the findings of parameters used to ascertain the level of book keepng literacy. Questionnaire items per objectives were written in the form of statement using a 5-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree. The mean score for each parameter was obtained using SPSS and the associated standard deviation based on the range of responses. The results of the findings were discussed below

**Table 4.3: Descriptive Statistics showing Book keeping literacy**

Book keeping literacy	Minimum	Maximum	Mean	Std. Dev
Book keeping knowledge has enabled management to prepare the financial statements	1.00	5.00	2.5606	1.4423
Book keeping knowledge has enables us to file the tax returns without engaging consultant	1.00	5.00	2.2121	1.3871
I acquired the necessary knowledge on accounting for the transaction in my business	1.00	5.00	3.5758	.9739
Proper book keeping has led us to meet debt obligations in time	2.00	5.00	3.7955	.9865
Proper book keeping has led to effective stock management	2.00	5.00	3.6591	1.0176
Valid N (listwise)				

As indicated in Table 4.3 above, proper book keeping has enabled SMEs to meet debt obligations in time. In addition proper book keeping has led to effective stock management. A number of respondents eluded that they acquired the necessary knowledge on accounting for the transaction in their business but they were indifference on whether book keeping knowledge has enabled management to prepare the financial statements. Moreover the finding revealed that book keeping knowledge was not sufficient enough to enable SMEs to file the tax returns without engaging consultant. The finding of the study that there is low level of knowledge on book keeping literacy is in line with the G20 Seoul Summit (2010) whose report indicated that low levels of financial literacy particularly book keeping skills worldwide is a major contributor of lost opportunities for a large number of SMEs. The report further stated that information unevenness among SMEs due to unreliable financial reports makes it hard to determine the creditworthy of the SMEs and potential proposals are rejected due to lack of financial information which makes most lenders reluctant to fund small firms especially those with new products.

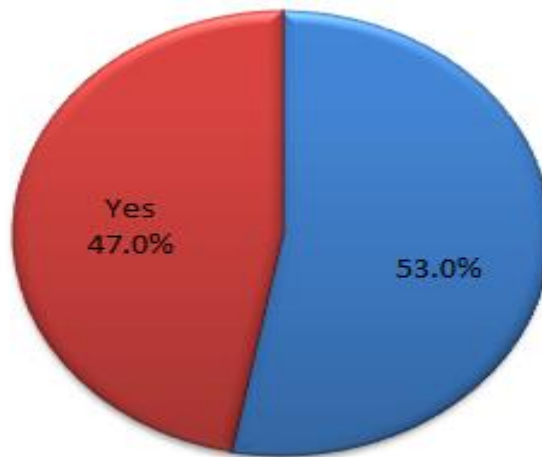
Mills and McCarthy (2014) confirm this and opine that assessing creditworthiness of small businesses is difficult due to information asymmetry because their transactions are largely informal. Ezejiofor *et al.*, (2014) sought to establish the relevance of accounting records in small business performance in Nigeria and found that MSEs that kept proper books of account were able to measure accurately the performance of their businesses. They also assert that business decisions with regard to expansion, maintaining a competitive edge, prevention of business failure and filling tax returns requires documentation with reliable and relevant information, easy to understand and readily available. Researchers also caution that the bookkeeping systems should generate the information in a simple and accurate order.

#### **4.4.4 Knowledge of Banking Services and Growth of SMEs**

Objective four of the study sought to establish the effects of banking services knowledge and growth of SMEs in Nyeri County. Descriptive statistical analysis was done to determine the effect of each factor of banking services on the growth of SMEs

#### 4.4.4.1 Depositing of Cash Collected to the Bank Account

The study sought to establish whether the respondents deposit all the cash collected in the bank account before spending



**Figure 4.12: Depositing of Cash collected to the Bank Account**

As shown in Figure 4.12, majority of the respondents 53.0% eluded that they do not deposit all the cash collected in the bank account before spending. This implies that cash collected is directly allocated to various expenditure which makes it difficult to reconcile.

#### 4.4.4.2 Frequency of Receiving Bank Statement

The study sought to establish how often the respondents receive bank statement

**Table 4.4: Frequency of receiving bank statement**

Frequency of receiving statements	Frequency	Percent
Less than a month	5	3.8
Monthly	59	44.7
Quarterly	23	17.4
Semi Annual	10	7.6
Annually	5	3.8
Do not receive	18	13.6
On demand	12	9.1
<b>Total</b>	<b>132</b>	<b>100.0</b>

Table 4.4 above indicated that majority of SMEs receive bank statement on monthly basis. This can be attributed to the tendency of commercial bank to generate monthly bank statements. 17.4% eluded that they receive bank statements quarterly, 7.6% semi-annual, 3.8% in less than a month or annually while 9.1% receive their statement

when they request for them. This implies that there is no policy on how often SMEs should receive the bank statements hence it is at the discretion of the SMEs. Further, the study revealed that 13.6% of the respondents eluded that they do not receive bank statements which is an indication that such SMEs do not undertake bank reconciliation.

#### 4.4.4.3 Frequency of Carrying Out Bank Reconciliation

The study sought to establish how many times bank reconciliation is carried out in a year

**Table 4.5: Frequency of carrying out bank statement**

<b>Frequency of bank reconciliation</b>	<b>Frequency</b>	<b>Percent</b>
When confirming a transaction	5	3.8
Weekly	6	4.5
Monthly	70	53.0
Quarterly	23	17.4
Semi-annual	11	8.3
Cannot tell	17	12.9
<b>Total</b>	<b>132</b>	<b>100.0</b>

As shown in table 4.5, slightly more than half of the respondents 53.0% indicated that they carry out bank reconciliation on monthly basis. 17.4% eluded that the carry out reconciliation on quarterly basis. The purpose of bank statement is to compare the bank statement with the cashbook because of the differences which may arise due to uncredited and unrepresented cheques as well as bank charges among other direct debit and credit with a view to reconcile the two accounts. The findings further revealed that 12.9% could not tell the frequency of carrying out bank reconciliation which is an indication that there is a possibility that these SMEs do not undertake bank reconciliation.

#### 4.4.4.5 Knowledge of Banking Services and Growth of SMEs

This section provides results and discussions of the findings of parameters used to ascertain the level of banking service knowledge. Questionnaire items per objectives were written in the form of statement using a 5-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree. The mean score for each parameter was

obtained using SPSS and the associated standard deviation based on the range of responses. The results of the findings were discussed below

**Table 4.6: Descriptive Statistics showing Banking Services Knowledge**

<b>Banking services knowledge</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev</b>
The managers conduct a survey about various banks products before opening the account or sourcing credit	1.00	5.00	3.6742	1.20112
The managers are aware of all the bank requirements when accessing credit	1.00	5.00	3.5000	1.16894
Managers are able to monitor the bank balances	1.00	5.00	3.1970	1.26273
We have increased the uptake of bank products in the recent past	1.00	5.00	3.3788	.90402
We acquired the Skills on reconciling our cashbook with the bank statements	1.00	5.00	2.0076	1.27511
<b>Valid N (listwise)</b>				

As shown in Table 4.6, it is evident that the managers conduct a survey about various banks products before opening the account or sourcing credit. The findings of the study further revealed that SMEs have increased the uptake of bank products in the recent past and managers are aware of all the bank requirements when accessing credit but the respondents were indifference on whether that managers are able to monitor the bank balances. The study also revealed that acquisition of skills on reconciling cashbook with the bank statements was rated below average. The finding of this study support earlier findings by Wachira and Kihiu (2012) who studied the family units in Kenya using the 2009 National Financial Access (FinAccess) who identified that there are other factors which affect the access to financial access that are individual based. They concluded that financial literacy created an awareness and enabled more individuals to be included in the financial services.

Financial literacy was also rated low as a factor in household decision making which implies that majority of individuals did not value and seek out financial information in

making financial decisions. Ekanem (2010) who studied the SME owner-managers in the printing and clothing manufacturing sectors in Ethiopia identified the uniqueness of each sector in relation to the financial literacy and firm administration.

#### 4.5 Growth of SMEs

The general objective of the study is to determine the effects of financial literacy and growth of small and medium enterprises in Nyeri County, Kenya. In order to ascertain the growth of SMEs, the study sought to establish how the respondents businesses performed in relations with net profit, number of new products and number of employees for the last four years.

**Table 4.7: Net profit for the year**

<b>Net profit for the year</b>	<b>Frequency</b>	<b>Percent</b>
below 10000	16	12.1
between 10000 – 20000	29	22.0
between 20001 – 30000	29	22.0
between 30001 – 50000	24	18.2
above 50000	34	25.8
<b>Total</b>	<b>132</b>	<b>100.0</b>

As shown in table 4:7, the study finding revealed that on average 12.1% of the respondent operating SMEs eluded that net profit for the last four year was below 10,000. 22.0% indicated that their net profit range between 10,000- 20,000 and 20,001 to 30,000. 18.2% eluded that their net profit range between 30,001 – 50,000 while a quarter of the respondent net profit was above 50,000. This implies that various categories of SMEs were included in the study.

**Table 4.8: Number of different products**

<b>Number of different products</b>	<b>Frequency</b>	<b>Percent</b>
below 5 products	95	72.0
between 6 - 10 products	26	19.7
more than 10 products	11	8.3
<b>Total</b>	<b>132</b>	<b>100.0</b>

The study findings indicated for the last four years on average 72.0% have introduced less five new products, 19.7% have introduced a range of between 6 – 10 products

while 8.3% had introduced more than 10 products. This implies that very few SMEs managed to introduce more than 10 products for a period of four years on average.

**Table 4.9: Number of Employees**

<b>Number of Employees</b>	<b>Frequency</b>	<b>Percent</b>
below 5 employees	108	81.8
between 6 - 10 employees	18	13.6
more than 11 employees	6	4.5
<b>Total</b>	<b>132</b>	<b>100.0</b>

The study findings revealed that SMEs had an average of less than 5 employees for the last four years, 13.6% indicated that the number of employees range between 6-10 years while 4.5% indicated that the number of employee were more than 11 employees. This implies that majority of SMEs employ less than 5 employees.

**Table 4.10: Assessment of the overall growth of SMEs**

<b>Overall growth of your organization</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev</b>
Net Income / Profit	1.00	4.00	2.1818	.67471
Number of different products	1.00	5.00	2.9848	1.08413
Number of employees	1.00	5.00	2.9091	1.24456
Valid N (listwise)				

The overall assessment of the growth of SMEs over the last four year was undertaken by rating the growth of SMEs in terms of net profit, number of different products and number of employees. Questionnaire items per objectives were written in the form of statement using a 5-point Likert-type scale ranging from (1) very low to (5) very high. The mean the finding of the study revealed that growth of net profit, number of different products and numbers of employees were moderately rated between a range of 2.18 to 2.89. This implies that there has SMEs growth for that last four years has been moderate. According to Pisa (2013), SMEs growth is measured by both internal and external factors.

## 4.6 Diagnostic Tests

Prior to running a regression model, multicollinearity and normality test were diagnostic tests conducted in the study to establish whether regression model met the laid down criteria.

### 4.6.1 Multicollinearity Test

Multicollinearity occurs when more than two predictor variables are inter-correlated, Kothari (2004). This is an undesirable situation where the correlations among the independent variables are strong as it increases the standard errors of the coefficients. To test for multicollinearity, Variance Inflation Variable (VIF) or tolerance, a diagnostic method was used to detect how severe the problem of multicollinearity is in a multiple regression model (Baguley, 2012). Using the VIF method, a tolerance of less than 0.20 and a VIF of more than 5 indicates a presence of multicollinearity. The results of multicollinearity

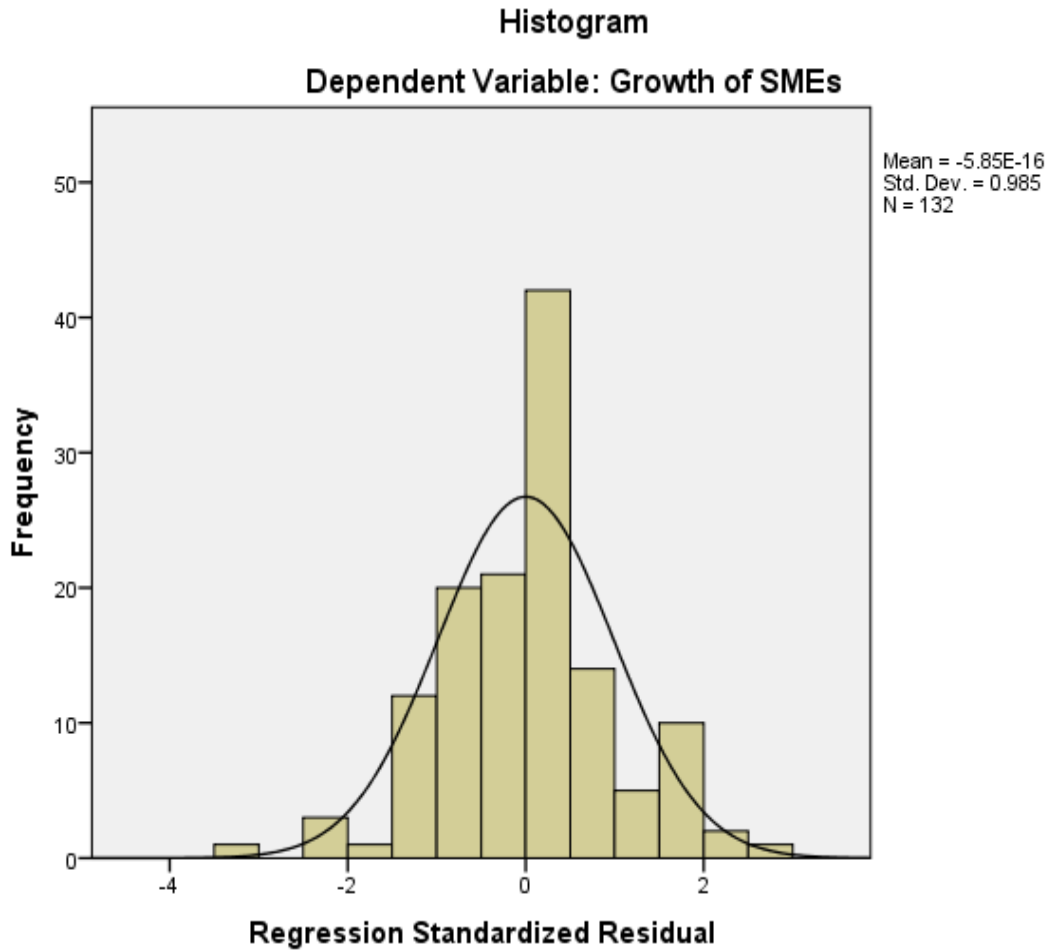
**Table 4.11: Multicollinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
Debt Management Literacy	.908	1.101
Budgeting Skills	.972	1.029
Book Keeping Literacy	.922	1.085
Banking Knowledge literacy	.999	1.001

From Table 4.11 there is no VIF with a value of 5 or greater than 5 and therefore no presence of multicollinearity.

### 4.6.2 Normality Test

To test for normality the data, the study employed the graphical method. The results from the graphical method are presented in the Figure 4.13 below,



**Figure 4.13: Histogram on Growth of SMEs**

As shown in Figure 4.13, the graph indicates that the residuals are normally distributed.

#### **4.7 Regression Analysis**

This section sought to establish the relationship between financial literacy and growth of small and medium enterprises in Nyeri County. Multiple regression analysis was applied using mean score to determine the effect of independent variables (debt management literacy, budgeting skills, book keeping skills and banking services knowledge) on dependent variable (growth of SMEs). This was performed using the field data and the results interpreted according to the R values,  $R^2$  values, the beta values and F ratio at the 0.05 level of significance. Explanation and interpretation of the findings was given.

#### 4.7.1 Model Summary

The study used a multiple regression model to determine the correlation coefficient (R) and coefficient of determination ( $R^2$ ) of independent variables on the dependent variable.

**Table 4.12: Regression analysis model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.477 <sup>a</sup>	.228	.204	1.03227

a. Predictors: (Constant), Banking Knowledge literacy , Book Keeping Literacy, Budgeting Skills, Debt Management Literacy

The results for model summary indicated in Table 4.12, the Pearson's Simple Correlation of 0.477 indicates that financial literacy has a fairly strong positive correlation with growth of SMEs in Nyeri County. The findings further indicated that financial literacy explains 22.8% of the changes in growth of SMEs when other factors are held constant (R squared = 0.228). Hence, Growth of the SMEs is mainly explained by other factors not part of the current study.

#### 4.7.2 ANOVA Table

Analysis of variance (ANOVA) was used to evaluate whether statistical model could fitted to a data set from which the data were sampled.

**Table 4.13: Regression analysis ANOVA table**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	39.968	4	9.992	9.377	.000 <sup>b</sup>
1 Residual	135.328	127	1.066		
Total	175.295	131			

a. Dependent Variable: Growth of SMEs

b. Predictors: (Constant), Banking Knowledge literacy , Book Keeping Literacy, Budgeting Skills, Debt Management Literacy

An F statistics of 9.377 was significant at 95% level of confidence (p value = 0.000 <0.05) which indicates that the model was significant in predicting growth of SMEs

### 4.7.3 Coefficient Table

Beta coefficients were used to determine the causal effect of the independent variables on the dependent variable. Table 4:14 below shows the values as extracted from SPSS.

**Table 4.14: Regression Analysis Coefficient table**

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.802	1.502		.534	.594
Debt Management Literacy	.281	.082	.281	3.431	.001
Budgeting Skills	.092	.099	.074	.930	.354
Book Keeping Literacy	.253	.070	.295	3.627	.000
Knowledge of Banking Services	.114	.292	.030	.389	.698

a. Dependent Variable: Growth of SMEs

The beta coefficient in Table 4.14 indicated a positive relationship between debt management literacy, budgeting skills, book keeping literacy, banking knowledge literacy and growth of SMEs in Nyeri County with  $\beta_1=0.281$ ,  $\beta_2=0.092$ ,  $\beta_3 = 0.253$  and  $B_4=0.114$  respectively. A regression model adopted by this study was  $Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3 + \beta_4X_4+ \alpha$ .

The regression equation extracted from Table 4.14 is as follows:

$Y= 0.802+ 0.281X_1 + 0.092X_2 + 0.253X_3 + 0.114X_4$ . This implies that holding all factors constant the growth of SMEs in Nyeri County would be 0.802.

Whereby Y = the dependent variable (growth of SMEs)

$X_1$  = Debt Management Literacy

$X_2$  = Budgeting Skills

$X_3$  = Book Keeping Literacy

$X_4$  = Knowledge of Banking Services,  $\alpha$  = error term.

The finding of the study that financial literacy positively affect growth of SMEs concurs with earlier study by Mutegi et al., (2015) who affirmed that financial literacy enables the firm to meet their short-term as well as long-term obligations through informed decision making processes such as settling of bills timely, proper book

keeping, improved budgeting skills, which positions the business strategically in the market. Hogarth (2002), noted that by being Financially literate, individuals are able to provide facts and sensitize financial concepts. Skills, motivation and confidence to apply such knowledge and sensitivity in the business, makes a manager to be efficient and effective across a range of financial contexts and improves the financial growth of SMEs. According to Siekei (2013) credit management skills, debt management skills, budgeting skills acquired through financial literacy programme enhance growth of the firm due to adequate administration of investment portfolios which minimizes the finance cost.

#### **4.8 Hypothesis Testing Results and Discussion**

The four research hypotheses that the study sought to test are addressed in this section based on regression analysis coefficient output on Table 4.14 above.

##### **4.8.1 Debt Management Literacy and the Growth of SMEs**

The result of the first hypothesis was achieved by testing  $H_{01}$

*$H_{01}$ : Debt management literacy has no significant effect on growth of SMEs in Nyeri County, Kenya.*

The study findings revealed that debt management literacy had positive and statistically significant effect on growth of SMEs in Nyeri County with  $\beta_1=0.281$  at P value 0.001 which is less than 0.05. It is on this basis the null hypothesis that debt management literacy has no significant effect on growth of SMEs was rejected. The finding of the study concurred with Lusardi and Mitchell (2011) who studied the impact of literacy levels on entrepreneurs performance which revealed that persons of limited financial literacy are more prone to exploitations when it comes to debt management, savings and credit, and are not able to administer their resources competitively.

##### **4.8.2 Budgeting Skills and the Growth of SMEs**

The result of the second hypothesis was achieved by testing  $H_{02}$

*$H_{02}$ : Budgeting Skills has no significant effect on growth of SMEs in Nyeri County, Kenya.*

The study found out that there was positive and statistically insignificant effect between budgeting skills and the growth of SMEs in Nyeri County with  $\beta_2=0.092$  at P value 0.354 which is greater than 0.05. It is on this basis that the null hypothesis that budgeting Skills has no statistical relationship to growth of SMEs in Nyeri County is supported. The finding of this study is in line with Siekei *et al.*, (2013) who assessed the possessions of budgeting skills on performance of SMEs and found that better presentation of SMEs in terms of sales increase and profitability is linked with proficiency on budgeting skills and business growth which is attained through finance education which enables the individuals to forecast sales and set achievable targets. Wijewardena and DeZoysa (2011) studied contributions to SMEs towards the budget process and indentified that the proper budget is compromised by the two significant aspects of the expected budget process which are the budget planning and the budget control.

#### **4.8.3 Book Keeping Literacy and the Growth of SMEs**

The result of the third hypothesis was achieved by testing  $H_{03}$

*$H_{03}$ : Book keeping literacy has no significant effect on growth of SMEs in Nyeri County, Kenya.*

The study findings revealed that book keeping literacy had positive and statistically significant effect on growth of SMEs in Nyeri County with  $\beta_3 = 0.253$  at P value 0.000 which is less than 0.05. It is on this basis that the null hypothesis that book keeping literacy has no relationship to growth of SMEs in Nyeri County is rejected. The study finding concur with Frankwood (2010) who studied the benefits of book keeping on SMEs performance and found out that computation of the income statement is highly dependent on the proper book keeping which also enable the business to be able to collect their debts timely and also pay on time for their obligations. He noted that the business is able to identify the opportunities available and avoid opportunity cost as well such as stock outs among others and be able to plan progressively.

Ezejiofor, Ezenyirimba and Olise (2014) investigated the impact of accounting records on SMEs and found that, a good bookkeeping scheme is reflected on its reports quality to both internal and external users and a well-organized maintenance

of records. Quality accounting information will be of help on financial administration and create room for a better funding. Joshi et al., (2013) scrutinized budgeting financial literacy by an analysis of 54 both medium and large businesses in Bahrain aiming on budget processes which are inclusive of the participation, planning, controlling and its overall performance the researchers identified that the expansion of a firm is linked to its growth. For the two to be in harmony they require a more detailed budget development as well as implementation so as to benefit exemplarily performance. Wise (2013) found that increase in financial literacy leads to production of financial reports oftenly and the individuals who have tendency of preparation of financial reports are able to repay their debts timely and this lowers the default levels.

#### **4.8.4 Knowledge of Banking Services and the Growth of SMEs**

The result of the fourth hypothesis was achieved by testing  $H_{04}$

*$H_{04}$ : Knowledge of banking services has no significant effect on growth of SMEs in Nyeri County, Kenya.*

The study found out that there was positive and statistically insignificant effect between knowledge literacy and the growth of SMEs in Nyeri County with  $B_4=0.114$  at P value 0.698 which is greater than 0.05. It is on this basis that the null hypothesis that banking services knowledge has no statistical relationship to growth of SMEs in Nyeri County is accepted. Djankov, McLiesh, and Shleifer (2012) studied the impact of debt administration on its repayment. The study engaged the managers of the financial institutions whose information was further analyzed using mean and standard deviation and it was concluded that financial education is significant on debt administration and its repayment too.

The study finding that financial literacy had positive effect on the growth of SMEs in Nyeri County concur with Fatoki (2014) who studied the causes of SMEs failure and found out that lack of finance education have adverse effects on the SMEs and especially the new start-ups. He noted that new start-ups requires a sound financial background which will create a healthy base of a successful business hence the growth of the enterprise. Duchesneau and Gartner (2010) studied on factors affecting new small firms progress and established that the individuals who have emerged successful in business mostly were brought up in a business set up or were raised by

successful entrepreneur parents which are a requisite for growth due to vast experience and exposure. This gives them confidence and vigour that they will make it in the ventures they start unlike the ones raised by the unsuccessful entrepreneurs who are unsuccessful. The financial capability report of 2009 eluded that acquisition of financial literacy skills would have a positive impact on an individual's behaviors in terms of increased savings, wealth accumulation and avoidance of unnecessary expenses. This would make SMEs managers better customers for the banks, prudent managers of the limited financial resources in their businesses and better able to select the most suitable products for their businesses. The ultimate goal would be to enhance financial performance and growth of SMEs.

The optimal regression equation for this study can be stated as:  $Y = 0.802 + 0.281X_1 + 0.253X_3$ . Where  $X_1$  represent debt management literacy while  $X_3$  represent book keeping literacy. This implies that increasing the debt management literacy by one unit would increase the growth of SMEs by 0.281 while increasing the book keeping literacy by one unit would increase the growth of SMEs by 0.253.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter contains the summary of the findings, conclusion arrived at and policy recommendations arising from the study. Research gaps identified during the study are also identified as basis for future studies.

#### 5.2 Summary

The specific objectives of the study were to establish effect of debt management literacy, budgeting skills, book keeping skills and banking services knowledge on growth of SMEs in Nyeri County, Kenya. Overall, the findings of the study revealed that all the four variables considered in the study had positive effect on the growth of SMEs. However, the growth of SMEs in Nyeri County was greatly influenced by debt management literacy and book keeping skills.

##### 5.2.1 Debt Management Literacy and Growth of SMEs

The first objective of the study was to establish the effects of debt management literacy and growth of SMEs in Nyeri County. Descriptive analysis showed that three quarter of the respondents had accessed credit from financial institutions although they had moderate knowledge on debt management. The findings further revealed that most of the respondents know the implication of accumulating debts in their business and they eluded that multiple borrowing from formal and informal sectors affect debt repayment. The ability to adhere to the purpose of the loan once loan is disbursed was lowly rated implying that majority of entrepreneurs operating SMEs do not put the money applied to the intended purpose which adversely affect the growth of SMEs. At 95% confidence level the results of regression analysis indicated that debt management literacy is positively and significantly associated with growth of SMEs in Nyeri County. The findings imply that an increase in debt management literacy leads to an improvement in growth of SMEs. The relationship is significant at 5% level of significance which implies an improvement in debt management literacy leads to an improvement in growth of SMEs.

### **5.2.2 Budgeting Skills and Growth of SMEs**

The second objective of the study was to determine the effects of budgeting skills and growth of SMEs in Nyeri County. Descriptive analysis showed that slightly more than half of the respondents do not prepare the business annual budget and eluded that their level of knowledge on budget preparation is moderate. The findings further revealed that most of the respondents are very careful on spending and they emphasize on reduction of cost. A small percentage indicated that managers have acquired the knowledge regarding the preparations of annual budgets and the effectively implemented of the set budget. This implies that most of SMEs in Nyeri County operate without business annual budget. At 95% confidence level the results of regression analysis revealed that budgeting skills were positively but insignificantly associated with growth of SMEs in Nyeri County. The findings imply that an increase in budgeting skills leads to an improvement in growth of SMEs. This relationship is however not significant at 5% significance level.

### **5.2.3 Book Keeping Literacy and Growth of SMEs**

The third objective of the study was to establish the effects of book keeping skills and growth of SMEs in Nyeri County. Descriptive analysis showed that proper book keeping has enabled SMEs to meet debt obligations in time. In addition proper book keeping has led to effective stock management. A number of respondents eluded that they acquired the necessary knowledge on accounting for the transaction in their business but they were indifference on whether book keeping knowledge has enabled management to prepare the financial statements. Moreover the finding revealed that book keeping knowledge was not sufficient enough to enable SMEs to file the tax returns without engaging consultant. At 95% confidence level the results of regression analysis book keeping literacy is positively and significantly associated with growth of SMEs in Nyeri County. The findings imply that an increase in book keeping literacy leads to an improvement in growth of SMEs. The relationship is significant at 5% level of significance which implies an improvement in book keeping literacy leads to an improvement in growth of SMEs.

#### **5.2.4 Knowledge of Banking Services and Growth of SMEs**

The fourth objective of the study was to establish the effects of banking services knowledge and growth of SMEs in Nyeri County. Descriptive analysis showed that managers conduct a survey about various banks products before opening the account or sourcing credit therefore they are awareness of all the bank requirements when accessing credit. The finding further revealed that SMEs have increased their uptake of bank products in the recent past but they are indifference on whether that managers are able to monitor the bank balances. At 95% confidence level the results of regression analysis revealed that banking knowledge literacy were positively but insignificantly associated with growth of SMEs in Nyeri County. The findings imply that an increase in banking knowledge literacy leads to an improvement in growth of SMEs. This relationship is however not significant at 5% significance level.

#### **5.3 Conclusions**

This study concludes that growth of SMEs is highly dependent on the debt management literacy level. Therefore a deliberate effort is paramount to train SMEs on how to manage their businesses effectively with a view to enhance growth of SMEs. Consequently, this would lead to increased financial performance. The study also conclude that majority of SMEs access credit facilities before seeking information on debt management hence find themselves accumulating debts through multiple borrowings from both formal and informal sector. In addition, SMEs were found to divert the funds from the intended purpose which impede the growth of SMEs.

The study concluded that there is need to improve budgeting preparation skills as this would improve growth of SMEs as money will be allocated to specific areas which are determined in advance as this would facilitate controls as actual performance is compared to budgeted performance. In addition budgeting enhances coordination of various functions with ultimate goal of meeting the agreed performance levels. Moreover most of the SMEs do not prepare the business annual budget hence business transactions are undertaken based on the prevailing circumstances which leads to impulse expenditure. Therefore managers need to be trained on budgeting skills and the importance of adherence to the set budget.

Further the study conclude that the growth of SMEs is highly dependent on the book keeping literacy level as higher level of literacy would enable SMEs to maintain proper records and books of accounts which could clearly show the performance of the business and consequently assist in decision making. The study also conclude that although some personnel operating SMEs has general knowledge on accounting for the business transaction such knowledge could not enable them to prepare financial statements independently. SMEs also need to be taken through the general concept of file the tax returns which may not necessarily require professionals.

Another conclusion made by the study is that knowledge of banking services is necessary as it enable SMEs to understand how banks operate to avoid being surcharged and penalized for failure to comply with terms and conditions associated with services provided. Moreover the study conclude that managers of SMEs normally conduct a survey about various banks products but very few monitor the savings and loan balances regularly.

#### **5.4 Recommendations**

Based on the study findings, the study recommends that SMEs should come up with strategies on how to manage debt since it is positively and significantly associated with growth of SMEs. Among the strategies would be to avoid multiple borrowings and accumulation of a lot of debt in the business since this may affect debt repayment. In addition, management of SMEs should come up with better debt management strategies which would reduce the debt to appropriate level which the firm could service without facing financial distress. The study also recommends that SMEs should be trained on how to prepare budget as this would enhance financial performance. This would lead to increased production efficiently, eliminate wastes and control costs and ultimately growth of SMEs.

Management of SMEs should ensure that they put in place strategies policy of recruiting employees with basic accounting concepts to assist in record and book keeping or else undertake capacity building training on the same since book keeping literacy is positively and significantly associated with growth of SMEs. This

knowledge enables the SMEs to prepared financial statement which could enable them to evaluate the financial performance of the enterprise and consequently enable them to make informed decisions.

Based on the findings that banking service literacy has a positive but insignificant association with growth of SMEs, the study recommends that management of SMEs should gather more information on operations of bank to avoid being charged hefty penalties and interest which could be addressed since it would lead increased operational cost which in turn could affect growth strategies.

### **5.5 Limitations of the Study**

There are a number of significant limitations that were projected on this study. One constraint of the study is lack of co-operation of some respondents unwilling to cooperate perceiving that it is a waste of time due to the time taken to fill in the questionnaire as they may be very busy. This was addressed by dropping the questionnaires and picking them as agreed. Time was another constraint for the researcher which was addressed by engaging a research assistant who was trained on how to collect data. In addition, the respondents could be reserved to provide confidential information relating to their growth due to business rivalry. This was addressed by assuring them that the data collected will be used for academic purpose only.

### **5.6 Contribution to Knowledge**

The results of the study contribute to finance theory by establishing the model to determine the growth of SMEs in Nyeri County in terms of financial literacy. In addition, the study provides basis for future reference to the academician especially those focusing on the growth of SMEs in Nyeri County.

### **5.7 Area for Further Research**

The result of the study indicates that financial literacy explains 22.8% variations of growth of SMEs while the rest can be explained by variables not considered in this study. This study therefore recommends that further studies can be conducted on these SMEs to explain the unexplained part of the variations.

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## **APPENDIX I: QUESTIONNAIRE**

Questionnaire to the management and employees of the SMES in Nyeri County.

Dear respondent.

I am Mwaniki Linda Nyambura an MBA (Finance Option) Student wish to conduct a study on your organizations on the RELATIONSHIP BETWEEN FINANCIAL LITERACY AND GROWTH OF SMALL AND MEDIUM ENTERPRISES IN NYERI COUNTY. The information given is purely needed for academic purposes and therefore will be treated with utmost confidentiality. I humbly request you to spend a few minutes and answer this questionnaire.

Your cooperation will be highly appreciated.

Fill in the following questions in the space provided by putting a tick [✓]

### **Section A: General Information (Tick one)**

How long have you operated this business?

5years or less than [ ]      6 - 10years [ ]      10years and above [ ]

The highest level of education.

Certificate ( )

Diploma ( )

Degree ( )

Masters ( )

Doctorate ( )

3.What is the form of ownership of your enterprise

Sole Proprietorship [ ]      Partnership [ ]      Company [ ]

### **Section B: Financial Literacy**

#### **Part I: Debt Management Literacy**

Have you ever access credit from financial institutions

Yes [ ]      No [ ]

How would rate your level of knowledge on debt management Literacy

Very low [ ]      Low [ ]      moderate [ ]      high [ ]      very high [ ]

Please rank the following statements in each area on debt management literacy ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1= Strongly Disagree

	5	4	3	2	1
I acquired all the necessary knowledge on all the loans offered by the banks					
I have the ability to calculate the loan interest on a monthly basis					
I know the implication of accumulating debts in my business					
I am able to adhere to the purpose of the loan once loan is disbursed					
Multiple borrowing from formal and informal sectors affect my debt repayment					

## Part II: Budgeting Skills

Do you prepare budget for your business?

Yes  No

If, Yes for how long have you been preparing budgets?

Less than 3 Years  6-9 Years

3 - 6 Years  More than 9Years

How would rate your level of knowledge on budget preparation

Very low  Low  moderate  high  very high

Please rank the following statements in each area on Budgeting Skills literacy ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1= Strongly Disagree.

	5	4	3	2	1
Managers have acquired the knowledge regarding the preparations of annual budgets					
Manager/s of the SMEs has the sales forecasting experience and knowledge					
We are very careful on our spending and we emphasize on reduction of cost					
The set budget is effectively implemented					

**Part III: Book Keeping Literacy**

Have you been trained on how to keep record of all business related transactions?

Yes [ ] No [ ]

How would rate your level of knowledge on book keeping

Very low [ ] Low [ ] moderate [ ] high [ ] very high [ ]

How long have you kept proper accounting records in your current enterprise?

Less than 3 Years [ ] 6-9 Years [ ]

3 - 6 Years [ ] More than 9Years [ ]

Please rank the following statements in each area on book keeping literacy ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1= Strongly Disagree

	5	4	3	2	1
Book keeping knowledge has enabled management to prepare the financial statements					
Book keeping knowledge has enables us to file the tax returns without engaging consultant					
I acquired the necessary knowledge on accounting for the transaction in my business					
Proper book keeping has led us to meet debt obligations in time					
Proper book keeping has led to effective stock management					

**Part IV: Banking Knowledge literacy**

Do you deposit cash collected in the bank account

Yes [ ] No [ ]

How often do you receive bank statement?

Less than a month [ ] Monthly [ ] Quarterly [ ] Semi-annual [ ]

Annually [ ] Others specify .....

How many times do you carry out bank reconciliation in a year?

Daily [ ] Weekly [ ] Monthly [ ][ ] Quarterly [ ]

Semi-annual [ ] Annually [ ] Others specify .....

Please rank the following statements in each area on banking knowledge literacy ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1= Strongly Disagree.

	5	4	3	2	1
The managers conduct a survey about various banks products before opening the account or sourcing credit					
The managers are aware of all the bank requirements when accessing credit					
Managers are able to monitor the bank balances					
We have increased the uptake of bank products in the recent past					
We acquired the Skills on reconciling our cashbook with the bank statements					

### Section C: Growth

20. How did your business perform in the following area for the last four years?

- i) Net profit for year
- Below 10,000 [ ]
  - Between 10,001-20,000 [ ]
  - Between 20,001-30,000 [ ]
  - Between 30,001-50,000 [ ]
  - Above 50,000 [ ]

ii) Number of different products

- Below 5 Products [ ]
- Between 6-10 Products [ ]
- More than 11 Products [ ]

iii) Number of Employees

- Below 5 Employees [ ]
- Between 6-10 Employees [ ]
- More than 11 Employees [ ]

21. Please give your assessment of the overall growth of your organization over the last 5 years.

**Scale:** 1 = Very Low    2 = Low    3 = Moderate    4 = High    5 = Very High

	5	4	3	2	1
Net Income / Profit					
Number of different products					
Number of employees					

Thank You for your Participation!