# THE EFFECTS OF SELECTED FACTORS ON THE CHOICE OF CAPITAL STRUCTURE OF SMALL AND MEDIUM ENTERPRISES (SMES) IN KIAMBU COUNTY, KENYA

**BERNARD K. NJENGA** 

A Research Project Submitted to the Graduate School in Partial Fulfillment of the Requirements for the Award of Master of Business Administration of Egerton University

EGERTON UNIVERSITY

MAY, 2018

## **DECLARATION AND APPROVAL**

## Declaration

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Bernard K. Njenga CM16/0372/13

## Approval

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

 Supervisor:

 Signature:

Date:

Dr. Fredrick Kalui Department of Accounting and Finance Faculty of Commerce Egerton University

#### COPYRIGHT

## ©2018 Njenga Bernard Kabuu

All rights reserved. No part of this project may be reproduced, stored in any retrieval system or transmitted in any form or means electronic, mechanical, photocopying or otherwise without prior written permission of the author or Egerton University.

## DEDICATION

To the almighty God, my wife Lucy Mutitu and my sons Stanely, Ian and Paul for their inspiration, support and encouragement during my postgraduate studies

#### ACKNOWLEDGEMENT

First and foremost I would like to register my special thanks to the Almighty God for the gift of life and good health. I also thank all the teaching, administrative and support staff of the Egerton University Nairobi Campus for their support throughout the programme period. Special thanks go to my Supervisor Dr. Fredrick Kalui, Senior Lecturer faculty of Commerce, Egerton University for his continued advice, guidance, availability, encouragement, useful criticism and suggestions throughout the project proposal work. My relatives and friends thanks a lot for your support. All my classmates and others who in one way or the other gave me support please receive my heartfelt thanks. Finally, I am indebted not only to people who gave me the inspiration, support and encouragement to pursue MBA programme but also to everybody who gave me the guidance and assistance on what has been suggested in this proposal.

#### ABSTRACT

This study was on the effect of selected factors influencing the capital structure of Small and Medium Size Enterprises (SMEs) in Kiambu County, Kenya. SMEs play a pivotal role towards the achievement of the broad goals outlined in vision 2030 and are critical drivers towards making Kenya an industrialized country with high quality of life for its citizens. The study observes that despite their significance past statistics indicate that three out of five SMEs fail within the first few months of operation and 80 per cent those that continue fail before the fifth year. The objectives of the study were to determine the effect of firm size, information availability, purpose of finance, cost of finance, and collateral requirement on the capital structure of SMEs in Kiambu County. The study findings will assist Government planners in understanding how to come up with policies that will help the SMEs sector in raising affordable capital; financiers will benefit from the findings by developing a better understanding of the factors that influence the capital structure of SMEs; and contribute to knowledge about financing decisions of SMEs. The study was guided by pecking order theory, and the life cycle approach. This study utilized explanatory research design. The study used proportionate sampling by utilizing a sample of 268 respondents. The data were collected from interview schedules using questionnaires and analyzed using descriptive and inferential statistics (Pearson's correlation and regression). The study findings indicated that the size of the business, availability of information, purpose of the finance, cost of capital, and collateral security influenced the capital structure of the firms to great extent and to greatest extent respectively. The research sought to test the hypotheses in order to fulfill the objectives of the study by using logistic regression. All of the null hypotheses were rejected on the basis that the significance of the t-statistic was 0.000 which was less than the p-value 0.05 set for the study. Therefore, all the selected factors had an effect on the choice of capital structure for SMEs in Kiambu County. The study recommended that the Government should introduce targeted legislation that ensures universal access to information by SMEs. In addition, the Government should negotiate favourable interest rates and flexible repayment period to encourage SMEs to borrow from financial institutions.

## TABLE OF CONTENTS

DECLARATION AND APPROVAL	ii
COPYRIGHT	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	X
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of the Problem	5
1.3 Objectives of the Study	6
1.3.1 General objective	6
1.3.2 Specific objectives	6
1.4 Research hypotheses	6
1.5 Significance of the study	7
1.6 Scope of the study	7
1.7 Limitations of the study	8
1.8 Assumptions of the study	8
1.9 Operational definition of terms	9
CHAPTER TWO	11
LITERATURE REVIEW	11
2.1 Introduction	11
2.2. Theoretical framework	11
2.2.1 Pecking Order Theory (POT)	11
2.2.2 The Lifecycle Approach	12
2.3 Contextual Understanding of Capital Structure of SMEs	13
2.3.1 SMEs Financing	13
2.3.2 SMEs Financing in Kenya, with a focus on Kiambu County	16
2.4 Empirical Literature	
2.4.1 Determinants of SMEs Financing Options	

2.4.2 Summary of Empirical Literature	
2.5 Research gaps	
2.6 Conceptual framework	
CHAPTER THREE	
RESEARCH METHODOLOGY	
3.1 Introduction	
3.2 Research design	
3.3 Target population	
3.4 Sample size and sampling technique	
3.5 Pilot test	
3.6 Validity and reliability	
3.7 Data collection methods and procedures	40
3.8 Data analysis and presentation	40
CHAPTER FOUR	42
DATA ANALYSES, PRESENTATION AND DISCUSSION OF RESULTS	42
4.1 Introduction	42
4.2 Background information	42
4.3 Size of the firm	46
4.4 Availability of information	48
4.5 Purpose of capital structure	49
4.6 Collateral requirements	51
4.7 Cost of capital structure options	53
4.8 Correlation analysis	54
4.9 Regression Analysis	56
4.10 Hypothesis Testing	
CHAPTER FIVE	60
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	60
5.1 Introduction	60
5.2 Summary of Findings	60
5.3 Conclusion	62
5.4 Recommendations	63
5.4.1 Recommendations from the study	63
5.4.2 Recommendations for further study	64
REFERENCES	65

APPENDICES	75
Appendix I: Questionnaire cover letter	75
Appendix II: Questionnaire	76
Appendix III: Time plan	85
Appendix IV: Research budget	86

LIST	OF	TA	BLES
------	----	----	------

Table 3.1: Target population	35
Table 3.2: Sampling distribution	
Table 3.3: Reliability Test.	
Table 3.4: Variable indicators	
Table 4.1: Work experience	
Table 4.2: Conditions when applying for loans	43
Table 4.3: Ownership	44
Table 4.4: Extent of utilization of capital structure	44
Table 4.5: Type of business	46
Table 4.6: Size of the firm	46
Table 4.7: Influence of size of business	
Table 4.8: Availability of information	48
Table 4.9: Source of information	49
Table 4.10: Extent of purpose of capital structure	
Table 4.11: Purpose of capital structure	
Table 4.12: Overall influence of purpose of capital structure	51
Table 4.13: Extent of utilization of collateral security	
Table 4.14: Use of collateral security	
Table 4.15: Cost of capital structure.	53
Table 4.16: Cost considerations.	56
Table 4.17: Affordability of capital structure.	
Table 4.18: Correlation coefficients	55
Table 4.19: Regression model summary	56
Table 4.20: Analysis of variance	57
Table 4.21: Regression coefficients	

## LIST OF FIGURES

Figure 2.1:	Conceptual Framewor	
-------------	---------------------	--

## LIST OF ABBREVIATIONS

African Task Force
Development Financial Institutions
Foreign Direct Investment
Gross Domestic Product
Government of Kenya
International Development Research Corporation
Microfinance Institutions
Modigliani and Miller
Microfinance Risk Management
Micro- and Small-Enterprises
Nairobi Stock Exchange
Pecking Order Theory
Research and Development
Rotating Savings and Credit Associations (Merry-go-rounds)
Savings and Credit Co-operative Societies
Strategic Business Advisors Africa Ltd
Small- and Medium-Sized Enterprise
Small Scale Business
Kiambu Business Directory
United Nations Environment Programme Financial Institutions

#### **CHAPTER ONE**

#### **INTRODUCTION**

#### 1.1 Background of the study

In both developing and developed countries, Small medium enterprises (SME) play important roles in the process of industrialization and economic growth (Akhabonje & Namusonge, 2016). The significance of Small and Medium-size Enterprises (SMEs) in economic development has been recognized worldwide. Abor (2008) and Floyd and McManus (2005) reinforce this recognition in the observation that most developing countries, have an absence of many large firms thus implying that the SME sector is the main engine of growth.

The Small and Medium Enterprise (SME) sector is the backbone of the European economy, accounting for over 66% of the exports, employing over 70% of the available workforce and generating 56.2% of its private sector turnover (Duarte & Martins, 2016). The extent of this sector's economic consequence is highlighted by the fact that 99.8% of the 17.9 million enterprises in the European Union are SMEs (Duarte & Martins, 2016). Research has shown that capital structure is a significant factor contributing to the growth of small firms (Brown, et al., 2008). At the end of 2015, United Kingdom (UK) Small and Medium Enterprises (SMEs) had about £50.9 billion worth of inventory on their balance sheet (ABFA, 2015). This amount indicates that investment in inventory is substantial for UK SMEs.

Small, micro and medium-sized enterprises (SMEs) play a very significant role in the economy of any country, both developing and developed nations as well as to the individuals. SMEs provide employment and improve the living standards of individuals-both the employers and employees. They are a major source of entrepreneurial skills and innovations. Entrepreneurship is progressively recognized as a vital driver of economic growth, creativity, productivity as well as career, which is generally recognized as being an essential area of economic dynamism. Transforming thoughts directly into economic opportunities could be the definitive difficulty regarding entrepreneurship. Heritage ensures that economic improvement is being considerably advanced by real people who are entrepreneurial as well as revolutionary, able to make use of opportunities as well as ready to consider pitfalls (Hisrich, 2005). Consequently, the role of entrepreneurship and an entrepreneurial culture in economic and social development has often been undervalued.

Small and Medium Enterprises (SMEs) are very important for employment creation and are important sources of economic growth (Tambunan, 2005). It is therefore not a surprise that

Small and Medium Enterprises (SMEs) receive ample attention in Iraq. Early review indicates that Iraq small and medium enterprises (SMEs) account for more than 99 per cent of total companies in the country. The evidence suggests that small and medium enterprises (SMEs) play a vital role in the nation's economy and wellbeing. The largest concentration of Small and Medium Enterprises (SMEs), in terms of numbers, can be found in the textile and apparel sector, followed by food and beverages, metals and metal products, and wood and wood products (Harash, et al., 2014).

The promotion of small and medium enterprises (SMEs) is regarded as an important issue in many countries, including Iraq (Harash, et al., 2014), because it plays considerable responsibility in providing further employment and conversion of economy. It is also implicit that sectors conquered by Small and Medium Enterprises (SMEs) are better able to develop dynamic economies of scale (Jasra, et al., 2011). The roles of Small and Medium Enterprises (SMEs) in the creation of productive employment are concerned with its position in the center of the range of sizes and resources intensities in a rising economy. Developing economies have started to focus on the crucial role that small and medium enterprises (SMEs) can play in their development (Maad, 2008). Due to the importance of Small and Medium Enterprises (SMEs) in relation to the economic development in a country, studies linked to this field are extremely important to enable researchers and stakeholders to improve their knowledge and expertise in the management of small and medium enterprises (SMEs) (Harash, et al., 2014).

In today's increasingly globalized economy, Small and Medium Enterprises (SMEs) are usually feeder industries for larger industries and they are crucial for economic growth and development (Kongolo, 2010). Small and Medium Enterprises (SMEs) are now considered to be the major source of dynamism, innovation and flexibility in emerging and developing countries, as well also the economies of most nations. They contribute substantially to economic development and employment generation (Koh, et al., 2007). Small and Medium Enterprises (SMEs) form as a potential economic back-bone of many regions and make a large contribution to employment than large companies (Chin, et al., 2012)

Majority of SMEs in developed countries have been found to be heavily dependent on bank finance (Benneworth, 2004). The differences in institutional arrangements and financial markets between developed and developing countries actually merit the need to look at the issue of SMEs financing from the perspective of developing economies, especially within the context of sub-Saharan Africa. Small and Medium Enterprises (SMEs) have an important role to play in the development of the country. A strong SME sector contributes highly to the economy, contributing to the gross domestic product, by reducing the level of unemployment, reduction in poverty levels and promotion of entrepreneurship activity.

In South Africa (SA), the growth of SMEs and prevalence of SMEs is significantly low. Strong Small and Medium Enterprises (SMEs) sector contributes highly to the country's economy, contributing to the Gross Domestic Product (GDP) by reducing the level of unemployment, reduction in poverty levels and promotion of entrepreneurship activity. The role of SMEs in the development of the country is significant (Bayati & Taghavi, 2007). SMEs in South Africa (SA) and across the globe still encounter many challenges, despite their importance and significance of SMEs and their contribution to economic growth which hinder business growth. It is obvious that hurdles in the business success are far more than it was previously. The environments, as well as some factors, are very complex and dynamic.

SMEs have the ability to make a meaningful reduction in the high level of unemployment and contribute to the GDP of the local economy in SA. Besides assisting in curbing the high level of unemployment, SMEs can be used as a means of transforming the country, by redistributing the productive assets, amongst the previously disadvantaged. The failure rate of SMEs is high throughout the world with the situation being no different to South Africa (Fang, Yuli & Hongzhi, 2009).

In Ghana, the most commonly used definition of SMEs is the number of employees of the enterprise. In applying this definition, however, there is some controversy in respect of the arbitrariness and cut off points used by the various official records (Dalitso & Quartey, 2000). The Ghana Statistical Service (GSS) defines small businesses as enterprises that employ less than 10 persons while those that employ more than 10 people are classified as Medium and Large-Sized Enterprises. Alternately, the National Board for Small Scale Industries (NBSSI) in Ghana utilized both the 'fixed asset and number of employees' criteria to define SMEs. According to the NBSSI, enterprises with not more than 9 workers, has plant and machinery (excluding land, buildings and vehicles) and not exceeding 10 million Cedis (US\$ 9506, using 1994 exchange rate) are considered as Small Scale Enterprises.

Mutandwa and Kanuma (2015) states that small and medium enterprises (SMEs) are often identified as one of the most important strategies for enhancing the livelihoods of people in Rwanda. Apart from increasing per capita income and output, SMEs create employment opportunities, enhance regional economic balance through industrial dispersal and generally promote effective resource utilization considered critical in engineering economic development.

In Kenya, Kithae, Gakure and Munyao (2012) explain that SMEs play a pivotal role towards the achievement of the broad goals outlined in vision 2030 and are critical drivers towards making Kenya an industrialized country with high quality of life for its citizen. Mulwa (2014) states that the small and medium size enterprises present the most dynamic economic foundation for growth, income and employment creation .In Kenya 18% of the GDP and 80% of the workforce population are employed in SMEs, sector according to Kithae (2012). SMEs are seen to provide apparently goods and services at a reasonable price, employment and incomes to a large number of individuals (Kauffmann, 2006). Several research, have been conducted to establish the relationship between economic growth and business development (Harris and Gibson, 2006).

Micro, small and medium sized enterprises are credited to offering about 75% of the general employment and contributing about 18% of GDP in the Kenyan economy. These enterprises cut across all sectors of economy including general trade (wholesale and retail), services, farm activities and manufacturing (Atieno, 2009).

SMEs based on the characteristics of the business, such as size, level of operations, type of industry, assets employed, and number of employees, turnover, market, management or control of the business or several others (Wanjohi & Mugure, 2008). In the Kenyan context, SMEs play a key role in growth of the economy. The Kenya situation is no different from the rest of the world in as far as the recognition and support of the small business is concerned. However, the emphasis on the sector, which has been recognized as informal, and "Jua Kali" did not take place until after 1972 following the ILO report on the World Employment program (Sessional Paper No. 2, 1992). The report laid a lot of emphasis on the possibilities of the informal and small business sector creating employment and generating income for the majority of the Kenyan people.

As a result of this recognition, the small business sector was given considerable attention in the subsequent Governments plans. The importance of the sector is particularly apparent in its ability to provide reasonably priced goods, services, income and employment to a number of people (Mullei & Bokea, 1999). It is for this reason that there has been a growing interest and concern by the government and development agencies for the improved growth of SMEs. It has become common knowledge among scholars that the importance of the role played by SMEs cannot be over emphasised (International Labour Organization, 2002).

The 1999 GOK baseline survey indicated that there were 1.3 million small enterprises (SMEs) employing 2.3 million people and generating as much as 18% of Kenya's Gross Domestic Product (GDP) (Cincotta, 2014). The contribution of SMEs is more than double that of the large manufacturing sector, which stands at 7% of the GDP (Government of Kenya [GoK], 1999). Overall, SMEs create 75% of all new jobs. Estimates based on the 2003 baseline survey showing that, in the year 2002, the SME sector employed about 5,086,400people, up from 4,624,400 in 2001. This was an increase of 462,000 persons and consisted of 74.2% of total national employment (Mokua, 2011).

The long-term growth and competitiveness of SMEs are compromised by poor choice of financing, among other systematic and institutional problems in developing countries. Poor choice financing has been identified as one of the major challenge confronting the SMEs sector in Kenya (Olekamma, 2016). Due to the wrong choice of financing most of the SMEs in Kenya end up closing their businesses in the first year of operation major reason being failure to repay back their loans or underfunding of their operations.

Small and Medium Enterprises in Kenya may exhibit lack of knowledge on financial resources available in the market leading them to choose expensive sources of finance which they are unable to service. It is important to remember that the SMEs hold the key to rapid technological development and full employment (Mokua, 2011). These enterprises offer a means whereby new employment opportunities can be created in rural areas. The small enterprises would not only provide a livelihood but would also create employment for others, thereby easing up social tensions like insecurity growing in an atmosphere where so many are deprived, a scenario to be found in the underprivileged areas of the developing world.

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

In almost all economies especially in developing countries SMEs hold the key to rapid technological development and creation of jobs (Mokua, 2011). In the developing world, most jobs are reported to be created by SMEs. Despite their significance, past statistics indicate that three out of five SMEs fail within the first few months of operation and those that continue 80 per cent fail before the fifth year (Kenya National Bureau of Statistics, 2007). It is therefore necessary to eliminate the many constraints facing these small businesses, such as wrong capital structure which make their operations unsustainable.

In the developing world, Kenya included, more than 90% of new ventures are financed by informal sources of finance and more than 60% of the start-up capital is financed by the business founders (Pretorius, 2007). In most cases, even where credit is available mainly

through banks, the SMEs may lack freedom of choice because the bank's lending conditions may force the purchase of heavy, immovable equipment that can serve as collateral for the bank, and lack of freedom of choice forces SMEs to rely on high cost short-term finance, which is detrimental to their day to day operations. However, the vast majority of past studies (Wanjohi & Mugure, 2008; Mokua, 2011; Gitari, 2012; Mwangi, 2013; Kenduiwo, 2014; Ndungu, 2014; Kiajage, 2015) focus on access to finance by the SMEs with no evidence of a study on factors influencing choice of capital structure for SMEs. Therefore, there was need to conduct a study to examine factors influencing their choice of capital structure, hence this study.

### 1.3 Objectives of the Study

### 1.3.1 General objective

The general objective of the study was to assess selected factors that influence capital structure for small and medium enterprises in Kiambu County, Kenya.

#### **1.3.2 Specific objectives**

- i. To determine the effect of firm size on the capital structure for SMEs in Kiambu County, Kenya.
- ii. To determine the effect of information availability on the capital structure for SMEs in Kiambu County, Kenya.
- To determine the effect of purpose of finance on the capital structure for SMEs in Kiambu County, Kenya
- To determine the effect of cost of finance on the capital structure for SMEs in Kiambu County, Kenya.
- v. To determine the effect of collateral requirement on choice of capital structure for SMEs in Kiambu County, Kenya
- vi. To determine the combined effect of selected factors on the capital structure of SMEs in Kiambu County, Kenya

### **1.4 Research hypotheses**

Ho<sub>1</sub>: There is no significant effect between the size of the firm and capital structure for SMEs in Kiambu County, Kenya.

Ho<sub>2</sub>: There is no significant effect between the availability of information and capital structure for SMEs in Kiambu County, Kenya.

Ho<sub>3</sub>: There is no significant effect between purpose of finance and the capital structure for SMEs in Kiambu County, Kenya.

Ho<sub>4</sub>: There is no significant effect between cost of finance and the capital structure for SMEs in Kiambu County, Kenya.

Ho<sub>5</sub>: There is no significant effect between collateral requirement and the capital structure for SMEs in Kiambu County, Kenya

HO<sub>6</sub>: There is no significant effect between the selected factors and the capital structure by Small and Medium Enterprises in Kiambu County, Kenya

## **1.5 Significance of the study**

The study findings will assist Government planners in understanding how to come up with policies that will help the SMEs sector in raising and accessing affordable capital as this will have a great impact on the country's economic growth.

Financiers will benefit from the findings by developing a better understanding of the factors that influence capital structure of SMEs. These will enable them to develop product offerings that tries to circumvent any limitations and that which tend to increase choice for potential entrepreneurs.

The study will be a source of reference material for future academic research on other related topics or expansion of knowledge on the same.

### 1.6 Scope of the study

This study examined factors influencing capital structure of SMEs in various industries in Kiambu County. Kiambu was selected as it is an industrial town and its proximity to proper infrastructure like that of Kenya capital, Nairobi. It is highly conducive to economic growth in Central Kenya. The study attempted to examine for cross-industrial similarities or differences among the SMEs in relation to the factors that influence choice of capital structure. The independent variables included size of the firm, information availability, purpose of finance, cost of finance, and collateral security; whereas the dependent variable was SMEs capital structure. In order for the data to be relevant the study covered 268 out of 889 SMEs operating in Kiambu County for the period between January 2016 to December 2016. Finally, the total budget for the study was Kenya shillings 50,000.

## **1.7 Limitations of the study**

There was reluctance of the targeted respondents to offer information hence a lot of persuasion was required from the researcher. The researcher had to provide a cover letter to assure the respondents that the research was purely academic.

It was not be possible to study the whole population for full information but a representative sample whose mean is a representative of the whole population.

## **1.8** Assumptions of the study

The study assumed that the researcher will be able to interview enough respondents to make generalizable findings, permission will be granted to carry out the study, and that there will be enough finances to carry out the study.

#### **1.9 Operational definition of terms**

**Asymmetric information:** The view that the borrower has more information than the lender on his ability to repay the loan, the viability of the project, and the use of the money being borrowed

**Capital structure:** This refers to financing choices available for SMES in a business environment. They include bank loans, trade credit, Venture capitalists, personal savings, etc.

**Costs of finance:** Are all the expenses that the entrepreneur must meet so as to acquire a particular kind of finance. They include interest rates, calling and travelling costs among others.

**Credit rating:** Evaluation of the timely repayment ability of an individual or firm on debt security. Credit rating is built up on the basis of the (1) credit history, (2) present financial position, and the (3) likely future income

**Credit rationing:** A measure employed by lending institutions to limit the availability of capital based on determinations they make about the credit-worthiness of borrowers as well as the lending environment in general. Raising interest rates above current market rates, regardless of the supply and demand equilibrium, is seen as a form of credit rationing

**Collateral:** These are assets that are pledged as security for a loan.

**Financing:** This is the act of providing funds for business activities to enable SME meet their objectives. They include activities such as providing working capital requirements, equipment acquisition among others.

**Information availability:** Is the general awareness of financial resources available through available mediums of communication e.g. print media radio stations and others.

**Purpose of finance:** These are the activities for which financial resources are being sought. They include meeting working capital requirements, equipment acquisition among others. **Selected factors:** The factors that were selected based on their recurrence and influence on SMEs financing after rigorous review of theoretical, contextual, and empirical literature. They include size of the firm, information availability, purpose of finance, cost of finance, and collateral security.

**SMEs**: Is defined by the Kenya Association of Manufacturers [KAM], (1999) as those firms employing between one to twenty staff with an annual turnover of between Kshs 500,000-

5,000,000 and a capital formation of between Kshs 5,000,000.00 to 20,000 000. It is also defined by Government of Kenya (2012) as a firm, trade, service, industry or a business activity whose annual turnover does not exceed five hundred thousand shillings; employs less than ten people; and whose total assets and financial investment does not exceed ten million shillings for a manufacturing firm and five million shillings for service and farming enterprises.

## CHAPTER TWO LITERATURE REVIEW

#### **2.1 Introduction**

This chapter presents a theoretical, contextual and empirical review of literature underlying the study, research gaps, and conceptual framework that illustrates the relationship between variables.

### 2.2. Theoretical framework

This section focuses on the theories guiding the study. The study was guided by pecking order theory, and the life cycle approach.

#### 2.2.1 Pecking Order Theory (POT)

The SME financing pattern explained by Berger and Udell (1998) contrasts with the hypothesis given under pecking order theory. The pecking order theory developed by Myers (1984) suggests that the capital structure decisions of a firm are a function of the firm's age. As postulated by this theory, internal sources of funding are prioritized while the use of external sources is delayed until the internal sources are exhausted. As such, when seeking funds, a firm prefers internal equity to external debt, short-term debt to long-term debt, and external debt to external equity. Therefore, the order of preference for the financing sources for a firm should always be as follows: internal equity, issuing debt, and then issuing equity (Padachi & Bhiwajee, 2016). Various authors state that the POT is even more relevant for the SME sector because the relatively greater information asymmetries and the higher cost of external equity for SMEs (Ibbotson, Sindelar & Ritter, 2001). Additionally, a common phenomenon in the sector is the desire of the firm owners to retain control of the firm and maintain managerial independence (Padachi & Bhiwajee, 2016).

SME owners source their capital from a pecking order of, first, their "own" money (personal savings and retained earnings); second, short-term borrowings; third, longer term debt; and, least preferred of all, from the introduction of new equity investors, which represents the maximum intrusion. Empirical evidence supports applicability of the POT in explaining the financing behaviour of SMEs (Ou & Haynes, 2006). These studies emphasize that small firms rely on collateral requirement and the size of the firm internal sources of finance and external borrowing to finance operations and growth, and only a very small number of firms use external equity. A number of studies report that firms operate under a constrained pecking order, and do not even consider raising external equity (Padachi & Bhiwajee, 2016).

The Pecking Order Theory offers critical and fundamental insights into why SMEs with internal sources of funding capital structure resources in terms of firm size profit and make choices of financing and meet Collateral requirements.

#### 2.2.2 The Lifecycle Approach

The lifecycle approach, as described by Weston and Brigham (1981), was conceived on the premise of rapid growth and lack of access to the capital market. Small firms were seen as starting out by using only the owners' resources. If these firms survived, the dangers of undercapitalization would soon appear, and they would then be likely to make use of other sources of funds, such as trade credit and short-term loans from banks. Rapid growth could lead to the problem of illiquidity. The dynamic small firm would therefore have to choose between reducing its growth to keep pace with its internally generated funds, acquire a costly stock market quotation, or seek that most elusive form of finance – venture capital (Weston & Brigham, 1981) thereby indicating a trend in SMES that expanding small firms are likely to experience rising short-term debt and use little or no long-term debt.

The financial life cycle model incorporates elements of trade-off, agency, and pecking order theories, and describes sources of finance typically advanced by funders at each stage of a firm's development. At start-up, the commonly held view is that firms have difficulty accessing external finance due to information opacity (Huyghebaert & Van de Gucht, 2007). The most important and commonly-used sources of finance at this stage are personal savings of the firm owner, and finance from friends and family members (Ullah & Taylor, 2007). The contribution of the firm owner in nascent firms is not confined to equity, but commonly includes the provision of quasi-equity in the form of personal assets used as collateral to secure business debt (Basu & Parker, 2001). Whilst a firm may obtain sufficient capital to initiate trading, a lack of planning may lead to problems of under-capitalization in the earliest stages. In extreme cases, particularly in the face of competition, the firm may not be able to continue in business (Cressy, 2006). As successful firms survive nascent and start-up phases, and mature through growth stages, personal funding becomes relatively less important as investment finance is increasingly sourced from retained profits.

Rapidly expanding firms lacking adequate working capital to meet increased costs may experience liquidity problems at this stage (Cressy, 2006). Firms faced with the problem of overtrading often seek to alleviate these liquidity problems by increasing their overdraft

facility. Thus, the lifecycle approach is appropriate in determining the choice of financing of SMEs in regard to the size of the firm, purpose of the finances and the availability of the finances.

#### 2.3 Contextual Understanding of Capital Structure of SMEs

#### **2.3.1 SMEs Financing**

Small and medium enterprises have become the backbone of most economies providing products and services to the customers. When Adam Smith published "Wealth of Nations" in 1776, he was describing an economy in which local small and medium enterprises were virtually the only economic entities. SMEs have been identified the world over as the stepping stones for industrialization. Robust economies like the United States of America and the United Kingdom trace their development from growth and development of their SMEs. Currently, it is estimated that the contribution to the GDP by this sector stands at over 25% (Economic Survey, 2012). As such, policy provisions remain fundamental in propelling these enterprises towards self-sustenance and realization of their full potentials in contributing towards economic growth (SMEs management journal 2010). SMEs operations cut across almost all sectors of the economy and sustain majority of households in Kenya, Wanjohi (2010). This was well recognized by the 2003, national budget. David Mwiraria, the then minister for finance noted that "SME activities form a breeding ground for businesses and employees and provide one of the most prolific sources of employment. Their operations are more labour intensive than the larger manufacturers." As such, policy provisions would mean boosting not only the operations of these enterprises but the country's economy as well.

The importance of SMEs in Kenya was first recognized in the international labour organization report on' Employment, Income and Equity in Kenya' in 1972. The report underscored SMEs as an engine for employment and income growth. SMEs create about 85 percent of Kenya's employment (African Economic Outlook, 2011 report). While the subsector constitutes close to 85 percent of employment, it only contributes to about 20 percent of the total GDP. This implies dismal performance of the subsector. The development trajectory of the subsector thus requires a system which holistically fosters SME development. The current constitutional framework and the new Micro and Small Enterprise Act 2012 (MSE Act, 2012) provide a window of opportunity through which the evolution of SMEs can be realized through the devolution framework. However, the impact of devolution

on SMEs development depends on the architecture of the regulatory and institutional framework inclined to support SMEs in an economy (Wanjohi, 2010).

One of the most important theories that focused on financing gap analysis is the Credit Rationing Theory by Stiglitz and Weiss (1981). In their formulation, Stiglitz and Weiss (1981) argued that agency problems (a conflict of interest between management (agents) and the shareholders (owners) of the organization) and information asymmetries are the major reason why SMEs have constrained access to finance. They argued that only SMEs know their real financial structure, the real strength of the investment project and the effective intention to repay the debt, that is, firms have superior private information (asymmetric information). Hence, the bank manager makes decisions under asymmetric information, and operates under a moral hazard and adverse selection risk. Stiglitz and Weiss (1981) explained the choice among different financing sources under conditions of asymmetric information and credit rationing. Asymmetric information can lead to credit rationing conditions by modifying the risk-return distribution; this fact encourages banks to refuse capital for investments and produces divergence between capital demand and supply (Alfo & Trovato, 2006). Constrained access to finance derived from financial institutions' credit rationing behavior might not be efficient because managers work under conditions of asymmetric information. This may result in less profitable investments getting financed while more profitable investments are being left out and thus resulting in adverse selection and moral hazard risks. Therefore, asymmetric information can explain asymmetric of credit among firms with identical characteristics, the lenders not being aware of the exact bankruptcy likelihood for the firms, know only that this likelihood is positive and therefore choose to increase debts' cost.

Start-up small firms are more likely to be affected by information asymmetry problems. Deakins, North, Baldock and Whittam (2008) argued those information asymmetries are more acute in new and technology-based propositions. They argued at an early stage, information is limited and not always transparent and assets are often knowledge based exclusive associated with the founding entrepreneur. Especially with manufacturing and technology based firms, entrepreneurs may be reluctant to provide full information about the opportunity because of concerns that disclosure may make it easier for others to exploit. These concepts on credit rationing theory lay the core foundation for SMES in moving toward making choices of financing because they know their real financial structure, the real

strength of the investment project and the effective intention to repay the debt.

The agency theory provides a different perspective. Jensen and Meckling (1976) outlined a number of potentially costly principal agent relationships in publicly quoted corporations that may arise because the agent does not always conduct business in a way that is consistent with the best interest of the principals. The firm's security holders (debt holders and stockholders) are seen as principals and the firm's management as the agent, managing the principals' assets. Whilst a number of these relationships are relevant for SMEs, the primary agency conflict in small firms is generally not between owners and managers, but between inside and outside contributors of capital (Ghobakhloo, Tang Sai & Standing, 2015).

Potential agency problems in SMEs are exacerbated by information asymmetries resulting from the lack of uniform, publicly available detailed accounting information. The primary concern for outside contributors of capital arises from moral hazard, or the possibility of the SME owner changing his behavior to the detriment of the capital provider after credit has been granted. This is because the firm owner has an incentive to alter his behavior expost to favor projects with higher returns and greater risk. Debt providers seek to minimize agency costs arising from these relationships by employing a number of lending techniques. Baas and Schrooten (2006) proposed a classification of lending techniques - transactions-based or 'hard' techniques include asset-based lending, financial statement lending, small business credit scoring lending and the 'soft' technique of relationship lending. Asset-based lending and relationship lending dominate the literature. In practice, lending to SMEs by banks is frequently collateral-based (Kon & Storey, 2003). The pervasiveness of the use of collateral is confirmed by a number of studies, for example; Ghobakhloo, et al. (2015) find that the ratio of loan size to collateral exceeds unity for 85 percent of small business loans in the UK, Berger and Udell (1990) report that over 70 percent of all loans to SMEs are collateralized. Even for firms with positive cash flow financial institutions typically require collateral (Song, 2014). The use of debt finance is positively related with the provision of collateral. Potential agency problems are not constant over the life cycle of the firm. Firms at the start-up stage typically experience the greatest informational opacity problems, and may not have access to debt financing.

As a firm becomes established and develops a trading and credit history, reputation effects alleviate the problem of moral hazard, facilitating borrowing capacity (Diamond, 1991).

Additionally, as the firm grows it will have accumulated assets as debt collateral in the form of inventory, accounts receivable and equipment (Berger & Udell, 1998). The firm may also have increased fixed assets in the form of land and buildings on which it may secure mortgage finance. Long term debt is typically secured on collateralizable fixed assets, and consequently its maturity matches the maturity of the pledged asset. Therefore, the use of long term debt is expected to increase initially, and decrease at a later stage as the long term debt is retired and the firm can rely increasingly on accumulated retained profits.

Agency theory is pertinent due to the potential for moral hazard that arises between 'outside' suppliers of capital and the owners of the firm. The potential for agency problems is exacerbated by the increased information asymmetries in the SME sector. Information asymmetries are the basis for the pecking order of financing (Ghobakhloo, et al., 2015) whereby firms seek to use sources of finance that are subject to the size of the firm, cost of finance and collateral requirement.

#### 2.3.2 SMEs Financing in Kenya, with a focus on Kiambu County

Financing is the act of providing funds to enable the SMEs to operationalise their business activities. In Kenya there are various capital structures available to the SMEs from banks, micro-finance institutions, cooperatives, government instruments, international institutions and donors as well as personal finances. Kenya has in the recent past seen tremendous growth and deepening of the financial sector. Kenya had a well-developed financial system by 1996, made up of 51 commercial banks, 23 non-bank financial institutions, 5 building societies, 39 insurance companies, 3 reinsurance companies, 10 development financial institutions, I capital market authority. 20 securities and equities brokerage firms, 1 stock exchange, 12 investment advisory firms , 57 hire purchase companies, several pension funds, 13 foreign exchange bureaus, and 2,670 savings and credit cooperative societies (Kenya National Development Plan, 1997/2001).

According a World Bank study, there are many SMEs in Kenya which, despite their high potential, have been unable to fully operationalise their activities due to the wrong capital structureat their initial stages. Such situations may be due to the inability of the SME to offer sufficient loan collateral or to operational issues within the SME requiring more hands-on assistance than commercial banks and leasing companies, for example, are normally able to provide.

Kiambu County constitutes twelve constituencies: Gatundu South, Gatundu North, Juja, Thika Town, Ruiru, Githunguri, Kiambu, Kiambaa, Kabete, Kikuyu, Limuru and Lari. The population tally in the county according to the Kenya National Bureau of Statistics report of 2009 is 1,623,282. Kiambu town is the commercial and administrative capital of Kiambu County. Due to its proximity to the city of Nairobi (16 kilometers), the town hosts key government offices for the main ministries. It's almost considered a suburb of Nairobi with most middle class renting houses there while they commute daily to Nairobi for work. The town is witnessing rapid growth with major road infrastructure and complex real estate developments taking place around and neighboring environs. Kiambu County relies mostly on agriculture and industries to sustain its economy. Although majority of residents are small scale farmers growing tea and coffee, there are several large-scale coffee and tea farms which are serviced by local industries. Local tea factories include Kambaa Tea Factory in Githunguri, Gachege Tea Factory; Kiambu, Ngorongo Tea Factory, Kagwe Tea Factory in Lari and Mundoro Tea Factory in Gatundu.

Coffee growing and marketing is run under the management of farmer's cooperative unions. Some of the cooperative and growers organizations include Dagoreti & Karai Coffee Growers Co-operative Society, Gititu Farmers Co-operative Society, Komothai Coffee Growers Co-operative Society, Kiambaa Farmers Co-operative Society, Kabete & Muguga Coffee Growers Co-operative Society and Ndumberi Farmers Co-operative Society Ltd. Kiambu County has a significant presence of various industries which specialize in agricultural based product, natural resources and service provision. Some of the leading industries include, Bogani Industries, Spinners & Spinners Ltd, Del Monte, Brookside, Fresha and Kinale dairies. Other industries are Devki Steel Mills, Carbacid industries, Bata Shoe industry and Uplands Bacon Industry in Limuru. The larger populations of people are in retail businesses where they manage hotels and restaurants, new and second hand clothes, foodstuffs, hardware shops and household goods.

The expansion of the Thika Superhighway has opened up the county and led to an expansion of the real estate market with several big projects under development, such as Tatu City, Thika Greens and Buffalo Hills complexes. Other modern housing developments include Bahati Ridges, Fourways Junction and Juja South schemes.

#### 2.4 Empirical Literature

#### 2.4.1 Determinants of SMEs Financing Options

This section discusses the selected factors influencing capital structure of SMEs. These factors are the size of the firm, availability of information, purpose of financing, cost of financing, and collateral requirements attached to specific capital structure.

Even though there is no consensus amongst researchers about the criteria that should be employed to measure the size of the firm (typically total assets, sales or the number of employees), the notion that firm size has an effect on SMEs activities and its potential to expand appears to receive general agreement. A firm's size is usually coupled with its age as they tend to have similar influence on the firm's life cycle. This influence can be strongly observed in the decision making process in the firm about whether one particular sort or another of finance should be chosen and utilized (van Binsbergen, Graham & Yang, 2010). Studying firms financing and capital structure using a sample consisted of 292 Australian firms, Nazir and Afza (2010) concluded that the "larger" small firms are, the more they rely on long-term debt and external financing, including bank loans. This is consistent with Storey (1994) who found that in the case of SMEs, the owner-manager's personal savings are more important as a source of funds during the start-up stage than outside finance such as loans and overdrafts from banks. From another angle, the extent to which firm size can impact the availability of finance to the firm was measured by Nyarige and Olweny (2014). They argued that as firms grow, they develop a greater ability to enlarge the circle of banks from which they can borrow. They then provided evidence that firms dealing with multiple banks and credit institutions are nearly twice as large as those with only one bank.

As younger firms are usually characterized by informational opacity (Myers & Majiuf, 2011) as a consequence of not having an established track record, this may lead to the reluctance of banks and other financial institutions to lend to these firms. According to Nyarige and Olweny (2014), younger enterprises (those established less than four years), are more reliant on informal financing and far less on bank financing. This is supported by Quartey (2003) who concluded the significant positive effect of firm age on the ability to access external finance. In addition, in their investigation of the impact of firm and entrepreneurial characteristics on SME access to debt finance in South Africa, Fatoki and Asah (2011) observed that SMEs established more than five years have a far better chance to be successful in their credit applications compared with SMEs established for less than five years.

In all these instances, these studies generated findings that only partially correlated with each other owing to methodological differences in the research designs. An example of these was the definition of SMEs based on the number of employee where Enders (2010) used large to stand for 500 employees and above while Pretorius (2007) used a narrower categorization scope. In many developing countries, entrepreneurs have limited access to formal credit. In sub-Saharan Africa, for example, the banking-sector penetration is roughly 10% of the population (Nyarige & Olweny, 2014). In Kenya, there are about 2.2 million micro-, small-and medium-sized enterprises (Strategic Business Advisors [Africa] Ltd, 2007), of which 88% are non-registered. Of this non-registered group, only 23% have bank accounts, and only 10% have ever received credit from any formal source. Atieno (2013) has observed in a survey done in Kenya that about 70% of the respondents got their initial capital from family, friends and relatives while 81% got their operating capital from the same financier.

The higher the level of information asymmetry, the higher the perceived risk, the less the likelihood of adopting a particular source of finance. In scenarios where firms have to make a choice, then that ranges from low risk to high risk capital sources as dictated by the availability of information sources (Myers and Majluf, 2011). As also seen earlier, the existence of information asymmetries between the firm and likely finance providers causes the relative costs of finance to vary between the different sources of finance (Butler, P. & Durkin, 2008). Due to asymmetries of information between insiders and outsiders, the company will prefer to be financed first by internal resources, then by debt and finally by stockholders' equity, in this 'pecking' order.

Wanjohi (2010) conducted an empirical study relating Kenyan manufacturing SMEs' finance needs to information on alternative sources of finance. The empirical evidence suggested that the majority of the SMEs operators in Kenya were not aware of certain sources of finance. Apart from a lack of knowledge on what they were, it was acknowledged by some respondents that it was difficult to obtain information on them. The findings indicate that the general knowledge and awareness of finance options available to SMEs in Kenya was poor. This was due to a lack of understanding of what is available due to fragmented financial information and a lack of targeted awareness and educational schemes with a view to raising the profile of finance issues among the SMEs. A failure to increase awareness of the finance availability for SMEs.

The empirical results indicate that there was an information gap in SMEs financing, that is, the necessary knowledge on finance sources was lacking. The respondents felt that they had difficulties knowing where to access business finance. They needed information and knowledge on alternative sources of finance applicable to their situation, be they freely available in the public domain or only accessible at a price. There are numerous types of finance available to SMEs in Kenya. However, their details are very fragmented and it is very difficult to identify: What finance options are currently available; which option(s) is (are) most appropriate; the restrictions for an application; and how to apply these; this study will attempt to shed light on some of these aspects (Wanjohi, 2010).

Policies and strategies designed to boost credit and finance to the MSE sector have been formulated in the absence of reliable information on appropriate methodologies, data on the magnitude of the sector, characteristics of the sector operators and factors influencing the growth and dynamics of the sector (Myers & Majluf, 2011). The situation translates into high credit transaction costs for collecting and verifying available information mainly on the creditworthiness of sector borrowers. Namusonge (2004) conducted a study whose intention was to investigate how three selected development financial institutions (DFIs) in Kenya have helped or hindered the acquisition of technological capabilities in SMEs. The rationale for selecting these institutions was that DFIs have important but underutilized capabilities for providing credit and consultancy services for technological development.

In dealing with entrepreneurial firms, providers of capital try to circumvent the problem of asymmetric information in a variety of ways. Venture capitalists often place one of their own people on the management team or Board of Directors for firms that they fund (Zhang, 2008). They also establish specific performance benchmarks and dole out successive rounds of financing only when designated targets have been achieved. Again, establishing on-going banking relationships is another way to deal with the problem of asymmetric information. In a study of small firms, Petersen and Rajan (1994) found that firms that concentrated their borrowing among a smaller number of banks benefited from lower interest rates and greater availability of financing.

Similarly, Myers and Majluf (2011) found that longer banking relationships led to lower interest rates on loans. Further, banks were less likely to require collateral from firms with whom they had longer term relationships. These relationships provide lenders with the opportunity to learn about privately held firms and to gain a better understanding of their

prospects for growth and profitability. The study identified local company support, private sector support, funds from levies contributions by research beneficiaries, contract mechanisms, foreign direct investment (FDI), joint ventures, licensing franchising, management contracts, marketing contracts, turnkey contracts, technical service contracts and international sub-contracting as alternative sources of project financing. The study concluded that DFIs and Government should increase funding for SME financing cycles covering idea generation, feasibility study, project design and project implementation. These programs were proposed in order to increase the success rate of SMEs that are funded.

The business activity of a venture is equally as important as the level of business development. Generally, in Africa, there are three main primary sectors where an enterprise may be classified, these being, production, agriculture and services (Ngehnevu and Nembo, 2010). Each of these sectors has its own risk and financing needs that are sector specific. Financiers are motivated to finance a particular sector after analyzing the purpose for the loan, etc. Some financiers target only one sector while others provide products and services for more than one sector. Their actions are determined by their objectives and the impact they wish to achieve.

Sufi (2009) observes that the kind of long term financing that is provided to a particular company depends on its type. For example, the long term financing that is provided to a sole proprietorship is different from that provided to a partnership. This is because long term financing is used in different ways by different types of business entities. The business entities that are not corporations and are only supposed to use long term financing for the purposes of debt. However, the corporations can use long term financing for both debt and equity purposes.

Short-term financing opportunities are available in a variety of ways to firms in global business. The majority of short-term transactions covered by financing are for periods of 180 days or less (Sufi, 2009). Short-term financing requirements result from the need to increase inventory. Inventory is then converted to sales which, if extended payment terms are given, create accounts receivable. Inventory and accounts receivable are short-term in nature and provide a collateral base for a lender to provide financing. A company may need financing when the inventory and accounts receivable grow at a fast pace as a result of continually increasing sales.

Then there is a greater need for funds to support the increase in the accounts that are growing at a faster rate than the accounts receivables can be converted to cash. The key factors in determining eligibility for short-term financing are whether the product is to be re-sold or used by the buyer. Financing is limited by the product's useful life and whether or not it is considered capital equipment or inventory (Amidu, 2007). Capital equipment can usually be financed for periods greater than one year, whereas most manufactured goods and agricultural products cannot. There are always exceptions to this rule; for example, many governments promote the export of agricultural products by offering guarantees on mediumterm financing.

The purpose of long term finance is to finance fixed assets; to finance the permanent part of working capital; the expansion of companies; increasing facilities; construction projects on a big scale; provide capital for funding the operations. This helps in adjusting the cash flow. Factors determining long-term financial requirements include nature of business; nature of goods produced; and technology used (Nikolaev, 2010).In the case of external financing, the company can basically either (1) sell shares; or (2) borrow finances from banks and/or other financial institutions (Amidu, 2007). There are other ways in which externally generated finance can be obtained, but these are the two principle methods, and the fundamental choice facing the owners of the business. When an investor buys a share, he/she pays over a sum of money that does not have to be given back by the business in return for a share in the ownership of the company.

Brown and Klapper (2008) describe how external financing is made difficult for entrepreneurs because of two fundamental problems; information asymmetry and the moral hazard problem. While the entrepreneur understands the quality of the proposed business, it may be difficult for investors to do so. Alternatively, outside investors and the entrepreneur may disagree about the value. The moral hazard problem recognizes that once substantial external funding is achieved, the entrepreneur may have the incentive to misuse or misallocate those firms to benefit themselves.

Entrepreneurial ventures may be financed depending on their level of business development (MRM, 2008). Unstable survivors are firms that are not considered credit worthy for financial services to be provided in a sustainable way. Their enterprise is unstable and it is believed they will survive only for a limited time and when MFIs focus on time to revert the situation by providing them other extra services, it is noticed that costs increases and time is also

wasted. Stable survivors are those who benefit in having access to entrepreneurial financial services to meet up with their production and consumption needs. These types of microenterprises rarely grow due to low profit margins which inhibit them from reinvesting and an unstable environment due to seasonal changes which makes them to consume rather than to invest in the business.

Growth enterprises are entrepreneurial firms with high possibility to grow. Financiers focusing on these types of firm are those that have as a primary objective, job creation and to move micro-entrepreneurs from an informal sector to a formal sector. Financiers prefer to provide products and services to meet the needs of this group since they are more reliable and pose them the least risk (MRM, 2008).In the entrepreneurship literature, the importance of capital to new ventures is well accepted (Nikolaev, 2010). The probability of individuals becoming entrepreneurs is found to increase with their assets-size. As a determinant of firm formation, capital is important because it influences not only the ability of firms to enter into markets, but also their performance post-entry.

Empirical studies on new ventures have established that sufficiency and size of initial capital resources boost the ability of new firms to survive earn higher profits and grow. There may exist capital requirements that discourage entry of new firms, positioning financing requirements as a potential entry barrier. In a review of studies in the economics literature on the determinants of firm entry, Sufi (2009) arrived at a stylized result that capital-raising requirements are important barriers to entry. Capital requirements act as entry barriers because entrepreneurs are usually liquidity constrained. The resources required to form a new firm are usually beyond the means of individual entrepreneurs. Entrepreneurs therefore look to external sources of financing to overcome the entry barrier of capital requirement.

The cost of capital is a term used in the field of financial investment to refer to the cost of a company's funds (both debt and equity), or, from an investor's point of view "the shareholder's required return on a portfolio of all the company's existing securities" (Khale & Ren'e, 2013). It is used to evaluate new projects of a company as it is the minimum return that investors expect for providing capital to the company, thus setting a benchmark that a new project has to meet. As such, in studying the financing options of start-ups, many factors other than the direct cost of funds may influence the financing decisions of both financier and entrepreneur.

Internal sources are often preferable to a firm as they will usually be cheaper and perhaps easier to arrange at short notice (Brijlal, Enow & Isaacs, 2014). However, the potential for arranging large amounts of finance may be low. The main internal sources are profits and savings from reduced working capital. Failure of the firm may lead to personal bankruptcy as well. Khale and Ren'e (2013) also noted that most small firm owners have undiversified personal portfolios; all of their assets and wealth are tied up in the firm. To make matters worse, the firm is typically their employer and may also employ other members of the family. If the firm fails, the entrepreneur, in addition to his friends and relatives, lose not only their wealth but their jobs as well. This lack of diversification adds to the riskiness of operating an entrepreneurial venture.

One of the major reasons why Kenyan lenders are reluctant to lend to start-up entrepreneurial ventures is that they lack cost-effective ways to quantify credit risk. There are currently no licensed credit bureaus with standardized data procedures, and SMEs financial statements, audited or not, may be of unreliable quality and veracity. Lenders, whether formal or informal, have a financial duty to make prudent loans with their depositors' and investors' funds. Thus, most limit their risk with the SME market either by not lending at all or by charging high interest rates and requiring at least 100% collateral coverage (Steadman Group Research Division, 2007).

Many entrepreneurs are reluctant to seek credit. The vast majority of bank credit customers indicate that the costs of getting a loan are high, interest rates are very high, it is difficult to meet the requirements for getting a loan, and there is a common perception that borrowing from a formal lender will imply losing assets and property (Steadman Group Research Division, 2007). One result of banks' limited ability to assess risk is a reduction of access to appropriate and affordable credit and consequently, reduced prospects for the development of SMEs and national economic expansion. Government regulation of entry is recognized as a barrier to entry. Regulatory and procedural requirements entail business costs to be incurred by entrepreneurs, in terms of financial outlay and/or time consumed. Prohibitive costs may deter potential entrepreneurs or drive them into the informal economy (Djankov, et al., 2002), hampering their ability to grow and contribute to economic growth due to lack of proper access to social, legal and business infrastructures. Four measures are used by the World Bank (2015) to capture various aspects of the registration process for new ventures in a country, measuring the cost of a starting a business. The four measures are: the number of procedures involved in the process, the number of days associated with the procedures, the

official costs associated with the procedures and the minimum capital required before the registration process starts.

According to Microfinance Risk Management [MRM] (2008), supposing that banks overcome their reluctance to share positive information with credit bureaus, predictive generic scores will probably become available within the next three years or so. This improvement in risk assessment will result in more efficient and standardized underwriting. It will also allow risk-based pricing, leading to lower costs of borrowing for the best customers and potentially greater credit availability for higher-risk customers. From a review of previous research on the SME perspective in Nairobi, it was clear that effectively developed and managed credit scoring would help meet their needs in a variety of ways (MRM, 2008). For example, credit scoring can eventually: reduce reliance on collateral, as competition increases, lead to risk-based pricing, resulting in a lower cost of borrowing for the lowest-risk customers and potentially greater credit availability for higher-risk customers, who, without risk-based pricing, would simply be denied loans, additionally, turn-around times from application to approval and funding would likely decrease. And as lenders become more confident in scoring's accuracy, risk-adjusted approval rates may go up.

For an investment to be worthwhile, the expected return on capital must be greater than the cost of capital (Khale & Ren'e, 2013). The cost of capital is the rate of return that capital could be expected to earn in an alternative investment of equivalent risk. In line with developing the impact of financing cost on access to entrepreneurial finance, an unbiased estimate of returns to capital has important policy implications in several areas. First, the returns from investment provide an upper bound of interest rates that borrowers are willing to pay to micro-lending organizations. Higher returns imply a higher likelihood of developing financially sustainable micro-lenders. There is considerable debate about the sensitivity of microfinance demand to higher interest rates.

Brijlal, Enow and Isaacs (2014) observed that Mexico had a very underdeveloped microlending sector relative to other low- and middle income countries. High returns may suggest the scope for more lending. Second, if returns are below some investment threshold, these low returns may act as an entry barrier, preventing high– ability entrepreneurs without access to capital from entering. If returns to capital are high at very low levels of investment, capital–constrained entrepreneurs should be able to enter and grow to a desired size by reinvesting profits earned in the enterprise. In this case, capital constraints will have shortterm costs but fewer long-term effects on outcomes. High returns at low to very low capital stock levels suggest that credit constraints will not lead to poverty traps. The recent literature generally finds high rates of return to capital in small-scale enterprises. With one exception, it uses non-experimental approaches to estimate the return to capital (Khale & Ren'e, 2013). Use changes in laws forcing Indian banks to make preferential loans to certain groups of firms (considerably larger than those studied here) to identify changes in access to finance among the firms.

They conclude that returns to capital are 74-100% a year. Kumar and Newport (2005) estimate annual returns to capital among small-scale agricultural producers on median-sized plots in Ghana at 50% for traditional crops and 250% for nontraditional crops. They also calculate the effective discount rates from the market for used taxi parts. Using data on prices and useful lives of used taxi parts, they estimate the annual discount rate among taxi drivers to be 60%, suggesting that the shadow value of capital among taxi drivers is at least this high. Fowler and Kinyanjui (2004) creatively use the data on stock-outs and discounts for bulk purchases to estimate annual returns of at least 113% for rural retail shops in Kenya. Formal financial institutions have failed to provide credit to the poor most of who are to be found in developing countries and to be more specific, in the rural areas.

The reasons given by Pasquariello (2014) are that their policies are not meant to favor the poor. The poor are mostly illiterate and banks lack skills to target these rural customers. In these areas, the population density is very low resulting in a high transaction cost owing to the need to move for long distances and also that it takes time to meet the customers. SMEs in developing countries are considered to be too unstable by banks to invest in. In Cameroon, Ngehnevu and Nembo (2010) observe that formal financial institutions are reluctant to lend to SMEs since investing in SMEs activities is considered risky. SMEs have low financial power, poor asset quality, and are unstable. The application process for a loan is long and it is difficult for SMEs to meet up with the demands and collateral requirements. They cannot afford these collaterals which include estates, and other fixed assets valued usually at 200% of the loan. The major setback that prevents SMEs to get funding from external sources is the problem of information asymmetry or the magnitude of the deviation of the correct information that is needed by the lending institution.

Banks use cash flows and profitability to measure or to assess the worthiness of a business. This is very expensive and is not a good method to measure the credit strength of rural SMEs. Production and distribution in the rural areas is influenced by social factors that are often neglected by enterprises in developing countries (Pasquariello, 2014). Agriculture dominates rural activities in developing countries and is dependent on the weather conditions for its output. An enterprise in this sector is considered risky because its outcome is highly variable.

Historical development and the associated culture, of the banking system underpin the problem of the emphasis on the provision of collateral as a primary condition in lending. Banks have always adopted a risk adverse stance towards small firms, with an accompanying inability to focus on the income generating potential of the venture, when analyzing the likelihood of loan repayment (Brick & Palia, 2007). Credit constraints can occur when banks increase collaterals for loans. As a result, low interest borrowers (including MSEs) may be removed from the list of potential customers and banks may skip these customers (Bae & Goyal, 2009). Gangata and Matavire (2013) in their study on challenges facing MSEs in accessing finance from financial institutions, found out that very few MSEs succeed in accessing funding from financial institutions, the main reason being failure to meet lending requirements, chief among them being provision of collateral security.

A study was done on challenges faced by Small & Medium Enterprises (SMEs) in obtaining credit in Ghana. Based on the responses received through the questionnaires circulated, it became evident that SMEs in Ghana like most SMEs in other countries are faced with major challenges in accessing credit. These challenges were revealed by the study to include, the inability of SMEs to provide collateral and other information needed by banks such as audited financial statement coupled with the high cost of loan in terms of high interest rates make it extremely difficult to access bank loans (Vuvor & Ackah, 2011). Cressy and Toivanen (2001) say that, "better borrowers get larger loans and lower interest rates; collateral provision and loan size reduce the interest rate paid. The banks are known to use qualitative as well as quantitative information in the structuring of loan contracts to small businesses." In effect, it may therefore be that simple because banks approach the lending process in a risk-averse way (in order to protect the funds of savers), and thus turn down a number of propositions perceived to be 'riskier', that there is an apparent 'discrimination' against for example women and ethnic minorities.

External funding on SME growth results to increasing the depth of credit pushing up the profit level of enterprise. This shows that a firm's access to formal finance is a factor in facilitating its business growth. The extent of sales value in SMEs was typically found to be

smaller than in large firms, being attributed to their constrained levels of credit access (Shinozaki, 2012). Access to finance for SMEs is an important factor in order for a company to experience continuous growth (Beck & Demirgüc-Kunt, 2006). The authors further argue that efforts targeted on the SME sector to improve the access to finance have so far been misguided. Access to finance for SMEs has in the past through targeted government policies been size oriented, not industry or market specific.

Beck and Demirgüc-Kunt (2006) argue that SMEs benefit more from policies improving the playing field at large, i.e. the market. Through a country comparative study the authors established that entry barriers and low turnover, through obstacles of growth, impedes on the development of SMEs and SME industries. Consequently, if a market is characterized by low entry and turnover, this is an indicator to the fact that there are constraints in the market which are impeding on the growth and development of SMEs. Schiffer and Weder (2001) indicates that the fact that small firms consistently report higher growth obstacles than medium-sized or large firms. Beck et al (2005) indicated, in correlation to Schiffer and Weder (2001), that small firms are consistently the most adversely affected by external obstacles in pursuance of growth. This is further backed by Beck et al (2006) who claim that the most consistent predictors of a firm's financing obstacles are size, age and ownership.

Boom, et al. (1983) and Longenecker, et al.(1994) describe two basic types of financing, namely debt and equity. Hisrich and Peters (1995) and Anderson and Dunkelberg (1993) describe debt as funds borrowed to be paid at a future date and a fee, referred to as interest to be paid an at agreed time schedule. The payments of interest are supposed to be done regardless of whether the firm makes profit or loss. Equity, on the other hand, is defined as funds contributed by entrepreneurs or investors who become owners or part owners of the firm and whose returns are primarily based on the profits. This implies that if a firm fails to make profits its owners do not get any returns. Generally, equity funds are long-term funds but debt may be short to medium or long-term. Hisrich and Peters (1995) mention another basic classification of funds: internal and external funds. Internally generated funds come from a number of sources within a company and are more frequently employed. They include operational and investment profits, sales of assets, extended payment terms, reduction in working capital and accounts receivable. Another important source of internally generated funds is expediting the collection of receivable accounts. This releases funds that may be locked up with suppliers and distributors for the firm's use. Sources that are external to a firm include owners, friends and relatives, commercial banks suppliers and distributors,

government and non-government agencies. The choice of financing of SMEs is critical and the decision should be made in regard to the size of the firm, availability of source of information, purpose of the finance and collateral requirement.

## 2.4.2 Summary of Empirical Literature

Ngehnevu (2010) conducted a study in Yaunde, Cameroon, whose objective was to determine if there were underlying factors such as size of the operations, securable wealth and gender of applicant that influenced the ability to secure a loan. A sample of 200 SMEs was drawn using proportionate sampling. Data was collected using a structured questionnaire. The findings indicated that securing financing by SMEs was positively related to size of the firm, purpose of financing and cost of financing. Gender was seen not to have any influence on the ability to access finance.

Kaijage (2015) studied on demand side factors and access to external finance by small and medium manufacturing enterprises in Nairobi, Kenya. The study employed an exploratory survey design utilizing quantitative methods in data collection and analysis. Data was analyzed using descriptive and inferential statistics. Logistic regression was used to test the relationship between demand-side factors and access to external finance because of the dichotomous nature of the dependent variable. The findings of the study showed that some of the demand-side factors significantly influence access to external finance. The study recommended further probing of the role of good financial management practices such as preparation and usage of financial information on access to external finance in diverse settings and industries.

Ndungu (2014) looked at factors affecting source of finance among small and medium enterprises in Murang'a County. This study was intended to be of great importance to individual entrepreneurs, potential investors, lending institutions, and the county government of Murang'a to facilitate enabling credit policies and other researchers. The target population was 1020 SMEs operating in Murang'a. The study used stratified random sampling and then applied the simple random sampling to select respondents from the selected strata out of which 102 respondents were selected. Data was gathered using questionnaires. The data collected was subjected to factor analysis and regression analysis was carried out to establish the relationship between the identified factors and credit uptake. From the study, it emerged that a number of lending institutions, interest charged on loans, collateral security and literacy

levels are the most significant factors that affect source of finance among SMEs in Murang'a. The study recommends that informal borrowing should be discouraged through trainings,

Gitari (2012) in her study on factors affecting 200 women entrepreneurs' financial performance in Kenya, a case of Ngara Market, found out that lack of information on who is offering what and the cost of obtaining such services limit them and that high inventory costing are some of the major drawbacks for success in women entrepreneurship. The high cost of running the entrepreneurs is a big threat to the women development due to wrong choice of financing and on the other hand lack of information on how to access funds to boost the business is also a major threat.

Niskanen (2010) studied the relationship between the purpose of finance and the capital structure. The sample was drawn from 300 SME,s operating in New Delhi India and data was collected through a structured questionnaire. The author observed that the purpose of long term finance is to finance the permanent part of working capital; the expansion of companies; increasing facilities; construction projects on a big scale; provide capital for funding the operations. This helps in adjusting the cash flow. Factors determining long-term financial requirements include nature of business; nature of goods produced; and technology used.

Kenduiwo (2014) conducted a study on the relationship between alternative sources of finance and financial performance of small and medium enterprises in Nairobi County. This study therefore investigates the relationship between alternative source of finance and financial performance of SME in Nairobi County. The study employed descriptive research design. A stratified sampling method was used to collect primary data from eighty five SMEs in Nairobi County for the year 2013. The study applied regression and correlation statistical tools to analyze data. The results were presented in tables, charts and frequency graphs. The study found out that the correlation between alternative source of finance and financial performance is 0.762. The study therefore recommends use of alternative finance in SMEs in Nairobi since they will lower cost of finance and improve liquidity which will result in improved financial performance.

Mwangi (2013) carried out a study whose objective was to assess the challenges facing SMEs in procuring credit: a case of youth entrepreneurs in Makuyu, Kenya. He found out that most of youth entrepreneurs faced challenges in getting credit due high cost of credit evidenced in high loan processing fees, high rate of legal fee, high rate of interest, high cost of credit

insurance and high expenses incurred in travelling in the process securing funds. The research recommends that the financial institutions should look for ways of developing credit products that would attract the youth. The lenders and other stakeholders should explore lowering rate of interest for credit products meant for the youth.

Mokua (2011) looked at the factors influencing credit financing of small scale business enterprises, in Kisii County, Kenya. The study employed the descriptive survey research design and employed questionnaire to collect data from160 SSB in Kisii town. The researcher sampled 160 SSB out of the population of 560 SSB using a simple stratified sampling technique. The questionnaires were tested in a selected sample of 20 businesses within Kisii town which were similar to the actual sample which was used in this study. The study employed questionnaires and interview in data collection. The study found out that the enterprises had inadequate funds. It was also revealed that the enterprises had stagnated in their financial status due to corruption in the municipality. It was also revealed that the enterprises had inadequate finances due to procedures that are too long to get the funding from financial institutions. The financial status of the enterprises is therefore affected in one way or the other.

#### 2.5 Research gaps

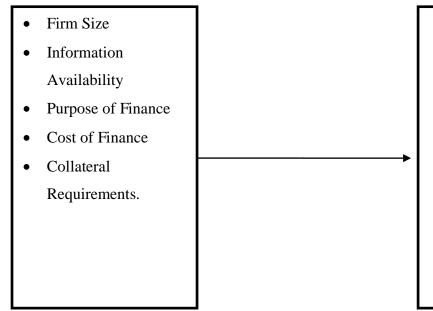
A lot of research has been carried out locally and internationally Niskanen (2010) studied the relationship between the purpose of finance and the capital structure; Ngehnevu (2010) conducted a study in Yaunde, Cameroon, whose objective was to determine if there were underlying factors such as size of the operations, securable wealth and gender of applicant that influenced the choice of financing; Kaijage (2015) studied on demand side factors and access to external finance by small and medium manufacturing enterprises in Nairobi, Kenya; Mokua (2011) looked at the factors influencing credit financing of small scale business enterprises, in Kisii County, Kenya; Kenduiwo (2014) conducted a study on the relationship between alternative sources of finance and financial performance of small and medium enterprises in Nairobi County; Ndungu (2014) looked at factors affecting choice of financing among small and medium enterprises in Murang'a County; Mwangi (2013) carried out a study whose objective was to assess the challenges facing SMEs in getting credit: a case of youth entrepreneurs in Makuyu, Kenya; Gitari (2012) in her study on factors affecting 200 women entrepreneurs' financial performance in Kenya: a case of Ngara Market

Most of these researches concentrated on their study areas based on their own objectives. The literature available does not concern itself on the combination of the five variables; that is firm size, availability of information, purpose of finance, cost of finance and collateral requirement. None of the studies have focused on factors influencing choice of capital structure for small and medium size enterprises in Kiambu County. Therefore, the study sought to assess these factors that influence choice of capital structure for SMEs in Kiambu County, Kenya.

#### 2.6 Conceptual framework

A conceptual framework is a product of qualitative process of theorization which interlinks concept that together provides a comprehensive understanding of a phenomenon or phenomena (Jabareen, 2009). The concepts that constitute a conceptual framework support one another, articulate their respective phenomena, and establish a framework-specific philosophy that defines relationships.

In this study the researcher sought to establish the relation between independent variables; size of the firm, availability of information, purpose of finance cost of finance and collateral requirements on the dependent variable; choice of capital structure for SMEs in Kiambu County. Further the study will look at the effect of moderating variables such as Government policy, technology and political influence on the dependent variable choice of capital structure for SMEs. In the figure below, the independent variables cause change in the dependent variable, either singly or in combination. The arrows show the direction of the influence.



# Selected Factors Influencing Capital Structure of SMEs

• Personal savings

**Capital Structure of SMEs** 

- Family/ relatives borrowing
- Bank loan
- SACCOs
- ROSCAs (merrygo-round)
- MFI

# **Figure 2.1. Conceptual Framework**

Source: Author (2017)

# CHAPTER THREE RESEARCH METHODOLOGY

## **3.1 Introduction**

This chapter describes the methodology and procedure that were used in conducting the study. It covers study design, population, sampling techniques, data collection methods and procedures, pilot test and the procedure for data processing.

## 3.2 Research design

This study utilized explanatory research design. Cooper and Schindler (2003) summarize the essentials of research design as an activity and a time based plan; always based on the research question; guides the selection of sources and types of information; framework for specifying the relationship among the study variables and outlines the procedures for every research design. Explanatory research is conducted in order to identify the extent and nature of cause-and-effect relationships. It can be conducted in order to assess impacts of specific changes on existing norms, various processes, by focusing on an analysis of a situation or a specific problem to explain the patterns of relationships between variables. The presence of cause-and-effect relationships between variables can be confirmed only if specific causal evidence exists. This design allows one to collect quantitative data which can be analyzed quantitatively using descriptive and inferential statistics (Saunders, et al., 2007).

## **3.3 Target population**

The population of interest is composed of all SMEs in Kiambu County registered in the Kiambu Business Directory (KBD) 2015. (Kiambu Business Directory is the official County Government register of all businesses in Kiambu County.) There is a total of approximately 889 SMEs belonging to different sectors; manufacturing has 113, agricultural has 226, essential services that include private schools and health facilities have 217, general merchandise like shops and supermarkets have106, commercial services and other service industries are a total of 227 (see table 3.1 below). Financing institutions like banks and SACCOS were not included since this would have conflicted the objectives of the study. This is because the study was looking at factors that influence choice of enterprise finance. These financing institutions were left out because they are just branches of large institutions located elsewhere and therefore are not reflective of themselves but rather of their parents elsewhere.

## 3.1. Target population

Sector	Number
Manufacturing	113
Agricultural	226
Essential Services	217
General Merchandise	106
Commercial & Other Services	227
Total	889

Source: Researcher (2015)

## 3.4 Sample size and sampling technique

According Cooper and Schindler (2003), a sampling frame is a listing of the entire population from where a sample size is selected. The smaller the sample, the larger the sampling error and the larger the sample, the smaller the error (Kerlinger, 1978).

The sampling frame is all the small and medium enterprises in Kiambu district that have contacts in Kiambu business directory of 2015, comprising a total of 889 SMEs. This is composed of only the small and medium-manufacturing, service SMEs and agricultural SMEs but exempts financing institutions, which is the researcher's body of interest.

Proportionate sampling method was used, where the population embraced a number of distinct categories. The frame was organized by these categories into separate "proportions" in this case manufacturing industries, Agricultural Essential services, General merchandise, Commercial & other services. Each proportion was then sampled as an independent sub-population, out of which individual elements were randomly selected.

Saunders et al. (2007), explains that provided samples are not biased, by the law of large numbers, samples of larger size are more likely to be representative of the population from which they are drawn than smaller samples. Statisticians have also proved that the larger the absolute size of a sample, the more closely its distribution will be to the normal distribution and thus the more robust it will be (Namusonge, 2010; Saunders, et al., 2007).

This relationship, known as the Central Limit Theorem, occurs even if the population from which the sample is drawn is not normally distributed. The Central Limit Theorem provides that when the sample size is at least 30, the approximation to the normal distribution of the sample means is complete and the confidence interval for the population parameter of interest can be determined from the sample mean at a specified level of confidence (Namusonge, 2010; Mason, et al., 1999).

According to Mugenda and Mugenda (1999) the sample size for a population of10,000 or more can be computed as per the formula below:

 $n = pqz^2 / e^2$ 

Where, n = Minimum Sample Size

p = Population proportion with given characteristic

q= 1-p

z = Standard normal deviate at the required confidence level

e = Error Margin

Mugenda and Mugenda (1999, as contained in Fisher, Laing and Styoeckel, 1983) recommend that since p and q are unknown, both are set at 50%. A confidence level of 95% will be used for this study, z = 1.96 and the sampling error of e = +-5%.

n=1.96<sup>2</sup>x0.5x0.5/0.05<sup>2</sup>=384

For a population less than 10,000 which is the case in this study the sample size is computed as per the formula  $\mathbf{nf} = \mathbf{n}/(1+\mathbf{n}/\mathbf{N})$ . Where N is the target population (889) and n is the typical sample size for a population of more than 10,000 (which is 384 as calculated above).

Thus, sample size nf becomes 384/(1+384/889) = 268

The formula for arriving at the proportionate samples is

Proportionate sample = Target sample/ Total population x sample size (268)

The proportionate distribution is as shown in table 3.2 below.

Sector	Number	Proportionate Sample
Manufacturing	113	34
Agricultural	226	68
Essential Services	217	65
General Merchandise	106	32
Commercial & Other Services	227	68
Total	889	268

#### Table 3.2. Sampling distribution

## **3.5 Pilot test**

The research instruments were pre-tested using a sample size of 26 respondents as per recommendations by Mugenda and Mugenda (1999) who observe that a successful pilot study uses 1% to 10% of the actual sample size. The respondents were SMEs in the population with similar characteristics to, but not those that were used in the main study. These respondents were selected from a sample that was similar to the one under study. Subjects from the actual sample were not used in the pre-test. Procedures used in pre-testing the questionnaire were similar to those used in the actual study. This help in clarifying questions and in refining the data analysis methods (Mugenda and Mugenda, 1999).

## 3.6 Validity and reliability

According to Golafshani (2003), validity is the accuracy and meaningfulness of inferences, based on the research results. One of the main reasons for conducting the pilot study is to ascertain the validity of the data. The study used both face and content validity to ascertain the validity of the questionnaires. Content validity draws an inference from test scores to a large domain of items similar to those on the test. Content validity is concerned with sample-population representativeness. Gillham (2008) stated that the knowledge and skills covered by the test items should be representative to the larger domain of knowledge and skills. The researcher sought assistance from research experts, experienced graduates and lecturers to help improve the validity of the data.

Instrument reliability on the other hand is the extent to which a research instrument produces similar results on different occasions under similar conditions. It's the degree of consistency

with which it measures whatever it is meant to measure (Bell, 2010). Reliability is concerned with the question of whether the results of a study are repeatable. A construct composite reliability co-efficient (Cronbach alpha) of 0.7 or above, for all the constructs, is considered to be adequate for any study (Rousson, Gasser & Seifer, 2012).

All the questions with ranking 1-5 on a Likert scale were tested on SPSS and the reliability coefficient of the research instrument with Cronbach's alpha ( $\alpha$ ) was found to be 0.798 (0.8) as indicated in the table below.

Variable	Cronbach's Alpha	Cronbach's Alpha
		Based on
		Standardized Items
Size of firm	0.799	0.799
Information availability	0.740	0.740
Purpose of capital	0.785	0.785
Cost of capital	0.779	0.779
Collateral security	.789	.798

#### Table 3.3. Reliability Tests

N=26

The variable indicators tested by the study are in the table below.

No.	Variable type	Variable name	Indicators
1	Independent	Firm size	-Number of employees
			-Annual turnover
	Dependent	Capital structure	;["
2	Independent	Information	-Available/ Not available
		availability	-Accessible/ Not accessible
	Dependent	Capital structure	-Personal savings
			-Family/ relatives borrowing
			-Bank loan
			-SACCOs
			-ROSCAs (merry-go-round)
			-MFI
			-Government agencies
3	Independent	Purpose of	-Meeting working capital
		finance	requirements
			-Acquiring assets
			-Expansion of the firm
	Dependent	Capital structure	-Personal savings
			-Family/ relatives borrowing
			-Bank loan
			-SACCOs
			-ROSCAs (merry-go-round)
			-MFI
			-Government agencies
4	Independent	Cost of finance	-Affordable/ unaffordable
			-Expensive/ cheap
	Dependent	Capital structure	-Personal savings
			-Family/ relatives borrowing
			-Bank loan
			-SACCOs

# Table 3.4: Variable indicators

			-ROSCAs (merry-go-round)
			-MFI
			-Government agencies
5	Independent	Collateral	-Group guarantees
		requirements	-Individual guarantees
			-Assets
			-Equity capital
	Dependent	Capital structure	-Personal savings
			-Family/ relatives borrowing
			-Bank loan
			-SACCOs
			-ROSCAs (merry-go-round)
			-MFI
			-Government agencies

#### **3.7 Data collection methods and procedures**

Primary data were collected from interview schedules using questionnaires, whereas the secondary data were collected from existing written materials such as journals, theses, books, pamphlets, among others. The questionnaire consisted of both closed ended and open ended questions and was administered to the respondents directly by the researcher with the help of research assistants.

The questionnaire contained demographic factors in the first part while the main body of the questionnaire focused on factors that influence capital structure for Small and Medium Size Enterprises, each respondent was asked to rate or rank the responses on a Likert scale. Secondary data from research reports and previous studies were used to provide a wider understanding of the issues under study.

## 3.8 Data analysis and presentation

The study generated both quantitative and qualitative data owing to the instrument adopted, which had open- and closed-ended questions. The qualitative data were organized as per the responses in the research Instrument. According to Munro (2005) content analysis is the process of analysing verbal or written communication in a systematic way to measure variables quantitatively. The transcripts from the research questionnaires were read to

identify themes as well as develop categories by coding paragraphs, phrases and then summarising the key themes emerging from the data. Responses from open-ended questions were grouped together based on their closest meanings then coded, entered on Statistical Package for the Social Sciences (SPSS) and analysed.

Descriptive statistics was used to summarize the data. This included percentages and frequencies. Findings were presented in figures, pie charts and tables for easier interpretation. Quantitative data was sourced from the closed-ended questions in the questionnaire. Correlation and regression analyses were employed to find out the strength of relationship between the independent and the dependent variables. The following regression model was used to test the hypotheses:

 $Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$ 

Where: Y = choice of capital structure X1 = purpose of finance X2 = availability of information X3 = size of business X4 = collateral security X5=cost of finance  $\beta$ 0 = Constant  $\epsilon$  = standard error

#### **CHAPTER FOUR**

## DATA ANALYSES, PRESENTATION AND DISCUSSION OF RESULTS

#### **4.1 Introduction**

This study set out to evaluate the effects of selected factors on the choice of capital structure of small and medium enterprises in Kiambu County, Kenya. The study targeted a sample size of 268 respondents and there was 100% return of questionnaires because they were administered directly.

This chapter therefore presents the background information of the respondents, the influence of size of the firm, availability of information, cost of finance, purpose of finance, and collateral requirements. It also presents a discussion of the findings.

#### 4.2 Background information

This section covers the demographic information of the respondents to be able to understand the background of the respondents.

## 4.2.1 Age of respondents

Age bracket is an important factor with significant influence on understanding the research topic since different age groups are perceived to hold different opinions. According to the findings a larger percentage (48.9%) of the respondents was 20-30 years old, followed by 31-40 years (33.2%), and 41-50 years (13.8%). Respondents above 50 years were less at 4.1%.

#### 4.2.2 Gender of respondents

The study sought to establish the gender category of the respondents in view of ensuring fair engagement of the respondents in terms of their gender. There were more male than female respondents at 68.3% and 31.7% respectively as shown below.

#### 4.2.3 Level of education of respondents

The level of education determines the personal understanding of different issues and in view of establishing the respondents' ability to respond to the questions they were requested to indicate their educational qualifications. Respondents with secondary education were more at 41.8% followed by those with a diploma (36.6%), and degree (14.9%). The respondents with postgraduate qualifications were a paltry 6.3%.

#### **4.3.4** Work experience of the respondents

The researcher went ahead to establish the duration the respondent had worked. In terms of work experience, majority (45.1%) of the respondents had been at work for 2-5 years, reflecting the common life cycle of SMEs. This was followed by those with less than 2 years' experience at 27.6%, 6-10 years' experience at 22.4%, and those above 10 years' experience at 4.9%.

	Frequency	Percentage	Mean	Standard Deviation
Less than 2 years	74	27.6		
2-5 years	121	45.1		
6-10 years	60	22.4		
Above 10 years	13	4.9		
Total	268	100.0	2.04	0.833

#### Table 4.1. Work experience

#### 4.2.5 Conditions when applying for loans

To know the conditions for applying for loan by SMEs in Kiambu County, the respondents were asked to indicate if certain conditions were applicable or not. The percentages, mean (M) and standard deviations (SD) are in the table below.

Statement	Percentage		М	SD
	Yes	No	_	
Gender and ethical considerations	20.9	79.1	1.79	0.407
Level of technological knowledge	42.9	57.1	1.57	0.496
Political affiliation	0.4	99.6	2.00	0.061
Listing on Nairobi Stock Exchange	0.7	99.3	1.99	0.086

Table 4.2. Conditions when applying for loans

From the table above, majority (79.1%) of the respondents had applied for loans where gender and ethical integration were a requirement, whereas the rest (20.9%) of the respondents had not. The source of finance where such requirements were required included youth and women funds. Almost half (42.9%) of the respondents said that they had applied for finances where level of technological knowledge were a requirement, whereas a slightly higher percentage (57.1%) had not applied. Almost all the respondents (99.6%) said that most financiers did not require the political affiliation of applicants. The businesses run by the

respondents had between two and 31 employees, qualifying them as SMEs. However, the study established that only 0.7% of the businesses were listed in Nairobi Securities Exchange.

### 4.2.6 Business ownership

Fifty one point nine percent (51.9%) of the businesses run by the respondents were private, followed by groups at 33.2%, and individuals at 14.9%. The businesses had between 1 and 15 directors each and average monthly expenditure ranged from KES 50,000 to KES 200,000.

	Frequency	Percentage	Mean	Standard Deviation
Private	139	51.9		
Groups	89	33.2		
Individual	40	14.9		
Total	268	100.0	2.63	0.730

## Table 4.3. Ownership

## **4.2.6 Utilization of capital structure**

To establish the extent of utilization of particular capital structure the respondents were asked to rate on a Likert scale, where 1=Not at All (NA), 2=Small Extent (SE), 3=Moderate (M), 4=Great Extent (GE), and 5=Greatest Extent (GSE). The mean (M) and Standard Deviation (SD) are also indicated as in the table below.

Statement	Percentage					М	SD
	NA	SE	М	GE	GSE	_	
Personal savings	-	4.1	15.7	37.3	42.9	4.19	0.0846
Family/ relatives borrowing	1.1	22.4	41.8	24.6	10.1	3.20	0.938
Bank loan	41.8	22.4	11.9	-	-	2.39	0.745
SACCOs	33.6	19.4	35.4	7.1	4.5	2.29	1.138
ROSCAs	8.6	26.5	32.5	18.7	13.8	3.03	1.162
MFIs	3.4	6.3	38.1	37.3	14.9	3.54	0.937
Government Agencies	26.1	30.2	25.0	13.1	5.6	2.42	1.170

 Table 4.4. Extent of utilization of particular capital structure

From the table above, the respondents had used personal savings to a great extent and greatest extent at 37.3% and 42.9% respectively. This finding is consistent with Pecking Order

Theory (Berger & Udell, 1999) and Mokua (2011) on a study on credit financing by SMEs in Kisii County who observed that most SMEs would rather exhaust personal savings than borrow from finance institutions. The respondents had utilized family/ relatives savings to support their businesses at a moderate level (41.8%), followed by those who used it to great extent (24.6%) and those who utilized to a small extent (22.4%).

Majority (41.8%) of the respondents had not utilized bank loans, whereas to a small extent (22.4%), and moderate (11.9%). However, a reasonable percentage (23.9%) of the respondents did not indicate whether they had utilized bank loans. This finding tallies with a study carried in Murang'a County by Ndungu (2014) that despite availability of information on bank loans most SMEs were reluctant to borrow due to stringent requirements by the banks. The respondents had utilized SACCOs to get finances for their businesses to moderate (35.4%), and small extent (19.4%). However, 33.6% had not utilized them at all. This compares to those who utilized to great extent (7.1%) and greatest extent (4.5%).

Majority (32.5%) of the respondents had used merry-go-round to finance their businesses, whereas 26.5% used to a small extent, 18.7% to a great extent, and 13.8% to greatest extent. The respondents sought financing from micro-finance institutions to moderate (38.1%) and great extent (37.3%) respectively; 14.9% utilized to greatest extent, whereas a paltry 3.4% did not borrow at all. Borrowing from government agencies were utilized to a small extent (30.2%) and moderate extent (25.0%); 26.1% did not utilize at all compared with those who used them to great extent (13.1%), and greatest extent (5.6%). This is mainly due to group guarantees required by Government finance agencies.

## 4.2.7 Type of business

The firms had total assets ranging from KES 100,000 to KES 5,000,000; average monthly gross profit in the last five years of between KES 30,000 to KES 150,000 and had between 1 and 5 branches. The finding is in line with the definition of an SME by Kenya Association of Manufacturers (1999). Majority of the businesses were both service and trade companies at 49.6% followed by those combining service, trade and manufacturing at 26.9%. Firms dealing in manufacturing only were 14.9%, trade 7.5%, and service 1.1%.

Table 4.5. Type of business

	Frequency	Percentage	Mean	Standard
				Deviation
Service	3	1.1		
Trade	20	7.5		
Manufacturing	40	14.9		
Service and trade	133	49.6		
Service, trade, and	72	2		
manufacturing	12	6.9		
Total	268	100.0	3.94	0.903

## 4.3 Size of the firm

This section deals with how indicators of the size of the firm influence their capital structure, as one of the objectives of the study. The findings as indicated below confirm that size of the firm influences choice of capital structure of SMEs and agree with the findings from a study conducted in Cameroon by Ngenhevu (2010).

## **4.3.1 Extent of influence of size of the firm**

To determine the extent of the influence of size of the firm on choice of capital structure the respondents were asked to rate on a Likert scale, where 1=Strongly Disagree (SDA), 2=Disagree (DA), 3=Neutral (N), 4=Agree (A), and 5=Strongly Agree (SA). The mean (M) and Standard Deviation (SD) are also indicated as in the table below.

Statement	Percentage					М	SD
	SDA	DA	Ν	А	SA	_	
Number of employees	1.9	13.8	22.4	39.9	22.0	3.66	1.027
Gross profit	1.9	17.9	24.3	29.9	26.1	2.40	1.112
Age of business	4.1	6.3	22.0	33.6	34.0	3.87	1.082
Annual average turnover	7.1	11.9	26.1	33.2	21.6	3.50	1.163
Expansion of the firm	11.2	15.7	17.5	26.1	29.5	3.47	1.353

From the table above, thirty-nine point nine percent (39.9%) of the respondents agreed that the number of employees in a firm influenced its choice of capital structure. This was followed by those who were not sure at 22.4%, those who strongly agreed 22.0%, and those who disagreed 13.8%. The respondents agreed (29.9%) and strongly agreed (26.1%) that gross profit influenced choice of capital structure, compared with those who were not sure (24.3%), disagreed (17.9%) and strongly disagreed (1.9%). A larger percentage of the respondents strongly agreed (34.0%) and agreed 33.6 % that the age of the business influenced where they got financing. This was followed by those who were not sure at 22.0%. According to Nyarige (2014) younger enterprises are more reliant on informal financing and far less on bank financing.

Similarly, 33.2% of the respondents agreed and 21.6% strongly agreed that annual average in sales turnover influenced capital structure. This compares favourably with those who were not sure and disagreed at 26.1% and 11.9% respectively. According to the respondents who agreed (26.1%) and agreed strongly (29.5%) expansion of the business in terms of number of branches influenced where financing was secured. However, 15.7%, 11.2%, and 17.5% disagreed, disagreed strongly and were not sure respectively. This agrees with earlier observation of size of the business, as the more the branches the bigger the size.

#### **4.3.2 Influence of size of business on capital structure**

Overall, the size of the business influenced the capital structure of the firms to great extent (33.6%) and to greatest extent (33.6%) respectively compared with those who were not sure at 18.7% as illustrated in the table below.

	Frequency	Percentage	Mean	Standard
				Deviation
Not at all	13	4.9		
Small extent	25	9.3		
Moderate	50	18.7		
Great extent	90	33.6		
Greatest extent	90	33.6		
Total	268	100.0	3.82	1.142

Table 4.7. Influence of size of business on capital structure

#### 4.4 Availability of information

Availability of information on range of capital structure options is one of the objectives of the study. This section therefore focuses on awareness of various sources of finance, knowledge about capital structure options, reliability, sources of information and restrictions imposed on them. Empirical sources (Kaijage, 2015; Ndungu, 2014; Gitari, 2012) observe that availability and access to information plays significant role in choice of capital structure by SMEs.

To find out the extent of influence of availability of information on choice of capital structure the respondents were asked to rate on a Likert scale, where 1=Not at All (NA), 2=Small Extent (SE), 3=Moderate (M), 4=Great Extent (GE), and 5=Greatest Extent (GSE). The mean (M) and Standard Deviation (SD) are also indicated as in the table below.

Statement	Percentage					М	SD
	NA	SE	М	GE	GSE	_	
Awareness of various sources	0.4	3.7	12.3	37.3	46.3	4.25	0.841
Knowledge of options	3.4	5.2	7.8	47.4	36.2	4.08	0.974
Appropriateness of choices	8.6	18.7	22.0	38.4	12.3	3.27	1.157
Restrictions on information	11.9	6.3	16.8	39.2	25.7	3.60	1.225
Methodologies of application	26.1	31.0	20.1	16.0	6.7	2.46	1.225
Reliability of information	14.9	18.3	17.5	32.5	16.8	3.18	1.323
Influence of information	1.1	2.6	14.6	36.2	45.5	4.22	0.871
availability							

 Table 4.8. Availability of information

From the table above, awareness of various sources of finance to great (37.3%) and greatest extent (46.3%) influenced capital structure of the firms. Those who were not sure were 12.3%. Knowledge of finance options influence choice of capital structure to great extent (47.4%) and greatest extent (36.2%) respectively. A small percentage 3.4%, 5.2%, and 7.8% said that it did not influence, it influenced to small extent, and were not sure respectively. Thirty-eight point four percent (38.4%) of the respondents said that appropriateness of various finance options influenced their choice of capital structure. This was followed by 22.0% who indicated moderate influence and those who said that it influenced to a small extent (18.7%).

Restrictions of various finance options influenced choice of capital structure by the respondents to a great extent (39.2%) and greatest extent (25.7%) respectively. The methodologies of application did not influence choice of capital structure and influenced only to a small extent at 26.1% and 31.0% respectively. They also influenced to moderate extent and great extent at 20.1% and 16.0% respectively. Majority (32.5%) of the respondents indicated that reliability of information sources influence capital structure to great extent. This was followed by those who indicated small extent (18.3%) and greatest extent (16.8%).

Statement	Percentage		М	SD
	Yes	No	_	
Local radio stations	33.2	66.8	1.77	0.914
Magazines and newspapers	26.9	73.1	1.94	1.006
Friends and colleagues	64.6	35.4	1.35	0.479

 Table 4.9. Sources of information

From the table above, most (66.8%) of the respondents did not get information from local radio stations. Only 33.2% got the information through local radio stations. Likewise, 73.1% of the respondents did not get financial information from the newspapers. However, 11.9% were convinced when they attended local exhibitions. The respondents got information about financing options from friends and colleagues at 64.6%. Overall, availability of information influenced choice of capital structure to a great extent (36.2%) and to greatest extent (45.5%) respectively.

#### 4.5 Purpose of capital structure

The study findings as demonstrated below observes that purpose for which capital structure was sought by SMEs had a great bearing on their choice of particular a capital structure. This agrees with the findings of Niskanen (2010) on SMEs in New Delhi, India.

To determine the extent of influence of purpose of capital structure on choice of capital structure the respondents were asked to rate on a Likert scale, where 1=Not at All (NA), 2=Small Extent (SE), 3=Moderate (M), 4=Great Extent (GE), and 5=Greatest Extent (GSE). The mean (M) and Standard Deviation (SD) are also indicated as in the table below.

Statement	Percen	Percentage					SD
	NA	SE	М	GE	GSE	_	
Working capital requirements	6.3	11.6	20.1	32.1	29.9	3.68	1.197
Acquiring assets	7.5	18.7	18.3	25.4	30.2	3.52	1.297
Expansion of firm	43.7	40.3	9.3	5.2	1.5	1.81	0.916

 Table 4.10. Extent of purpose of capital structure

From the table above, to a great extent (32.1%) and greatest extent (29.9%) meeting working capital requirements was given as the greatest influence for choice of capital structure. However, a significant percentage (20.1%) was not sure. Amidu (2007) observes that meeting working capital requirements is the most consequential purpose of choosing certain capital structure by SMEs. The respondents indicated that acquiring assets influenced their choice of capital structure to great extent (25.4%) and greatest extent (30.2%). However, a significant majority indicated to a small extent (18.7%) and were not sure (18.3%) respectively. Expansion of the business did not influence choice of capital structure according to the respondents who indicated not at all (43.7%) and small extent (40.3%).

In addition, to assess the purpose of a particular capital structure, the respondents were asked to indicate as in the table below.

Statement	Percenta	ge						М	SD
	Persona	Friends/	Ban	SACCO	ROSCA	MFI	Gover	-	
	1	relatives	k	S	S	S	nment		
	savings	borrowin	loan				Agenc		
		g					ies		
Working	48.8	21.3	12.3	7.1	4.1	2.6	3.7	2.19	1.609
capital									
requireme									
nts									
Acquiring	30.2	41.0	11.2	0.7	3.7	2.2	10.8	2.57	1.880
assets									
Expansion	18.3	42.5	3.4	4.1	9.0	14.9	7.8	3.19	2.033
of firm									

Table 4.11. Purpose of particular capital structure

From the table above, the capital structure required to meet working capital requirements was personal savings at 48.9%, followed by family/ relatives borrowing at 21.3%. Acquiring assets was most met by personal savings and family/ relatives borrowing according to 30.2% and 41.0% of the respondents respectively. However, a smaller percentage 11.2% and 10.8% indicated bank loans and government agencies. The respondents indicated that they sought family/ relatives borrowing for the expansion of their businesses at 42.5%. This was followed by those who indicated personal savings (18.3%) and micro-finance institutions (14.9%).

Overall, the purpose of capital structure influenced choice of capital structure to a great and greatest extent according to 39.9% and 47.8% of the respondents as in the table below. This agrees with the findings of Niskanen (2010).

	Frequency	Percentage	Mean	Standard
				Deviation
Not at all	3	1.1		
Small extent	11	4.1		
Moderate	19	7.1		
Great extent	107	39.9		
Greatest extent	128	47.8		
Total	268	100.0	4.29	0.855

 Table 4.12. Overall influence of purpose of capital structure

## 4.6 Collateral requirements

Most creditors require collateral security before they extend financing to SMEs. This section demonstrates how collateral requirements influenced the choice of capital structure of SMEs in Kiambu County.

To establish the extent of influence of collateral security on the choice of capital structure the respondents were asked to rate on a Likert scale, where 1=Not at All (NA), 2=Small Extent (SE), 3=Moderate (M), 4=Great Extent (GE), and 5=Greatest Extent (GSE). The mean (M) and Standard Deviation (SD) are also indicated as in the table below.

Statement	Percentage					М	SD
	NA	SE	М	GE	GSE	_	
Group guarantees	44.8	38.8	9.3	4.5	2.6	1.81	0.961
Individual guarantors	51.1	32.5	10.8	3.4	2.2	1.73	0.941
Assets (title deeds/ log books)	3.7	9.0	19.0	33.2	35.1	3.87	1.106
Equity capital	10.1	16.8	18.3	25.4	29.5	3.47	1.336

## Table 4.13. Extent of utilization of collateral security

From the table above, majority of the respondents did not utilize group guarantees as collateral requirement in their choice of capital structure according to 44.8% and 38.8% of the respondents who indicated not at all and small extent respectively. Mokua (2011) observes similarly that one of the inhibitions towards expansion of SMEs is lack of collateral requirements. Similarly, individual guarantors were less utilized as a collateral requirement in choice of capital structure according to 51.1% and 32.5% of the respondents. A small percentage (10.8%) of the respondents was not sure.

Assets, especially title deed and vehicle logbook, were widely used by the respondents as collateral requirement in their choice of capital structure according to 33.2% and 35.1% of the respondents who indicated great extent and greatest extent respectively. In addition, equity capital was utilized as collateral according to 25.4% and 29.5% of the respondents who indicated great extent and greatest extent respectively. However, a fair majority indicated moderate (18.3%), small extent (16.8%), and not at all (10.1%).

Similarly, to determine the role of particular collateral security the respondents were asked to indicate as in the table below.

Statement			I	Percentage				М	SD
	Persona	Friends/	Ban	SACCO	ROSCA	MFI	Gover	-	
	1	relatives	k	S	S	S	nment		
	savings	borrowin	loan				Agenc		
		g					ies		
Group guarantees	-	0.7	2.2	4.9	2.6	3.7	85.8	6.64	0.998
Individual guarantors	-	-	5.2	5.2	7.8	39.9	41.8	6.08	1.083
Equity capital	5.2	4.1	53.0	3.7	-	29.9	4.1	3.95	1.654

 Table 4.14. Use of collateral security

From the table above, group guarantees were used to borrow from governments agencies according to 85.8% of the respondents. Individual guarantors were used to borrow from micro-finance institutions and government agencies according to 39.9% and 41.8% of the respondents respectively. Similarly, equity capital was used to borrow from banks and micro-finance institutions according to 53.0% and 29.9% of the respondents.

#### 4.7 Cost of capital structure options

A significant majority (98.1%) of the SMEs considered the cost of accessing and procuring finance in their choice of capital structure.

	Frequency	Percent	Mean	Standard
				Deviation
Yes	263	98.1		
No	5	1.9		
Total	268	100.0	1.02	0.136

Table 4.15. Did you consider cost in your choice of capital structure?

This finding agrees with Kinyanjui (2004), Mwangi (2013), and Kenduiwo (2014). Most consideration was put on interest on loans, application procedures and fees levied, or default risks such as auctioning of assets.

	Frequency	Percent	Mean	Standard
				Deviation
Interest rates	68	25.4		
Insurance fees	23	8.6		
Negotiation fees	47	17.5		
Legal fees	50	18.7		
Processing fees	80	29.9		
Total	268	100.0	3.19	1.567

Table 4.16. Cost considerations

From the study findings, more emphasis was put on SACCOs (63.4%) because they had low risks in the event of defaults as discussed below.

	Frequency	Percent	Mean	Standard Deviation
SACCOs	170	63.4		
Family/ relatives	40	14.9		
MFIs	5	1.9		
Bank loan	12	4.5		
ROSCAS	18	6.7		
Government agencies	23	8.6		
Total	268	100.0	2.02	1.679

 Table 4.17. Which capital structure was more affordable?

This signifies that majority of the SMEs proprietors even if they are not members of SACCOs aspire to join them.

## 4.8 Correlation analysis

A correlation analysis was conducted for this study to determine whether there existed any relationship between the study variables. The findings show that on average the independent variables showed strong positive relationship with the dependent variable (capital structure) as shown in table 4.18 below. There was strong positive correlation between availability of information (r=0.780, p<0.01), purpose of finance (r=0.0.906, p<0.01), size of the business (r=0.916, p<0.01), and collateral security (r=0.671, p<0.01). However, there was weak

positive correlation between cost (r=0.132, p<0.05) and choice of capital structure. This means that at 1% and 5% level of significance all the independent variables availability of information, size of the firm, purpose of finance, cost of financing, and collateral security determined choice of capital structure of SMEs in Kiambu County.

		Capital	Influenc	Availa	Influen	Collater	Cost of
		structu	e of size	bility	ce of	al	capital
		re	of	of	purpos	security	structu
			business	inform	e of		re
			on	ation	finance		
			capital	sources	on		
			structure		capital		
					structu		
					re		
	Pearson Correlation	1	.916**	.780 <sup>**</sup>	.906**	.671**	.132*
Capital structure	Sig. (2-tailed)		.000	.000	.000	.000	.031
	Ν	268	268	268	268	268	268
Influence of size of	Pearson Correlation	.916**	1	.832**	.895**	.665**	.143*
business on capital	Sig. (2-tailed)	.000		.000	.000	.000	.019
structure	Ν	268	268	268	268	268	268
Availability of	Pearson Correlation	.780 <sup>**</sup>	.832**	1	.693**	.905**	.329**
information sources	Sig. (2-tailed)	.000	.000		.000	.000	.000
	Ν	268	268	268	268	268	268
Influence of purpose of finance on capital	Pearson Correlation	.906**	.895**	.693**	1	.632**	.115
	Sig. (2-tailed)	.000	.000	.000		.000	.061
structure	Ν	268	268	268	268	268	268

 Table 4.18. Correlation coefficients

	Pearson	.671**	665**	.905**	.632**	1	.480**
Colleteral coourity	Correlation	.071	.005	.905	.032	1	.400
Collateral security	Sig. (2-tailed)	.000	.000	.000	.000		.000
	Ν	268	268	268	268	268	268
	Pearson	.132*	1/2*	.329**	.115	$.480^{**}$	1
Cost of capital	Correlation	.132	.143	.329	.115	.460	1
structure	Sig. (2-tailed)	.031	.019	.000	.061	.000	
	Ν	268	268	268	268	268	268

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

## **4.9 Regression Analysis**

The relationship between selected factors and choice of capital structure of SMEs was tested through a regression analysis. The results presents the regression model summary in table 4.49 which gives the coefficient of determination showing the extent to which the predictor variables influences the dependent variable, the analysis of variance in table 4.50 which determines the reliability of the model developed in explaining the relationship and the regression coefficients in table 4.51 which gives the coefficient explaining the extent at which the independent variables influence the dependent variable.

The coefficient of determination (R square value) from the table is 0.883. This indicates that, the variability in the choice of capital structure by SMEs is 88.3% explained by the independent variables. This being the case, therefore, the variability due to other factors which were not studied in the current research is 11.7%. From the table also, the adjusted R square is 0.881 which measures the reliability of the results. Thus, the study results are 88.1% reliable and therefore the model results are significant and reliable in explaining the influence of the predictor variables to the dependent variable.

 Table 4.19. Regression Model Summary

Model	R	R Square	Adjusted R	Std. Error of	
			Square	the Estimate	
1	.940 <sup>a</sup>	.883	.881	.292	

a. Predictors: (Constant), Collateral security, Cost of capital structure,
Influence of purpose of finance on capital structure, Influence of size of business on
capital structure, Availability of information sources

The table below presents the F statistic which is used to test the significance of the relationship between the depended and the independent variables. The F value in the table is 395.065. Therefore, there is strong evidence that the regression model developed is statistically significant at 0.000 which is less that of p-value 0.050 and that the variation in the results is insignificant. It is clear from the results that the relationship between the variables is statistically significant.

Model		Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	168.893	5	33.779	395.065	.000 <sup>b</sup>
1	Residual	22.401	262	.086		
	Total	191.295	267			

a. Dependent Variable: Capital structure

b. Predictors: (Constant), Collateral security, Cost of capital structure, Influence

of purpose of finance on capital structure, Influence of size of business on

capital structure, Availability of information sources

The table below gives the regression coefficients which are used to answer the regression model proposed;

 $Y=\beta0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4\ \beta_5X_5+\epsilon$ 

Where: Y = choice of capital structure X1 = size of business X2 = availability of information X3= cost of finance X4 = purpose of finance X5 = collateral security  $\beta 0$  = Constant  $\epsilon$  = standard error

Based on the table results, the model therefore becomes;

Y=1.029+0.262X1+0.129X2+0.147X3+0.477X4+0.015X5+0.202

Model	Unstanda	ardized	Standardized	t	Sig.
	Coeffic	cients	Coefficients		
	В	Std.	Beta		
		Error			
(Constant)	1.029	.202		5.098	.000
Influence of size of business on capital structure	.262	.061	.353	4.295	.000
Availability of information sourc	es .129	.066	.176	1.951	.042
Cost of financing	147	.161	024	913	.036
Influence of purpose of finance o capital structure	n .477	.059	.482	8.075	.000
Collateral security	015	.064	016	228	.019

## Table 4.21. Regression coefficients<sup>a</sup>

## a. Dependent Variable: Capital structure

From the model, it is clear that all the independent variables are positively related to the dependent variable. The findings indicate that the selected factors have a positive relationship with choice of capital structure of SMEs in Kiambu County where a unit increase in selected factors would result to 1.029 times increase in the choice of capital structure of the SMEs. The significance of the coefficients at 95% confidence level was found to be significant as indicated by their p-values which are less that 0.050 (the critical value at 5% level) except availability of information.

## 4.10 Hypothesis Testing

The researcher sought to test the hypotheses by regressing selected factors against choice of capital structure. Below are the findings.

The first hypothesis  $Ho_1$ : There is no significant relationship between the size of the firm and capital structure for SMEs in Kiambu County, Kenya. The significance was 0.00, which was less than the p-vale 0.05 with t=4.295. Therefore, the null hypothesis was rejected.

The second hypothesis Ho<sub>2</sub>: There is no significant relationship between the availability of information and capital structure financing for SMEs in Kiambu County, Kenya. The

significance t-value was 0.042, which was less than the p-vale 0.05 with t=1.951. Therefore, the null hypothesis was rejected.

The third hypothesis Ho<sub>3</sub>: There is no significant relationship between purpose of finance and the capital structure for SMEs in Kiambu County, Kenya. The significance was 0.000, which was less than the p-vale 0.05 with t=-0.913. Therefore, the null hypothesis was rejected.

The fourth hypothesis  $Ho_4$ : There is no significant relationship between cost of finance and the capital structure for SMEs in Kiambu County, Kenya. The significance was 0.036, which was less than the p-vale 0.05 with t=8.075. Therefore, the null hypothesis was rejected.

The fifth hypothesis  $Ho_5$ : There is no significant relationship between collateral requirement and the capital structure for SMEs in Kiambu County, Kenya. The significance was 0.019, which was greater than the p-vale 0.05 with t=-0.228. Therefore, the null hypothesis was rejected.

Finally, hypothesis six which is a summary of all the hypotheses  $HO_6$ : There is no significant relationship between the selected factors and the capital structure by Small and Medium Enterprises in Kiambu County, Kenya. The significance was 0.00, which was less than the p-vale 0.05 with t=5.098. Therefore, the null hypothesis was rejected.

#### **CHAPTER FIVE**

## SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

This chapter focuses on summary of the findings, conclusion and recommendations of the study. The general objective of the study was to assess selected factors that influence capital structure for small and medium enterprises in Kiambu County, Kenya. Specifically, the study sought to determine the effect of firm size on the capital structure for SMEs, the effect of information availability on the capital structure for SMEs, the effect of purpose of finance on the capital structure for SMEs, the effect of cost of finance on the capital structure for SMEs, the effect of SMEs, the effect of cost of finance on the capital structure for SMEs, the effect of selected factors on the capital structure of SMEs.

### **5.2 Summary of Findings**

Based on the objectives, the following are the summary of the findings.

#### 5.2.1 The effect of firm size on the capital structure for SMEs

The first objective of the study sought to determine the effect of firm size on the capital structure for SMEs in Kiambu County. The size of the business influenced the capital structure of the firms to great extent (33.6%) and to greatest extent (33.6%) respectively compared with those who were not sure at 18.7%. The correlation analysis at 1% significance level the size of the business showed strong positive relationship (r=0.916, p<0.01) with choice of capital structure for SMEs. The findings agree with findings from a study conducted in Cameroon by Ngenhevu (2010) that the size of the firm influences choice of capital structure for SMEs.

## 5.2.2 The effect of information availability on the capital structure for SMEs

The second objective of the study sought to determine the effect of availability of information on the capital structure of SMEs. Availability of information influenced choice of capital structure to a great extent (36.2%) and to greatest extent (45.5%) respectively. Correlation analysis at 1% level of significance indicated strong positive relationship(r=0.780, p<0.01) between availability of information and choice of capital structure of SMEs in Kiambu County. The finding tallies with a study carried in Murang'a County by Ndungu (2014) that despite availability of information on bank loans most SMEs were reluctant to borrow due to stringent requirements by the banks. Other eempirical sources by Kaijage (2015), Ndungu (2014), and Gitari (2012) observe that availability and access to information plays significant role in choice of capital structure by SMEs.

#### 5.2.3 The effect of purpose of finance on the capital structure for SMEs

The third objective of the study was to determine the effect of purpose of finance on the capital structure for SMEs in Kiambu County. The purpose of the finance influenced choice of capital structure to a great and greatest extent according to 39.9% and 47.8% of the respondents. To a great extent (32.1%) and greatest extent (29.9%) meeting working capital requirements was given as the greatest influence for choice of capital structure. However, a significant percentage (20.1%) was not sure. Correlation analysis indicted that at 1% level of significance there was strong positive correlation (r=0.0.906, p<0.01), between purpose of finance and choice of capital structure for SMEs in Kiambu County. The finding agreed with a study conducted by Niskanen (2010) on SMEs in New Delhi, India, that the purpose for which finance was sought by SMEs had a great bearing on their choice of particular a capital structure.

#### 5.2.4 The effect of cost of finance on the capital structure for SMEs

The fourth objective was to determine the effect of cost of finance on the capital structure for SMEs. Majority (98.1%) of the respondents indicated that the cost of finance influence their choice of capital structure. From the study findings, more emphasis was put on SACCOs (63.4%) because they had low risks in the event of defaults. Correlation analysis at 5% level of significance found that there was weak positive relationship (r=0.132, p<0.05) cost of financing between cost of finance and choice of capital structure for SMEs. The finding agrees with findings by Mokua (2011) on a study on credit financing by SMEs in Kisii County that observed that most SMEs would rather exhaust personal savings than borrow from finance institutions because of the exorbitant costs of acquiring them.

#### 5.2.5 The effect of collateral requirement on choice of capital structure for SMEs

The fifth objective was to determine the effect of collateral requirement on choice of capital structure for SMEs. Majority of the respondents did not utilize group guarantees as collateral requirement in their choice of capital structure according to 44.8% and 38.8% of the respondents who indicated not at all and small extent respectively. Individual guarantors were used to borrow from micro-finance institutions and government agencies according to 39.9% and 41.8% of the respondents respectively. Similarly, equity capital was used to borrow from banks and micro-finance institutions according to 53.0% and 29.9% of the respondents.

Correlation analysis at 1% level of significance indicated that there was strong positive relationship (r=0.671, p<0.01) between collateral requirement and choice of capital structure for SMEs in Kiambu County. This finding agrees with Mokua (2011) that one of the inhibitions towards expansion of SMEs is lack of collateral requirements and Nyarige (2014) that younger enterprises are more reliant on informal financing and far less on bank financing because of lack of collateral requirement.

#### 5.2.6 The combined effect of selected factors on the capital structure of SMEs

The sixth objective of the study was to determine the combined effect of selected factors on the capital structure of SMEs in Kiambu County. The selected factors had a lot of impact on the choice of capital structure for SMEs with personal savings generally recommended for SMEs with 22.0%, 29.1% and 48.9% of the respondents indicating average, high and very high recommendation. Therefore, all the selected factors significantly affected choice of capital structure for SMEs in Kiambu County, as confirmed by Ngenhevu (2010), Niskanen (2010), Mokua (2011), Ndungu (2014), Gitari (2012), Nyairige (2014), and Kaijage (2015).

#### **5.3 Conclusion**

The objective of the study was to establish the relationship between selected factors and choice of capital structure among SMEs in Kiambu County. The research sought to test the hypotheses in order to fulfill the objectives of the study by using regression model and applying t-test to test the significance in the relationship. All the null hypotheses were rejected on the basis that the significance of the t-statistic was less than p-value 0.05 set for the study. Therefore, all the selected factors had an impact on the choice of capital structure for SMEs in Kiambu County. Below are the conclusions of the study based on the objectives.

#### 5.3.1 The effect of firm size on the capital structure for SMEs

The first objective of the study sought to determine the effect of firm size on the capital structure for SMEs in Kiambu County. The study rejected the null hypothesis that there was no significant relationship between the size of the firm and capital structure for SMEs in Kiambu County. The significance was 0.00, which was less than the p-vale 0.05 with t=4.295.

## 5.3.2 The effect of information availability on the capital structure for SMEs

The second objective of the study sought to determine the effect of availability of information on the capital structure of SMEs. The study rejected the null hypothesis that there is no significant relationship between purpose of finance and the capital structure for SMEs in Kiambu County. The significance was 0.000, which was less than the p-vale 0.05 with t=-0.913.

#### 5.3.3 The effect of purpose of finance on the capital structure for SMEs

The third objective of the study was to determine the effect of purpose of finance on the capital structure for SMEs in Kiambu County. The study rejected the null hypothesis that there was no significant relationship between purpose of finance and the capital structure for SMEs in Kiambu County, Kenya. The significance was 0.000, which was less than the p-vale 0.05 with t=-0.913.

## 5.3.4 The effect of cost of finance on the capital structure for SMEs

The fourth objective was to determine the effect of cost of finance on the capital structure for SMEs. The study rejected the null hypothesis that there was no significant relationship between cost of finance and the capital structure for SMEs in Kiambu County, Kenya. The significance was 0.036, which was less than the p-vale 0.05 with t=8.075.

## 5.3.5 The effect of collateral requirement on choice of capital structure for SMEs

The fifth objective was to determine the effect of collateral requirement on choice of capital structure for SMEs. The study rejected the null hypothesis that there was no significant relationship between collateral requirement and the choice of capital structure for SMEs in Kiambu County, Kenya. The significance was 0.019, which was greater than the p-vale 0.05 with t=-0.228.

## 5.3.6 The combined effect of selected factors on the capital structure of SMEs

The sixth objective of the study was to determine the combined effect of selected factors on the capital structure of SMEs in Kiambu County. The study rejected the null hypothesis that there was no significant relationship between the selected factors and the capital structure by SMEs in Kiambu County, Kenya. The significance was 0.00, which was less than the p-vale 0.05 with t=5.098. Therefore, all the selected factors significantly affected choice of capital structure for SMEs in Kiambu County.

#### **5.4 Recommendations**

This section discusses the recommendations from the study and also areas for further research.

#### 5.4.1 Recommendations from the study

The study findings established that information access was critical to choice of capital structure by SMEs. In order to ensure that SMEs have adequate information on available financing options the Government should introduce targeted legislation that ensures universal

access to information. In addition, the Government should ensure adequate training opportunities for owners of SMEs.

There is need for the Government to negotiate favourable interest rates and flexible repayment period for SMEs borrowing from financial institutions in order to encourage SMEs to borrow from them then expand their businesses, thereby creating employment opportunities. Similarly, banks and other financial institutions should review stringent loan access and processing conditions to SMEs.

In addition, small and medium size business owners should enhance their personal savings for financing their business ventures because according to the findings, it is the mainstay of their capital structure. In addition, SACCOs should consider lending to non-member SMEs because there is great preference among SMEs for SACCO financing according to the study findings. Banks should also reduce the high level of collateral requirement for SMEs. However, the Government should consider guaranteeing for loan borrowing from financial institutions by SMEs. This can be enhanced by the Government investing in some innovative start-ups.

#### 5.4.2 Recommendations for further study

This study concentrated on the effect of selected factors on the choice of capital structure for SMEs in Kiambu County. There is need for a comparative study of the influence of the same factors on the capital structure of SMEs in other counties, or inclusion of factors other than the ones in this study.

#### REFERENCES

- Akhabonje, M. & Namusonge, G. S. (2016). Factors Affecting Access to Credit By Small and Medium Enterprises: A Case of Kitale Town Shirley, *The International Journal of Social Sciences and Humanities Invention*, 3 (10), 2904-2917.
- Amidu M. (2007). Determinants of Capital Structure of Banks in Ghana: An Empirical Approach, *Baltic Journal of Management*, 2(1), 67-69, available from www.emeraldinsight.com [cited 11th October 2016].
- Ang, J. (1992). Small business uniqueness and the theory of financial management. *Journal* of small business finance 1, 1-13.
- Arthurs, J. D. & Busenitz, L. W. (2006). Dynamic capabilities and venture performance: the effects of venture capitalists. *Journal of Business Venturing*, *21*(2), 195-215.
- Aryeetey, E. (1992). *The relationship between the formal and informal sectors of the financial markets in Ghana*. AERC Research Paper No. 10
- Aryeetey, E. (1995). Filling the Niche, Informal Finance in Africa. Nairobi, Kenya: East African Educational Publishers Ltd.
- Atieno, R. (1998). Credit Rationing and Access to Credit: A Study of Formal and Informal Credit Institutions in Kenya. *African Journal of Economic Policy*, *5*(2), 29-53.
- Avery, R. B., Bostic, R.W. & Samolyk , K. A. (1998). The role of personal wealth in small business finance. *Journal of Banking & Finance*, 22, 1019-1061.
- Bae, K. H. & Goyal V.K. (2009).Creditor Rights, Enforcement and Bank Loans. Journal of Finance,64, 823-860.
- Basu, A. & Parker, S. C. (2001). Family finance and new business start-ups. Oxford Bulletin of Economics and Statistics, 63(2),333-58.
- Bates, T. & Nucci, A. (1989). An Analysis of Small Business Size and Rate of Discontinuance. *Journal of Small Business Management*, 68-74.
- Berenbach, S. & D. Guzman, D. (1994). The Solidarity Group Experience Worldwide. In Otero, M. and Rhyne, E. (Eds), *The New World of Microenterprise Finance: Building Healthy Financial Institutions for the Poor*. Kumarian Press.

- Berger, A. N. & Udell, G. F. (1998). The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle. *Journal of Banking and Finance*,22, 613-673.
- Bozanic, Z., Cheng, L. & Zach, T. (2013). Private debt contract complexity: What the numbers don't tell you. Working Paper, Ohio State University and University of Arizona.
- Brick I. E. & Palia, D. (2007). Evidence of Jointness in the Terms of Relationship Lending. Journal of Financial Intermediation, 16, 452-47
- Brijlal, P., Enow, S. & Isaacs, E. H. (2014). The Use of Financial Management Practices by Small, Medium and Micro Enterprises: A Perspective from South Africa. *Industry* and Higher Education, 28(5), 341-350.
- Broadbent, M. & Cullen, J. (2003).Managing Financial Resources, 3rd Ed. Oxford: Elsevier Butterworth-Heinemann.
- Broembsen, M. W. & Herrington, M. (2005). *Global Entrepreneurship Monitor: South African Executive Report.* Cape Town: University of Cape Town.
- Brown, G., Chavis, L. & Klapper, L (2008). A New Lease on Life: Institutions, External Financing, and Business Growth. World Bank mimeo.
- Burnett, D. (2000). *The Supply of Entrepreneurship and Economic Development*. Retrieved April 23, 2013 fromhttp://www.technopreneurial.com/articles/history.asp
- Busenitz, L., Fiet, J. O. & Moesel, D. D. (2004). Reconsidering the venture capitalists 'value added' proposition: an inter-organizational learning perspective. *Journal of Business Venturing*, 19(6), 787-807.
- Butler, P. & Durkin, M. (2008). Managing expectation in the small business-bank relationship. *Irish marketing review*.
- Bygrave, W.D., Hay, M., Ng, E. & Reynolds, P. (2003). Executive forum: a study of informal investing in 29 nations composing the Global Entrepreneurship Monitor. *Venture Capital*, 5(2), 101-16.

- Carland, J. W. Hoy, F., Boulton, W. R. & Carland, A. C. (1984).Differentiating Entrepreneurs from Small Business Owners: A Conceptualization. *The Academy of Management Review*, 9(2), 354-359.
- Cassar, G. (2004). The financing of business start-ups. Journal of Business Venturing, 19, 261-283.
- Chatain, O. (2010). Value Creation, Competition and Performance in Buyer-Supplier Relationships. Retrieved April 23, 2013 fromonlinelibrary.wiley.com/doi/10.1002/smj.864
- Chipeta, C. & Mkandawire, M. L. C. (1991). Links between the Formal and Informal/ Semiformal Financial Sectors in Malawi, AERC Research PaperNo. 14. African Economic Research Consortium
- Chiyah Boma Ngehnevu & Forchu Zachary Nembo. (2010). The Impact of Microfinance Institutions (MFIs) in the Development of Small and Medium Size Businesses (SMEs) in Cameroon: A case study of CamCCUL, Master's Thesis, Swedish University of Agricultural Sciences.
- Cincotta, D. (2014). Collective Beer Brand Identity: A Semiotic Analysis of the Websites Representing Small and Medium Enterprises in the Brewing Industry of Western PA. *ProQuest LLC*,
- Cole, R. A., Goldberg, L. G. & Lawrence, J. White, (2004). Cookie Cutter vs. Character: The Micro Structure of Small Business Lending by Large &Small Banks, *Journal of Financial and Quantitative Analysis*, 39, 227-251
- Coleman, S. (2007). The Role of Human and Financial Capital in the Profitability and Growth of Women-Owned Small Firms. *Journal of Small Business Management*, 45(3),303-319.
- Cosh, A, & Hughes, A. (1994).Size, financial structure and profitability, in Hughes, A and storey. *D.J. (EDS), finance and the small firm*, 18-63. London: Routledge
- Dayton, C. M. (1992).*Logistic Regression Analysis*. Department of Measurement, Statistics & Evaluation, Room 1230D Benjamin Building, University of Maryland.

- Desai, V. (2009). *The Dynamics of Entrepreneurial Development and Management*. Mumbai: Himalaya Publishing House.
- Dollinger, M.J. (2008). *Entrepreneurship Strategies and Resources*. Lombard, Illinois: Marsh Publications.
- Drucker, P. (2007). Innovation and Entrepreneurship. New York: Elsevier Ltd.
- Duarte M. & Martins, J. (2016). Factors in the Effective Transfer of Knowledge from Multinational Enterprises to Their Foreign Subsidiaries: A Mozambican Case Study. *International Journal of Training and Development*, 20(3), 224-237.
- Enders, W. (2010). *Applied Econometric Time Series*, 3rd ed. Hoboken, NJ: John Wiley & Sons.
- Fama, E. & French, K. R. (2005). Financing Decisions: Who Issues Stock? Journal of Financial Economics, 76, 549-82.
- Fowler, A. & Kinyanjui, K. (2004). Indigenising Foreign Seed on African Soil: The Story of K-REP. Nairobi: K-Rep.
- Garson, J. (1998). *Microfinance and Anti-poverty Strategies: A Donor Perspective*. United Nations Capital Development Fund (UNCDF) Policy Book.
- Geroski, P. (1995). *Market structure, corporate performance, and innovative activity*. Oxford University Press.
- Ghobakhloo, M., Tang Sai, H. & Standing, C. (2015). B2B E-Commerce Success among Small and Medium-Sized Enterprises: A Business Network Perspective. *Journal of Organizational & End User Computing*, 27(1), 1-32.
- Ghosh, A., Cai, F. & Li, W. (2000). The Determinants of Capital Structure. American Business Review, 18, 129-32.
- Gitari, C. G. (2012). Factors affecting women 200 entrepreneurs' financial performance in Kenya: a case of Ngara Market.Master's thesis University of Nairobi.
- Government of Kenya Central Bureau of Statistics [CBS] (1999). African Centre forEconomic Growth [ACEG] and KREP Holdings, *National micro and smallenterprises baseline survey*. Nairobi: CBS.

Government of Kenya. (2012). Micro and Small Enterprises Act, No. 55. Nairobi.

- Gregory, B. T., Rutherford, M. W. Oswald, S. & Gardiner, L. (2005). An empirical investigation of the growth cycle of small firm financing, *Journal of Small Business Management*, 43, 382-393.
- Harrison, R. T, Mason, C. M. & Girling, P. (2004). Financial Bootstrapping and Venture development in the Software Industry, Entrepreneurship and Regional Development. London: Routledge.
- Higgins, R. C. (2001). Analysis for Financial Management, 6th Ed. New York: Irwin/McGrawHill.
- Hu, C., Hu, Y. & Yan, W. (2014). An empirical study of factors influencing user perception of university digital libraries in China. *Library & Information Science Research* (07408188), 36(3/4), 225-233.
- Kaijage, E. (2015). Demand side factors and access to external finance by small and medium manufacturing enterprises in Nairobi, Kenya, Master's thesis, University of Nairobi.
- Kaplan, S., Berk, A. S. & Per, S. (2009). Should Investors Bet on the Jockey or the Horse?Evidence from the Evolution of Firms from Early Business Plans to Public Companies. *Journal of Finance*.
- Karumba, M. & Wafula, M. (2012). Collateral Lending: Are there Alternatives for the Kenyan Banking Industry: KBA Centre for Research on Financial Units and Policy. Working Paper Series 3.
- Kenduiwo, E. K. (2014). The relationship between alternative sources of finance and financial performance of small and medium enterprises in Nairobi County. Master's thesis, University of Nairobi.
- Kenya Association of Manufacturers [KAM]. (1999). Market Access for SMEs through Private and Public Procurement In Kenya. Nairobi.
- Kfouri, G. & Skyrius, R. (2016).Factors influencing the implementation of business intelligence among small and medium enterprises in Lebanon. *Informacijos Mokslai / Information Sciences*, 76,96-110.

- Khale, K. &Ren'e, S. (2013). Access to capital, investment, and the financial crisis, *Journal* of Financial Economics 110, 280–299.
- Koch, T. W. & Macdonald, S. S. (2000). *Bank Management*, 4<sup>th</sup>Ed. Orlando, FL: Dryden Press.
- Kotelnikov, V. (2010).*New Paradigm: Resource-Based Theory*. Retrieved April 24,1522013 fromhttp://www.1000ventures.com/business\_guide/mgmt\_stategic\_resourcebased.html
- Kothari, C. R. (1993). *Research Methodology: Methods and Techniques*. New Delhi: Vishwa Prakashan.
- Kothari, N. & Pals, D. (1993). Introduction to Educational Research. Njoro: Egerton University.
- Kruger, M.E. (2004). Entrepreneurship Theory and Creativity. Retrieved April 25,2011from http://upetd.up.ac.za/thesis/available/etd-08242004-145802/unrestricted/02chapter2.pdf
- Langdon, K. & Bonham, A. (2004). *Smart Finance*, 2nd Ed. West Sussex: Capstone Publishing Ltd.
- Li, Y. (2008). Duration analysis of venture capital staging: a real options perspective. *Journal* of Business Venturing, 23(5), 497-512.
- Mason, C. & Harrison, R. (2002). Barriers to investment in the informal venture capital sector, *Entrepreneurship & Regional Development*, 14(3), 271-287.
- Mason, D. R., Lind, D., & Marchal, B. (1999). Statistical Techniques. In *Business and Economics*. New York: Irwin/McGraw-Hill.
- McKenzie, D. & Woodruff, C. (2008).Experimental Evidence on Returns to Capital and Access to Finance in Mexico, *World Bank Econ. Review*, 457-82
- Migiro, S. O. (2006). Relating Kenyan manufacturing SMEs' finance needs to information on alternative sources of finance. South African Journal of Information Management, 8(1).

- Mills, J.(2010). *Resource and Competence-based Strategy*. Retrieved April 24, 2013from http://www.ifm.eng.cam.ac.uk/csp/summaries/res\_competence.html.
- Modigliani, F. & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *American Economic Review*, 48, 261-297.
- Mokua, M. K. (2011). Factors influencing credit financing of small scale business enterprises in Kisii County, Kenya. Master's thesis, University of Nairobi.
- Montaye, J. A. (2006). *Entrepreneurship in Economic Theory*. Retrieved May 7, 2013 from www/highbeam.com
- Mugenda, O. M. & Mugenda, A. G. (1999). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: ACT Press.
- Muhanna, E. (2007). Conceptual Analysis of Determinants of Entrepreneurship: A South African Perspective. *Problems and Perspectives in Management*, 5-1,95-102.
- Murphy, P. J. (2011). A 2 X 2 Conceptual Foundation for Entrepreneurial Discovery Theory. Retrieved April 24, 2013 from WWW/Allbusiness.com, Mwirichia.
- Mwangi, M. (2013). The challenges facing SMEs in accessing credit: a case of youth entrepreneurs in Makuyu, Kenya. Master's Thesis, University of Nairobi.
- Myers, S. C. & Majluf, N.S. (2011). Corporate financing and investment decisions when firms have information the investors do not have. *Journal of Finance and Economics*, *13*, 187-221
- Myers, S. C. & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have, *Journal of Financial Economics*, *13*(2), 187-221.
- Namusonge, G. S. (2004). The Role of Development Financial Institutions in the Acquisition of Technological Capabilities by Small and Medium Enterprises in Kenya. ATPS Working Paper Series No. 41
- Namusonge, G. S. (2010). *Business Statistics: Concepts and Applications*. Beau Bassin, Mauritius: VDM Publishing House Ltd.

- Nazir, M. &Afza, T. (2010).Impact of Aggressive Working Capital Management policy on Firm profitability. *The IUP Journal of Applied Finance*, *3* (16), 20-30
- Ndungu, C. W. (2014). Factors affecting credit access among small and medium enterprises in Murang'a County. Master's thesis, University of Nairobi.
- Ngehnevu, C. B. & Nembo, F. Z. (2010). *The Impact of Microfinance Institutions (MFIs) in the Development of Small and Medium Size Businesses (SMEs) in Cameroon: A case study of CamCCUL*. Master's Thesis, Swedish University of Agricultural Sciences.
- Ngigi, P. W. (1997). An Investigation into Venture Capital Financing for Small- and Medium-Scale Enterprises in INFO-TECH. MBA Research Project, University of Nairobi, Nairobi.
- Nikolaev, V. V.(2010). Debt covenants and accounting conservatism. *Journal of Accounting Research*, 48, 51–89.
- Njoroge, H. (2003). Factors Affecting Venture Capital Financing in Kenya. MBA Research Project, University of Nairobi.
- Nyarige, C &, Olweny, T. (2014, September). Effect of working capital Management on performance of Firms listed at the Nairobi Securities Exchange. *Economics and Finance Review*, 01-14.
- Nyoike, C. M. (2002). *Financing Capital; Investments by Quoted Companies in Kenya*. MBA Research Project, University of Nairobi.
- Ogujiuba, K.K., Ohuche, F.K. & Adenuga, A.O. (2004). *Enterprises in Nigeria: Importance of new capital base for banks – background and issues*. Available: http://econwpa.wustl.edu. (Accessed 23rd June 2013).
- Olekamma, K. C. (2016). The Influence of Entrepreneurial Characteristics on Small and Medium-Sized Enterprise Accessibility to Debt Finance in Nigeria, *International Journal of Managerial Studies and Research* (IJMSR),4(10).
- Onsomu, Z. N. (2003). The Relationship between Debt Financing and the Value of the Firms Quoted at the NSE.MBA Research Project, University of Nairobi.

- Orford, J. W., Fischer, E. & Herrington, C. J. & Segal, N. (2003). Global Entrepreneurship Monitor: South African Executive Report. Cape Town: University of Cape Town, School of Business Management.
- Ortega, W. R. & Grant, G. H. (2003, July). Maynard Manufacturing: An Analysis of GAAP-Based and Operational Earning Management Techniques, *StrategicFinance*, 50-6.
- Otieno, A. (2013). Capital Structure of listed firms in Kenya: The Case of Non-Financial Firms. MBA Thesis-Arts in Economics, University of Nairobi.
- Ozkan, A. (1996). Corporate Bankruptcies, Liquidation Costs and the Role of Banks. *The Manchester School*,64, 104-119.
- P. M. M. (1983). Financing Local Authorities in Kenya: A Case Study of Meru Municipality.
   MBA Research Project, University of Nairobi.
- Padachi, K. & Bhiwajee, S. L. (2016). Barriers to Employee Training in Small and Medium Sized Enterprises: Insights and Evidences from Mauritius. *European Journal of Training and Development*, 40(4), 232-247.
- Pandey, I. M. (1999). Financial Management, 8th Ed. New Delhi: Vikas Publishing House PVTLtd.
- Pasquariello, P. (2014). Financial market dislocations. *Review of Financial Studies*27, 1868–1914.
- Petersen, M. A. & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *Journal of Finance*, 49, 3-37.
- Powell, T. (2007).*Resource Based View*. Retrieved April 24, 2013 fromtamanpowell.com/Writing/assets/Resource%20Based%20View.pdf
- Pretorius, W. (2007).Bootstrap Financing Applied by South African Entrepreneurs. MBA Research Project, University of Pretoria, Pretoria.
- Rahman, A. (1999). Micro-credit initiatives for equitable and sustainable development: who pays? *World Development*, 27, 67–82
- Rajan, R. G. & Zingales, L. (1995). What Do We Know About Capital Structure? Some Evidence from International Data. *Journal of Finance*, 50, 1421-60.

- Song, C. (2014). Factors Influencing Micro-Enterprises' Information Technology Adoption. *ProQuest LLC*.
- Sufi, A. (2009). Bank lines of credit in corporate finance: an empirical analysis. *Review of Financial Studies*, 22, 1057–1088.
- Van Binsbergen, J. H., Graham, J. R., & Yang, J. (2010). The cost of debt. *Journal of Finance*, 65(6), 2089-2136.
- Wanjohi A. (2010). *SMEs Sub-Sector in Kenya: Issues and Efforts*. Retrieved from http://www.articlesbase.com/articles on 7th March. 2013.
- Yeh, C., Lee, G. & Pai, J. (2015). Using a technology-organization-environment framework to investigate the factors influencing e-business information technology capabilities. *Information Development*, 31(5), 435-450.
- Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting and Economics*, 46, 27–54

## **APPENDICES**

## **Appendix I: Questionnaire cover letter**

## Factors influencing choice of financing for SMEs questionnaire

Egerton University

Department of Accounting, finance and management science,

Faculty of Commerce

P.O BOX 536-20115

EGERTON

## Dear Sir/Madam

I am a Masters student at Egerton University, Faculty of Commerce. In order to fulfill the degree requirements, I am undertaking a management research project on Factors influencing capital structure for SMEs in Kiambu County, Kenya

To this end, I kindly request that you complete the following questionnaire regarding your perception on the subject under the study.

Your response is of the utmost importance to me and will be used exclusively for academic purposes.

Should you have any enquiries or comments regarding this project, you are welcome to contact me directly on 0722-732-927. E-mail: bnjenga71@gmail.com

Yours Sincerely,

Bernard K. Njenga

#### **Appendix II: Questionnaire**

## A STUDY IN PARTIAL COMPLETION OF MASTERS IN BUSINESS ADMINISTRATION EGERTON UNIVERSITY

This questionnaire seeks to identify factors that influence capital structure for small and medium sized enterprises in Kiambu County. This study is an academic study and the information obtained through this questionnaire will be treated confidentially and will not be used for any other purpose other than academic research.

Date: \_\_\_\_\_ Questionnaire No: \_\_\_\_\_

Kindly tick in the space provided ( $\sqrt{}$ ) the correct answers or supply the required information where, required, please specify and elaborate.

#### **Section A: Respondents Information**

- Age of the respondent
   20 to 30 years () 31 to 40 years () 41 to 50 years () Above 50 years ()
- 2) Gender of the respondent?Male Hemale ()
- 3) What is your highest level of education?
  Postgraduate Degree Diploma (Form four ())
- 4) Indicate the period of work experience?
  Less than 2 years ( ) 2 to 5 years ( ) 6 to 10 years ( ) above 10 years ( )
- 5) Have you ever applied any form of finance where adherence to government policies on gender and ethnical integration was a requirement to qualify?
  - Yes [ ] No [ ]

If yes, indicate the source

.....

- 6) Have you ever applied finances where the lender required a certain level of education/ Technological knowledge to qualify?
  - Yes[ ] No [ ]
- 7) Have you ever applied money from a lender who required that you belong to a particular political group/ party?

Yes ( ) No [ ]

## Section B: SME Bio-Data

1. Number of employees in your firm.....

5. Listed in the Nairobi Stock exchange? Yes No ( ) ( )

- 2. Ownership ( )  $\left( \right)$ a) Foreign Local Total % b) Public Private Total %  $\left( \right)$  $\left( \right)$ c) Individual Groups Total %  $\left( \right)$  $\left( \right)$
- 7. Number of directors.....

8. Average monthly expenditure (salary + rent) Ksh.

9. Kindly Indicate to what extent the following choices of finance have been applied in your business.

1- No Extent at all, 2 Small Extent, 3 Moderate Extent, 4 Great Extent, 5 Greatest Extent

Cap	ital structure	1	2	3	4	5
1	Personal savings					
2	Family/Relatives					
3	Bank loan					
4	SACCOS					
5	ROSCAS (merry go rounds)					
6	MFI					
7	Government Agencies					

## Section C: Size of the firm

Please fill in the size parameters given below:

a) How many employees does the firm have other than the owner?\_\_\_\_\_

b) Give the estimate in Kshs of the total assets of the firm\_\_\_\_\_

c) For the last 5 years indicate on average the monthly gross profit of the firm\_\_\_\_\_

d) Indicate how many branches the firm has if any \_\_\_\_\_

e) In which category does your firm fit? Service ( ) Trade ( ) Manufacturing	[]
(tick all which apply)	

Looking at the above parameter tick the extent to which you agree with the following statements. The questions are ranked on a five Likert scale ranging from 1 strongly disagree,
 2 disagree, 3 neutral, 4 agree, 5 strongly agree.

Size Parameters	1	2	3	4	5
a. The number of employees did not influence					
capital structure of the firm.					
b. Gross profit influenced the choice of financing					

for the firm.			
c. The age of the business determined where you			
got your finance.			
d. Annual average turnover in sales of the			
business did not influence the capital structure.			
e. Expansion of the business in terms of			
branches influenced where you obtained finance.			

3. Which of the following best describes the influence of size of your business on where you applied for finance?

i. No extent at all	[ ]
ii. Small extent	( )
iii. Moderate extent	( )
iv. Great extent	[]
v. Greatest extent	[ ]

## Section D: Availability of Financial Information

To what extent do the following aspects of information availability affected the choice of financing for your business? Please tick where appropriate in the table using the Likert scale given below

Asp	pects of Financial Information	1	2	3	4	5
1	Awareness of various sources of finance					
2	Knowledge of finance options					
3	Appropriateness of various finance options					
4	Restrictions on various finance options					
5	Methodologies of application/access to various finance options					
6	Reliability of information sources					
7	Availability of information sources					

2. How often do you access financial information from the following sources?

1- not at all, 2 very rarely, 3 rarely, 4 often, 5 Very often

	1	2	3	4	5
Local Radio stations					
Newspapers /					
Magazines and journals					
Local financial					
Institutions, exhibitions					
and shows					
Personal enquiries from					
other entrepreneurs					
Any other					

## 3. Please tick where appropriate

	Yes	No
I choose to acquire finances from the above source because the enterprise		
required finance and I was informed on where to get it.		
I got information through local radio stations that there are available		
finances to boost enterprises.		
I read from magazines and newspapers on the form of finance and decided		
to go for it.		
Through local shows and exhibition I was convinced of the suitability of the		
finance by the lender.		
I talked to some friends and colleagues and those who have in business and		
they informed me the best source of finance.		

4. Which of the following describes the extent to which information availability influenced you to go for the enterprise finance?

- i. No extent at all ()
- ii. Small extent ()
- iii. Moderate extent ()
- iv. Great extent ()
- v. Greatest extent ()

## **Section E: Purpose of finance**

1. To what extent do the following purposes of finance affect the choice of financing for your business? Please tick as appropriately in the table using the Likert scale given below

# 1- No Extent at all, 2-Small Extent, 3-Moderate Extent, 4-Great Extent, 5-Greatest Extent

List of purpose of		Rating effect of purpose on					
Finan	nce	capital structure					
		1	2	3	4	5	
1	Meeting working						
	capital requirements						
2	Acquiring						
	Assets						
3	Expansion of the						
	Firm						
4	Any other						

2. For the purposes of finance above, which choice of financing did it lead you to?

Purpo	ose	The choice of financing
promj	pting search for finance	it led you to & where obtained, indicate
1	Meeting working capital requirements	
2	Acquiring Assets	
3	Expansion of the Firm	
4	Any other	

3. Which of the following best describes the influence of purpose of finance on the choice of financing shown above?

i. No extent at all	[ ]	
ii. Small extent	[ ]	
	[ ]	

iii. Moderate extentiv. Great extentv. Greatest extent( )

## **Section F: Collateral requirements**

1. To what extent does collateral requirement affect the choice of financing for your business? Please tick appropriately in the table using the Likert scale given below on collateral requirements.

# 1- No Extent at all, 2-Small Extent, 3-Moderate Extent, 4-Great Extent, 5-Greatest Extent

List of collateral of		Ratin	Rating the effect of										
obtaining finance		Colla	Collateral on										
		choice of source of funds											
		1	2	3	4	5							
1	Group guarantees												
2	Individual guarantors												
3	Assets												
	(Title deed/logbook)												
4	Equity capital												

2. Kindly give the specific collateral you used to obtain finance and the source of finance you were you acquiring.

List of collateral of		Give	the	collateral	Which source of finance					
obtaining finance		used t	o obta	in finance	were you acquiring					
1	Group guarantees									
2	Individual guarantors									
3	Assets									
	(Title deed/logbook)									
4	Equity capital									

## **Section G: Cost of capital structure**

1. Did you consider the choice of your capital structure before applying for it?

Yes [] No []

## 2. What were the cost considerations that you made?

Cost	of finance	Tick (√)
1	Interest rates	
2	Insurance fees	
3	Negotiation fees	
4	Legal fees	
5	Processing fees	

## 3. Which capital structure was more affordable?

Capital structure	Tick ( $$ )
SACCOs	
Family/ relatives	
MFI	
Bank loan	
ROSCAs	
Government agencies	

## **Section H: Recommendations**

1. What would you like to be done by SME to improve choice of financing business enterprises?

2. What would you like to be done by the government to improve choice of capital structure for SMEs?

THANK YOU FOR YOUR TIME

## Appendix iii: Time Plan

The research project will run for approximately six months as indicated in the schedule from April 2017 to September 2017

Activities	Jan 17				Feb 17				Mar 17			Apr 17				May17				June 17				
Time in Weeks	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Formulation of the topic and research problem																								
Proposal development																								
Proposal defense																								
Data collection																								
Report writing																								

# Appendix IV: Research budget

The researcher will finance the project in full. The estimates are as indicated in the schedule.

ITEM	TOTAL (KShs)
1.Stationery & photocopy	5,000
2.Field Data Collection & Transport	10,000
3.Data Editing, Analysis & Coding	10,000
5.Report writing, printing and binding	20,000
4.Contingency	5,000
Total	50,000