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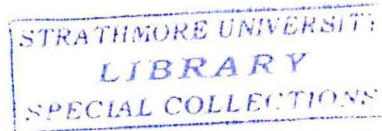
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**Determinants of Access to Finance by Small and Medium
Enterprises in Kajiado County**



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Submitted in Partial Fulfillment of the Requirements for the Award of a Master's in
Business Administration (MBA) Degree

Strathmore Business School

MARCH, 2019

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DECLARATION

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DEDICATION

To God almighty for his mercies and abundant blessings.

I would also like to dedicate this work to my family for standing with me during the research period and also for being the pillars of my support and encouragement. May the almighty God bless you.

ACKNOWLEDGEMENT

First and foremost, my sincere gratitude and appreciations goes to almighty God for giving me good health, strength and determination to write this dissertation. I would also like to thank and appreciate my supervisor Dr Hellen N Otieno for her continuous support, encouragement and time input that enabled me to carry out this research. My sincere appreciation further goes to Equity Bank fraternity in particularly Dr. James Mwangi, the Group CEO and Managing Director for giving me the scholarship to study this program. Special thanks also goes to my family, my wife Jennifer Apajok Garang, my daughter Gabriella Arok Joseph and my brother Rev. John Dau. They have been my pillars of support and source of encouragement.

ABBREVIATIONS AND ACRONYMS

GDP	Gross Domestic Product
ILO	International Labour Organization
IMF	International Monetary Fund
MDGs	Millennium Development Goals
MFI	Micro Finance Institution
NGOs	Non -Governmental Organizations
SME:	Small and Medium Enterprises
SSA	Sub Saharan Africa

ABSTRACT

In Kenya, private sector development remains critical for economic growth and development particularly in creating jobs among the unemployed Kenyan youths. The SME sector has grown in stature though it's riddled with myriad of challenges among them financing despite the fact that this sector has so far employed 7.5 million youth which is 80% of the total persons employed in Kenya. The objective of the study was to find out the determinants of access to finance by small and medium enterprises in Kajiado County, Kenya. The specific objectives of the study included; determining the influence of borrowing firm's characteristics on access to finance among SMEs in Kajiado County, to establish the influence of product features on access to finance among SMEs in Kajiado County; to find out the influence of lender characteristics on access to finance among SMEs in Kajiado County. The study employed descriptive and inferential research design targeting 368 respondents comprising of SME owners. The questionnaires administered to collect the research data has a response rate of 61.4% which is 226 of the target population. From the inferential statistics results, the study found that product features explain up to 70.6% of the variations in access to credit among the SMEs, firm characteristics explain up to 52.7% of the variations in access to credit while lender characteristics explain up to 19.2% of credit access by SMEs in Kajiado County. This study therefore recommends that given role played by SME sector on employment creation there is a need for a concerted effort to focus on streamlining the access to credit policy among the SMEs. And that management of financial institutions need to establish frameworks that address key concerns on credit access. With Commercial banks management enhancing management competencies in SME lending to customize product features rather than a one size fit all SMEs. Such research will enable financial institutions deliver products suiting women with such characteristics like grace period, competitive interest rates, flexible loan period, unnecessary hidden charges, social guarantees rather than tangible collaterals as well as ability to graduate SME loans based on good credit history.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The role played by SMEs in economic growth and development cannot be underscored for both developed and developing countries owing to their significant global contribution (Olatokun & Kebonye, 2010). The continuous globalization provides ever growing opportunities to SMES which in turn facilitate sustainable growth and development to the global economy (World Bank, 2015). Private enterprises dominated by SMES have contributed immensely to employment creation in developed and developing countries in turn stimulating growth and reducing social conflict globally (Okpara and Kabongo 2009).

The importance of financial access on firm size may be explained from the Modigliani and Miller (1958) theory of capital structure wherein they proved, albeit under restrictive assumptions, that firm value remains unchanged irrespective of the amount of leverage used. Their finding implied that access to credit does not have a role in increasing firm size. However, they showed in their revised paper that firm value increases with increase in leverage due to interest tax shield, which suggested importance of debt to firm size (Modigliani and Miller, 1963). Thus, following the Modigliani and Miller (1963) theorem, we postulate that while SMEs with access to credit can grow faster and hence achieve optimal size sooner, those with limited access to finance remain stagnant and hence remain smaller in size (De Maeseneire and Claeys, 2012).

Inability of SMEs to access finance from a formal credit market forces them to resort to informal finance. Earlier studies by Steel et al. (2012) reported the vitality of informal finance as an alternative route to SME access to credit. Recent studies also show that informal finance can be used as a remedy to the information asymmetry problem faced by SMEs, and that it can also enhance efficiency of the credit market (Lin and Sun, 2013). However, despite its wider use among SMEs, it has been reported to have no robust impact on firm growth as much as formal finance. This is according to the findings of World Bank researchers Ayyagari et al. (2010) who reported that despite extensive use of informal finance by SMEs in China, those that use formal finance rather than informal finance exhibited faster growth. This could be explained by two reasons. Firstly, informal loans are small and hence they are

mostly used for financing operations (working capital) rather than growth (expansion) (Fanta, 2012). Secondly, as reported by Bolnick (2013) and many others, informal lenders charge unreasonably high interest rate that erodes profit of small firms.

SMEs in Kenya like in Ghana, Nigeria, Uganda and Tanzania Continue to suffer from credit access and this has been a bottle neck for their growths given that varying factors determine their ability to access credit (Waari and Mwangi, 2015). The total financing gap among microenterprises stood at about 52–64 percent of (31.2–44.8 million) in developing economies are unserved or underserved and about 29–35 percent of formal microenterprises (17.4–24.5 million) in developing economies are unserved. About 23–29 percent of formal microenterprises (13.8–20.3 million) in developing economies are underserved by financial institutions (IFC, 2016)

A World Bank survey confirms that large firms everywhere generally have more access to bank credit than small firms (Cull et al., 2014) given that the capital structure of a firm depend on the age of the firm, size of the firm, asset structure, profitability, growth and risk. This is also confirmed by Dawson (2013) who found that formal sector credit was out of reach for smaller enterprises in Ghana and Tanzania. Gebru (2014) also found that compared to large firms, SMEs face a relative disadvantage to raise finance from formal institutions such as banks because they are considered to have higher financial risk. Smaller firms also find it relatively more costly to resolve information asymmetries with lenders, thus, may present lower debt ratios.

Bigsten et al. (2013), stated that in developing countries asymmetric information, high risk, lack of collateral, lender-borrower distance, small and frequent credit transactions of small enterprises make real cost of borrowing vary among different sources of credit. Access to credit by micro and small enterprises can also be attributed to their characteristics. Hussein (2013), posits that the probability of choosing the commercial bank credit sector was positively attributed to gender, educational level, and enterprise's size. He further explained that education, credit information and extension visit are more likely to increase the information base and decision-making abilities of the enterprises including the ability to compare pros and cons of choosing appropriate credit and production technology.

Cassar (2014) observed that lenders may perceive incorporation as a sign of credibility and formality of operations. He argued that the form of ownership could affect the debt-equity decisions of SMEs. Thus, corporations and limited liability companies may be more likely to

finance their projects with equity, while sole proprietors are more likely to employ debt financing. (Coleman and Cohn, 2009) also find evidence suggesting a positive relationship between leverage and incorporation.

Credit terms namely; interest rate, credit limit, and loan period considerably influence financial decisions of SME borrowers. The terms control the monthly and total credit amount, maximum time allowed for repayment, discount for cash or early payment, and the amount or rate of late payment penalty (Richard, 2010). Rate of interest is a key determinant of access to finance as it influences investment. Whenever interest rate rises up, investment will eventually fall, this is because with higher interest rate the possibility of making profit out of investment is very low, hence high interest rate reduces the marginal efficiency of capital (source). Schmidt and Kropp (2011) revealed that the type of financial institution and its policy often determine the access. What is displayed in form of prescribed minimum loan amounts, complicate application procedures and gives restrictions on credit for specific purposes, Where credit duration, terms of payment, required security and the provisions of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists and when they do, they will be denied access (source).

Though access to finance globally has often been cited as a primary obstacle that affect SMEs disproportionately (Ayyagari et al., 2012), it has been difficult to determine the exact size of the SMEs financing gap owing to lack of data accuracy. According to IFC (2015), there is an estimated 200 to 245 million formal and informal enterprises globally whose financing gap could be in the range of \$2.1 to \$2.6 trillion, approximately 30 to 36 percent of current outstanding MSME credit Look for more current source.

With reference to enterprise-level data covering years 2005 to 2014 collected by the IFC (2015), SMEs in Sub-Saharan Africa are more financially constrained than in any other developing region. Only 20 percent of SMEs in Sub-Saharan Africa have a line of credit from a financial institution compared, for example, with 44 percent in Latin America and Caribbean, and only 9 percent of their investments are funded by banks versus 23 percent in Eastern Europe and Central Asia. These findings alone provide the rationale for investigating the structure of the SME lending market in the region, with the aim to understand the main drivers and obstacles to SME financing as well as banks' operational approaches.

1.1.2 SME Financing in Kenya

In Kenya, the small business sector has immense potential of liberating millions of people from the informal economy to the mainstream economy. The sector in 1999 was estimated to employ over 2.3 million people approximated to over 50% of the working Kenyans (KNBS, 2015). According to Kenya Economic Report (2013) majority of the MSEs in Kenya operating informally comprising over 35,000 formal SMEs employed over 40% of the working population reaffirming the SME role envisaged in Vision 2030 by GoK of becoming key industries to drive productivity and innovation (Ministry of Planning, National Development & Vision 2030, 2007). About 75% of the general employment and 18% of GDP is credited to micro, small and medium sized enterprises which cut across all sectors of economy including general trade (wholesale and retail), manufacturing, services and farm activities (KNBS, 2015).

It is generally recognized however, that SMEs face unique challenges which inhibits their growth and profitability in turn diminishing their ability to contribute effectively to sustainable development (IFC, 2015). The International Finance Corporation (IFC) (2015) has identified various challenges faced by SMEs including lack of innovative capacity, lack of managerial training and experience, inadequate education and skills, technological change, poor infrastructure, scanty market information and lack of access to credit. On the supply side, most formal financial institutions consider SMEs un-creditworthy, thus denying them credit. Lack of access to financial resources has been seen as one of the reasons for the slow growth of firms. Difficulties in accessing credit has held back this sector in Kenya as most financial institutions perceive them as unstable placing tighter lending requirements prior to credit advancement (Atieno, 2009).

Lack of access to credit is almost universally indicated as a key problem for SME's due to undeveloped capital market forcing the entrepreneurs to bank on owners' equity as well as borrowing from friends or relatives. Commercial banks' lending activities have traditionally concentrated on large enterprises and consumer credit, with very little involvement in SME financing. Lack of access to long-term credit for small enterprises forces them to rely on high cost short term finance. High cost of credit and high bank charges and fees are other financing constraints faced by SMEs (Wanjohi, 2012).

The ability of SMEs to grow depends mostly on their ability to invest in restructuring, innovation and other factors that require funding. The access to funding by SMEs is vital to

their growth and development. However, access to funding remains one of the major challenges, especially to those SMEs in developing economies (Nkuah, 2013). To date, in most developing countries and Africa in particular, SMEs lack access to capital and money markets and still experience difficulties in obtaining capital despite efforts by some financial institutions and public sector bodies to open more avenues of funding (Kiama, 2012). In addition, availability of external finance for SMEs is a topic of significant research interest to academic and an imperative issue to policy makers around the globe (Berger and Udell, 2005).

The majority of the SMEs are still not considered credit worthy by commercial banks due to their inability to fulfill some conventional banking requirements and as such, most SMEs in Kenya are forced to consider other informal financing options, whose lending conditions are less stringent (Alhassan and Sakara, 2014). The funding obtained from informal financing, is not enough to finance SMEs' expansion and growth (IFC, 2011). Therefore, it is important to identify the determinants of lending to SMEs by commercial banks in Kenya. Several studies have been carried out both internationally and locally on the factors that influence lending to SMEs. For example, Haron et al (2013) examined the factors influencing SMEs in obtaining loans and established that collateral, good relationship with the lenders, and good financial records were some of the factors that influence lending to SMEs.

Sun et al (2013) also established that SMEs financing confirm the severity of credit constraints to SMEs and that bank lending policy of using fixed assets as the security exacerbate the plight of SMEs funding. However, the studies did not examine the influence of credit risk, bank size, interest rate and liquidity of commercial banks on SMEs lending. In Kenya, a study by Langat (2013) examined the determinants of lending to farmers by commercial banks in Kenya and established that commercial banks give out loans to farmers that have reliable sources of income, but the study focused on the farming sector, hence its findings cannot be generalized to all SMEs.

A survey by the Danish government found out that about 65% of micro, small and medium investors in Kenya did not receive any financial assistance from financial institutions during difficult economic times while a meagre 12% said they received financial help with good terms of repayment, (The financial Denmark, 2015). Olomi, (2011) established that the survival rate of SMEs was significantly low given limited access to finance. Further, Onyango (2016), indicated that lenders tend to shy from the SME market on fears of defaults

which may have contributed to these statistics which suggest that there exists financing gap on SME funding in Kenya. These studies appreciated there exists a financing gap among the SMES in Kenya but they did not establish the determinants of credit access among the SMEs which creates research opportunity to be met by scholars, practitioners and policy makers. Among the scholars who studied credit access by SMES like Omar, (2008), Rukwaro (2001), and Mokogi (2003) disagreed with Calice (2012) that the determinants of SME access to finance are similar between the developed and the developing countries given that the stages of development in the financial sector are different. It was against this background that this study explored the determinants of financial access among SMEs in Kajiado County in Kenya which is a developing country yet with a great emphasis on SME role in economic development

1.2 Back ground of SME and Kajiado County

Kajiado County was formed after the successful implementation of Kenya's Constitutional Referendum of 2010 which yielded the 47 counties in the Country. The county covers an approximated area of 21,900.9 square kilometers. Kajiado County Consists of a number of administrative districts are Kajiado Central, Isinya, Loitokitok, Magadi, Mashuru, Namanga and Ngong. Kajiado County is adjacent to the Capital City of Kenya, Nairobi. Kajiado's County neighbors include counties of Machakos, Makeni, Narok, Taita Taveta and Kiambu counties. Here are few towns found in the county – Ngong, Kitengela, Ongata Rongai, Kiserian, Kajiado, Loitokitok, Namanga, Isinya, Sultan Hamud and Ilbisil.

The county's main physical features include the beautiful plains, valleys ,volcanic hills, scarce vegetation in low altitude areas which increases with altitude and rain this combinations make Kajiado one of few natural selected wildlife habitat in Kenya Kajiado County like many counties in Kenya is mainly water stressed where community members sometimes find themselves covering an average of 10km in search of water

The county has a population growth rate of 5.5 percent; total population was estimated at 807,070 with 401,785 being females and 405,245 males as at the statistics of 2012. The population was projected to grow to 1 million by the year 2017. Economic growths and development is majorly depending on the main strengths and future investments in these sectors of Agriculture, Horticulture, Food Crop Farming, Livestock production, Dairy, Beef production, Hides and Skins, Poultry Farming and other Commercial exploits. Tourism is strength that Kajiado holds dear through the current progress with Amboseli

National Park, but not only stopping there for there is a lot of room for good investment in this area. The proximity to Nairobi and being rated as one of the richest county in Kenya makes Kajiado County a suitable area of study in the SME. The study was particularly focused on the determinants of access to finance by small and medium enterprises in Kajiado county further helping in determining whether there is a relationship between SMEs and wealth creation in Kajiado County.

1.3 Problem Statement

The role of SMEs in economic development ranges from employment creation, trade development, poverty alleviation leading to economic growth (Ayyagari et al., 2012). Even when their contribution to the economy have been well articulated, SMEs sectors growth continue to stagnate with very few transiting to large scale enterprises owing to inadequate financing inhibiting their operations and expansion (IFC, 2015). Financial constraints reduce firm growth by 10% for small firms but only 6% for large firms, confirming that small firms are more adversely affected by a lack of financial access (Beck et al., 2012).

Many SMEs are unable to access bank loans limiting their growth abilities. SMEs that have been able to access finance from banks have reported that the funds have not been enough due to banks loans rationing which makes some firms to get loans while others fail to get loans at all (IFC, 2015). Rweyemamu and Venter (2014) argue that limited access to finance inhibits SME performance and growth. Further, Kessy and Temu (2010) argue that “SMEs have very limited access to financial services from formal financial institutions in particular credits to meet their working and investment capital needs”.

IFC (2011b) reports that across the developing world Kenya included, many SMEs cite access to finance as a major constraint than any other. While SMEs make significant contributions to the Kenyan economy, the case for access to finance by SME have remained even worse. Despite this fact, previous studies on small enterprise development in Kenya (Mullei & Bokea, 2010; Coughlin & Ikiara, 2008; King 2016) largely focused on social, economic and administrative constraints that hinder development of the SMEs. Several related recent studies have acknowledged a number of determinants of access to finance: Fatoki and Assah (2011) noted that SMEs in South Africa have to own tangible assets, maintain proper business information and improve their management skills to accelerate access of debt financing from lenders. Colluzi et al. (2009) in a study on the significance of

firm characteristics on access to external finance found out that in the Euro area, young and small firms are significantly facing financial constraints.

Atanasova and Wilson (2014) conducted a study in UK and found that firm's total asset collateral is an essential determinant to access credit. Bougheas et al. (2006), noted that several firm characteristics including collateral, age, profitability, riskiness and size do influence accessibility of debt financing. An industrial sector in which a firm conducts business does play an influential role in determining accessibility to external capital markets. Canton et al., (2010) conducted a study in the European Union and found out that firm's age, firm-bank relationship, and banking sector degree of competition are the determinants of firm's perceived financial constraints in banking industry at the European Union level.

The survey study of determinants of finance access to SMEs in ECB and the European Commission resulted that firm's ownership structure and age are vital determinants of the perceived financial constraints regardless in which industry firm operate or the firm size Ferrando and Griesshaber (2011). Most of these studies evaluating firm's characteristics, lender characteristics and product features have agreed that there exists financing gap among SMEs in both the developed and developing countries. Most of the studies reviewed have been done in the developed countries whose financial sector is more developed in terms of channels of distribution, increased technology adoption making banks profile risks of customers with ease reducing the default risk, high saving culture economies hence mobilization of deposit for on lending is better, government policy on lending to SME as catalysts of development is better and strictly implemented etc. The SME characteristics are also quite different from a developing country like Kenya given that the high literacy level promotes record keeping, better borrowing and repayments culture, increased use of technology to management the businesses, country risks are low inhibiting SME failures.

Locally prior studies on access to finance by firms focused on different areas. Kamau, (2008) focused on the critical factors affecting accessibility of credit services by small scale tea farmers, Wanjohi & Mugure (2008) focused on the factors affecting growth of MSEs in Rural areas in Kenya while Wasonga, J.K (2008) did research on challenges in financing SMEs in Kenya. This research is unique in the sense that it focuses on the determinants of access to finance by SMEs in Kajiado County having the general recognition that there exists determinants of access to finance amongst the SMEs. This study was undertaken to fill this

research gap by establishing; what are the determinants of access to finance by SMEs in Kajiado County?

1.4 Specific Objectives

The general objective of the study was to analyze the determinants of access to finance by small and medium enterprises in Kajiado County, Kenya.

The study was guided by the following specific objectives:

- i). To determine the influence of firm characteristics on access to finance among the SMEs in Kajiado County.
- ii). To assess the influence of product features on access to finance among the SMEs in Kajiado County.
- iii). To evaluate the influence of lender characteristics on access to finance among the SMEs in Kajiado County.

1.5 Research Questions

- i). To what extent does a firm characteristic influence access to finance among the SMEs in Kajiado County?
- ii). To what extent do product features on access to finance among the SMEs in Kajiado County?
- iii). To what extent does a lender characteristic on access to finance among the SMEs in Kajiado County?

1.6 Significance of the Study

This study is useful to several stakeholders among them,

SME owners: They have found insights from the study on the borrowing firms characteristics considered by commercial banks while they are evaluating the qualifications for financial access to SMEs. This was enabled the SME owners operate within the benchmarks of commercial banks thus increasing opportunities for access to finance

Management of financial institutions: The information on product and service features is critical in enabling them tailor make or restructures their products and services targeting the SME sector to promote uptake

SME consultants could advise the SMEs on the overall determinants of access to finance ranging from borrowing characteristics, lenders characteristics as well as product features. They can get insight on the extent each variable affects the access to finance

The research paper have identified the areas for future research which can be picked up by other scholars and researchers for further research to enrich literature on SME and financial access

1.7 Scope of the Study

The target population of this study was owners of SMEs. The study covered Kajiado County with 9181 SMEs. The study was conducted in the year 2018

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes information from other researchers who have carried out their research in the same sphere of study on study leading to development of a conceptual framework.

2.2 Theoretical Review

This section covers the theories describing access to finance among them access to capital theory, credit rationing model, financial inclusion theory, adverse selection theory.

2.2.1 Access to Capital Theory

The access to capital theory was founded on the 1972 Bolton reports outlined issues underlying the concept of finance gap on small firms. The theory rested on two components-knowledge gap-debt is restricted due to lack of awareness of appropriate sources, advantages and disadvantages of finance; and supply-gap-unavailability of funds or cost of debt for larger enterprises exceeds the cost of debt to small enterprises) that: there are a set of difficulties which face a small company. Small companies are hit harder to taxation, face higher investigation costs for loans, and are generally less informed of sources of finance and less able to satisfy loan requirements. Small firms have limited access to capital and money markets and therefore suffer from chronic undercapitalization. As the result; they are likely to have excessive resource to expensive funds which acts as a brake on their economic development. This theory has been used by other scholars like Fatoki and Assah (2011), Colluzi et al. (2009), Atanasova and Wilson (2014) in their studies on SME access to credit. The theory has been used to anchor the borrowing firms' characteristic as a variable in this study. This theory is weak in that it fails to consider the lender characteristics and product features as part of determinants of SME access to credit. The relevance of this theory to this study is that borrowing firm' characteristics among them; size, collateral, age as well as risk-taking propensity determines access to credit among the SMEs. The theory e useful in this study in that it provided insights on what was considered as access to finance by both the borrower and the lender and what is acceptable by all.

2.2.2 The credit-rationing model

The credit-rationing model emanated from the revolutionary work of Stiglitz and Weiss (1981). According to Stiglitz and Weiss (1981) lenders seek to impose quantitative restrictions on the amount of debt the borrower can obtain, so-called "equilibrium quantity rationing of credit", because higher interest rates may give a further stimulus to adverse selection and risk taking. The model is based on imperfect credit markets characterized by information asymmetry, which makes it too costly for banks to obtain accurate information on the borrowers and to monitor the actions of the borrowers.

The model assumes the existence of many banks that seek to maximize their profits through their choice of interest and collateral (thereby reducing the probability of default on their loans) and many potential borrowers who seek to maximize their profits through the choice of projects (Okurut, Olalekan and Mangadi, 2012). The relevance of this theory in this study is that lenders characteristics among them; cost of funds, cost of risks and cost of holding funds, administration costs of the loan and the lending relationship with the SMES determines access to credit among the SMEs. This theory have been used by other scholars like Omar, (2008), Rukwaro (2001), and Mokogi (2003), Calice (2012), Alhassan and Sakara (2014) in their studies on SME access to credit. The theory has been used to anchor the product features as a variable in this study. This theory is weak in that it fails to consider the borrowing firm's characteristics as part of determinants of SME access to credit. Lending institutions structure their financial products based on the risk profile, associated costs as well as the cost of administration to the target group. This theory is critical in this study as it provided explanations behind financial institutions considerations while lending with some customers getting the credit requested in full, others getting a certain percentage of the applied amount while others getting a decline of their applications.

2.2.3 Adverse Selection Theory

The adverse selection theory of credit markets emanated from the works of Stiglitz and Weiss (1981). The theory is based on two main assumptions: that lenders cannot distinguish between borrowers of different degrees of risk, and that loan contracts are subject to limited liability (i.e, if project returns are less than debt obligations, the borrower bears no responsibility to pay out of pocket). The analysis is restricted to involuntary default, i.e., it assumes that borrowers repay loans when they have the means to do so (Ghosh et al., 2000). Helsen and Chmelar (2014) points out that the adverse selection quality of the credit market

becomes apparent when looking at the negative effects of allowing interest rates to rise under market influence. Rising interest rates will reduce the quality of the pool of borrowers by pushing out low-risk, low-yield borrowers and attracting riskier borrowers instead.

With relation to SMEs, the adverse selection problem arises due to incomplete information regarding the underlying quality of the project and the management of the small firm. Small business finance market is characterized by risk and uncertainty regarding future conditions and information is distributed asymmetrically between the bank and the firm (Stiglitz and Weiss, 1981). Further, the problem of information asymmetry and the resulting adverse selection problem is further compounded by certain trends like competition, age of business, experience of the owner, assets ownership, record keeping, entrepreneurial training, level of education location of business, size of the business as well as business management skills (Lean and Tucker, 2001). This theory was used by the borrowing firm characteristics variable is anchored on this theory.

The relevance of this theory in this study is that lenders characteristics among them; cost of funds, cost of risks and cost of holding funds, administration costs of the loan and the lending relationship with the SMES determines access to credit among the SMEs. This theory have been used by other scholars like Haron et al (2013), Langat (2013, Sun et al (2013),(Ayyagari et al., 2012), Olomi, (2011) in their studies on SME access to credit. The theory have been used to anchor the lenders' characteristic as a variable in this study. This theory is weak in that it fails to consider the borrowing firm's characteristics as part of determinants of SME access to credit. This theory provided insights on the various considerations given by lending institutions while they are structuring their financial products such as the risk profile, associated costs as well as the cost of administration to the target group.

2.3 Empirical Literature

This section covers various literature from other scholars on the determinants of access to finance among the SMEs like the firm size, age of the firm, firm/owner's credit rating and availability of collateral/guarantees.

2.3.1 The influence of borrowing firms' characteristics on access to finance

SMEs have varying characteristics that are fundamental determinants of access to finance. Among the various characteristics include size, firm's age, and availability of collateral and firms or owners credit rating. On the Firm's size, commercial banks are likely to charge higher differential interest rates to SMEs than to large customers. It is generally believed that

smaller firms are more prone to insolvency than large firms because they are usually less diversified on the production and distributions side and are more likely to face financing constraints (Behr and Guttler 2007). This notion is taken into consideration by banks that do not grant credit to high-risk default risk borrowers.

In an empirical study of German SMEs, Harhoff and Korting (1998) observed a negative relationship between firm size and interest rates, indicating that banks may use firm size as a proxy for credit risk. Lehmann and Neuberger (2001) and D'Auria et al. (1999) obtained similar results for Italy and Germany. The reputational effects and greater negotiating power associated with larger firms could help in explaining why they obtain longer-term loans, pay lower interest rates and provide less collateral than their smaller counterparts. This study therefore sought to determine if the effect of SME firm size on microfinance institution financing and the consequent effect on SME growth.

Ngoc et al. (2012) found that it is often difficult and expensive for young SMEs to access bank financing, due in large part to information asymmetry between the banks and firms. Bougheas et al. (2010) argue that young firms are more prone to failure than older ones. Several related studies have acknowledged a number of determinants of access to finance. Fatoki and Assah (2011) suggested SMEs have to own tangible assets, maintain proper business information and improve their management skills to accelerate access of debt financing from lenders. Colluzi et al. (2009) found out that young and small firms are significantly facing financial constraints in their study on the significance of firm characteristics on access to external finance. Atanasova and Wilson (2014) proposed that firm's total asset collateral is an essential determinant to access credit. Beck et al. (2006) uncover that countries with higher levels of financial intermediary development, more efficient legal systems, higher GDP-per-capita and more liquid stock market report lower financing obstacles.

The study conducted UK manufacturing firm between 1989 and 1999 by Bougheas et al. (2006), established several firm characteristics including collateral, age, profitability, riskiness and size do influence accessibility of debt financing. Canton et al., (2010) found out that firm's age, firm-bank relationship, and banking sector degree of competition are the determinants of firm's perceived financial constraints in banking industry in countries in the European Union. A study of determinants of finance access to SMEs in ECB and the

European Commission by Ferrando and Griesshaber (2011) showed that firm's ownership structure and age are vital determinants of the perceived financial constraints regardless in which industry firm operate or the firm size. Evidence from Harrison and McMillan (2003) showed that listed firms and foreign owned firms encounter financial constraints compared to unlisted and locally firms. In addition, industrial sector in which a firm conducts business does play an influential role in determining accessibility to external capital markets (Hall et al., 2000). Sectors which require huge capital intensive to operate such as manufacturing and construction seems to attract investors/lenders to extend capital financing.

Extant literature has shown the link between firm size to the ability of firms to access finance. For example, Honhyan (2010) found that larger firms tend to be more diversified and fail less often, so size can be an inverse proxy for the probability of bankruptcy. Cassar (2012) argues that it may be relatively more costly for smaller firms to resolve information asymmetries with debt providers. Consequently, smaller firms may be offered less debt capital. In addition, transaction costs are typically a function of scale and may be higher for smaller firms. It is also possible that small firms have fewer opportunities to raise capital because capital markets are out of reach due to their size

With regards the Age of the SME, conventional wisdom in contemporary corporate finance literature argues that younger SMEs are more likely to be less transparent or information opaque. Hyytinen and Pajarinen (2008) find that a closely related proxy for informational opacity is a firm's age. Information opaque firms are likely to have poor financial records. As noted earlier, it is expected that a firm that has good financial records will be able to convince a bank of its ability to repay a loan. (Stiglitz and Weiss's, 1981) The absence of formal financial records thus increases the credit risk of a firm. In the context of Sub-Saharan Africa, Lefilleur (2009) advanced a number of reasons for the acute information asymmetry between young SMEs and their bankers. First, most SMEs evolve in the informal sector and are therefore not in a position to give banks the minimum information they generally require (e.g. contact details, legal documents, financial statements, etc.). Second, for SMEs evolving in the formal sector, the excessively high level of accounting information required by international/regional financial reporting standards, coupled with the lack of independent, competent and credible accounting firms, have an impact on the quality of information transmitted to banks. Moreover, some entrepreneurs knowingly disseminate very limited or even erroneous information in order to evade taxes. Finally, there are usually no tools that would allow banks to learn about the payment behaviors of their new clients. Credit

referencing agencies either do not exist or are ineffective. In this context, banks use informal communication to make up for the shortfall in financial information.

Given this background, banks are therefore likely to charge higher interest rates to younger and informationally opaque SMEs and lower rates to older and more established large firms. Stiglitz and Weiss's (1981) model show that with a given creditworthiness, relatively young firms seeking external finance are likely to be more credit constrained than a pool of more established firms. Diamond (1989) also shows that the joint influence of adverse selection and moral hazard reduces the ability of a recent entrant to raise external finance at a reasonable cost. These problems are most severe when the firm is young (i.e. a start-up) and has only a short track record, because then a severe enough adverse selection (leading to high interest rates) undermines the firm's incentives to behave diligently (e.g. to choose a low risk investment project) as shown by Stiglitz and Weiss (1981). If the firm survives to the next period despite its risky investment decision, adverse selection is less of a problem, for those that survive are, on the average, of better quality. This decreases the interest rates that the financiers demand and thus increases the firm's incentive to choose less risky projects over time. This study sought to determine the effect of SME age/opacity on microfinance institution financing and the subsequent effect on SME growth.

Regarding collateral, banks are likely to charge higher interest rates for SME loan applicants that cannot meet the bank's collateral requirements. On a theoretical basis, the use and strength of personal or business collateral supplied by the borrower should decrease the lender's risk and hence, improve financing conditions (Bruns and Fletcher 2008; St-Pierre and Bahri 2011). The bank may insist on a personal commitment from the owner-manager in addition to company guarantees, ensuring alignment of interests between bank and borrower and reducing monitoring costs for the bank (Jimenez and Saurina 2004). Under these circumstances, the availability of collateral and/or guarantee should reduce interest rates.

Secured loans tend to carry lower loss given default and will lead to lower risk premiums. This is the "loss mitigation" effect (Berger et al. 2011). However, some studies have also found that the use of collateral is a signal of high probability of default and is not associated with reduced risk premium (see St-Pierre and Bahri 2011). This reflects the argument that banks use collateral to control presumed risk, because young, small, more indebted and less solvent firms are more likely to be asked to guarantee loans. The finding suggests that the dominant reason collateral banks require collateral is to help detect riskier borrowers ("lender

selection" effect). This study sought to determine the effect of SME collateral guarantees on microfinance institution financing and the subsequent effect on SME growth. From the studies reviewed, there seems to be no universally accepted characteristics of the SME firms and hence the lenders have no reference document on such characteristics. This thus leaves a gap and this study sought to fill it by considering the firms' characteristics and how it relates to access to finance among SMEs in Kenya

2.3.2 The influence of lender characteristics on access to finance

With regard to the influence of lender characteristics on access to finance, the lenders consider varying factors while extending credit to SMES. Among these factors include; cost of funds, cost of risks and cost of holding funds, administration costs of the loan and the lending relationship with the SMES. For lenders, the pricing of loans to businesses can more closely be explained in terms of the cost, revenue and risk elements associated with lending activity. The profitability of any venture is directly determined by two major components: cost and revenue. The revenue components of lending include interest income and other non-interest fees. Interest income is interest earned on loans and other earning assets. The importance of interest income to profitability is dependent on the relative proportion of earning assets (compared to non-earning assets) in a bank's total asset portfolio (Gup and Walter 1989). Apart from interest income, banks also earn revenue from fees charged on loans (Churchill and Lewis 1986) and similar financial services such as hire purchase, factoring and other asset-based lending.

The BBA (2011) has identified three key drivers behind how banks price lending to SMEs: (1) cost of funds, (2) cost of risk and capital, and (3) cost of administration. The literature shows that banks are likely to charge higher risk premiums on SME loans because of higher cost of funds, cost of risk and costs of loan administration.

On the cost of the funds, the risk premium on loans is usually affected by the cost of mobilizing liquidity and accessing capital. According to the loanable funds theory, in order to lend money to businesses, banks need to attract funds from depositors by paying them interest. They also need to aim to hold deposits for similar lengths of time as the term of loans financed. Hubbard et al. (2002) in a recent study investigated the effects of banks' financial condition on the borrowers' risk premium after controlling for borrower risk and information costs. They find that capital-constrained banks charge higher loan rates than well capitalized banks and that this cost difference is especially associated with borrowers for

which 'information costs' and 'incentive problems' are most important. Their result is also consistent with models that allow banks to charge a risk premium to borrowers facing switching costs in bank-borrower relationships as well as models of the bank-lending channel of monetary transmission. The former concept refers to borrowers that switch from one bank to the other in search of better credit relationships and have to bear the costs of building credit reputation and transferring proprietary information to the new lender. The latter concept is explained below under the credit channel of monetary policy.

On the cost of risk and cost of holding capital, costs can also be reckoned in terms of the risks associated with bank lending such as funding liquidity, credit, and capital risks. All banks face the risk of maturity transformation of assets and liabilities. They borrow short-term funds (liquid liabilities) to finance long-term (illiquid) loans so that there is a disconnection between their short-term funding and their expected future cash flows. Banks are therefore exposed to 'funding liquidity risk' (Brunnermeier et al. 2009) and this affects their profitability and long-run survival. For example, if banks face unexpected withdrawal of deposits on a large scale and are unable to control the resulting cash shortage by borrowing from money markets, they may be forced into early liquidation of their assets (i.e. fire sale) in order to realize cash, thus lowering their book value. The situation becomes worse if contagion occurs: the entire banking system will become vulnerable to destructive bank runs (Diamond and Dybvig 1983) and confidence in the system will disappear quickly as the entire credit markets cease to function.

Banks also face credit risk or the risk that a borrower or counterparty will be unable to repay a loan or interest due on the loan on the due date. Mainstream theory suggests that increased exposure to credit risk is normally associated with lower bank profitability (e.g. Athanasoglou et al. 2008). However, in Post-Keynesian economics, banks are equally prepared to face higher credit risk with large firms because lending to them is more profitable, while small borrowers are likely to have a higher possibility of deviation from their expected rate of return than large firms due to uncertainty and other factors such as competition and macroeconomic conditions (Basu 2003). In any case, banks are able to improve credit risk through effective screening and monitoring of borrowers. There is some evidence that large bank institutions are less likely to lend to relatively young and informationally opaque entities because they lack good credit reputation and hence could pose serious credit risks to lenders (Haynes et al. 1999; Berger and Udell 2006). On the

liability side, banks could be significantly dependent on a particular source of funding, e.g. borrowing heavily from the wholesale interbank markets or through securitizations.

Now turning to capital risk, banks are highly levered financial institutions and the volume of their businesses is in multiples of their regulatory capital. According to the Basel capital accord, banks are required to keep about 8 % of their assets in capital (CAR). Banks are required to hold adequate capital to cushion the risks of loan losses and insulate depositors by providing a first line of reserve to absorb such losses. However, increased nominal capital requirements often results in banks taking on extra risks on their portfolios, and this could, under some circumstances, increase the probability of bank failure, even if it improves the bank's franchise value.

Administration costs refer to the costs directly associated with the loan administration and monitoring function, e.g. salaries of loan officers and other support staff, benefits and other loan-related office expenses such as telephone bills, postage, photocopying, transportation, etc. (Churchill and Lewis 1986: 197). Smaller loan facilities tend to have a relatively higher administrative cost per unit of currency lent than larger facilities, and not all of that cost can be recovered through fees. So small loans tend to bear higher margins, even if the risk is comparable with larger lending. Because of their size, large banks are likely to incur higher operating and monitoring costs for smaller loans than for larger loans due to diseconomies of scale. This suggests that most large banks are likely to lend predominantly to larger corporates that seek out larger loans, and hence find relationship lending to small local customers less cost effective and profitable.

Banking relationships also seem to alleviate credit rationing because banks can more easily monitor and access information regarding borrowers' history and actions (Petersen and Rajan, 1994). Diamond (1991) argues that the borrowers that suffer from the most severe information asymmetries (e.g., small firms with less established repayment histories and/or borrowers with poor credit ratings) have the most to gain from relationship lending. Previous empirical studies on relationship lending found that relationship duration has impact on loan rate, the probability of using collateral and credit availability (Elyasiani and Goldberg, 2004). Petersen and Rajan (1994) examine the effect relationship lending on the availability and cost of funds, using a sample of small privately held firms in US.

They rely on the fact that credit constraint firm are willing to pay higher price to raise additional funds and define as constrained in the bank loan market those firms which borrow

from non-institutional lenders at abnormally higher rate. They use the length of business relationship, measured in years, number of financial services and number of lenders as a measurement of relationship. They found that longer banking relationships, number of financial services purchased from the lending bank and number of bank relationships enhances the availability of fund. They also found a reduction of the interest rate among those enterprises that work with fewer institutions, although they didn't find a significant link between the duration and scope of the relationship and the price of debt.

Using the same data base Berger and Udell (1995) found that for firms which maintain long relationship with banks the cost of borrowing on previously negotiated credit lines is smaller and collateral is less frequently required. Relationship lending involves the acquisition of soft information by the lender about the prospective borrower through one-to-one personal contact over time in which case the loan officer uses the soft information obtained to make lending decisions. The length of borrower-lender relationships can influence the setting of loan contract terms. Boot and Thakor (1994) show that when lenders and borrowers engage in repeated interactions through time, they are able to build trust and credibility, which help to reduce moral hazard problems. Banks that have gathered proprietary information over their clients often use this information in refining contract terms offered to borrowers.

Berger and Udell (1995) in their study of the role of relationships in determining both price and non-price contract terms of bank lines of credit extended to firms find that longer bank-borrower relationships reduce the interest rates paid by borrowers and the chances that they will have to pledge collateral. To the extent that this occurs, longer duration of banking relationships relaxes the terms of a loan, ameliorates credit constraints and hence raises firm value. Several studies have also found that relationship driven banks are able to benefit from the inter-temporal smoothing of contract terms—e.g. by sacrificing short-term for long-term gains when they offer subsidized credit to growing enterprises (Sharpe 1990; Rajan 1992; Petersen and Rajan 1994, 1995; Berger and Udell 1995; Berlin and Mester 1998; Boot 2000). In other words, banks are likely to charge younger firms lower interest rates at the beginning of their banking relationship with the hope of making higher returns in later years when their business has become established. All these results are consistent with theoretical arguments that relationship lending generates valuable information about borrower quality.

Since relationship lending involves a personal touch with local customers, relationship-driven banks by virtue of their proximity to the local customers are arguably more efficient than

their non-relationship banks in delegated monitoring and enforcement of loan contracts (Diamond 1984; Nakamura 1994). This in turn improves loan quality, though this may not necessarily improve lending profitability because small loans are also associated with higher costs of lending as literature suggests. In addition, through multiple interactions with the customer, smaller banks are able to appraise their clients' investments and provide support services (e.g. business planning, accounting and tax planning solutions etc.) in order to add real value to the client and ensure better cash flow.

The interest rate a bank charges its business customers is likely to be a decreasing function of the applicant firm's/owner's credit rating. Credit risk is related to the firm's financial standing and its ability to meet its financial obligations. According to Bruns and Fletcher (2008), the lender's probability of advancing credit to the borrower could be dependent on both past performance and current financial standing of the borrower. Past performance measured by profit and losses in the past increases or decreases the financial strength of the firm. In addition, the number of business credit obligations on which the firm has been delinquent in the past is a negative function of the quantity and cost of credit extended to the firm. Current financial position is mainly an indicator of whether or not the borrower is solid enough to repay the loan should the individual project that money is sought for fail. Therefore, the effect of financial standing on the credit decision is similar to that of collateral a strong financial position indicates that the borrower is able to repay the loan irrespective of the outcome of the project.

Machauer and Weber (1998) confirm in their study a highly significant impact of credit rating on loan prices, with a better rating lowering the cost of capital. This study sought to determine the effect of SME firm owner's credit rating on access to finance and the subsequent effect on SME growth. From the studies reviewed, there seems to be no universally agreed lender characteristics and hence various lenders have differing characteristics based on the risk appetite, customer segmentation, and technology to profile customer risks as well as their mission statement. This again varies from country to country as well as from lender to lender. This thus leaves a gap and aimed at considering the lenders characteristics and how it relates to access to finance among SMEs in Kenya

2.3.3 The influence of product features on access to finance

The credit product features have been found in various research papers to influence access to credit. Credit product features include; grace period, loan size , interest rates, loan application

fee, repayment schedule, loan term, associated costs, collateral requirements or guarantees as well as penalties on default. In his study on uptake of agricultural loans in Bangladesh, Meyer (2002) argues that firms with loan repayment schedules matching expected cash flows to the time of harvest demonstrated high credit uptake owing to the fact that the loan repayments are tagged against the time of cash flow generation. Further Dalla Pellegrina (2011) states that compared to (flexible) loans of informal money lenders and conventional banks, standard loans of MFIs are less suitable to finance businesses with sporadic cash flows given that in some months the business have low sales. Weber and Musshoff (2012) find in their MFI analysis in Tanzania that standard loans might be the reason why agricultural firms have lower credit access probabilities than nonagricultural firms due to poorly structured product features. The absence of adequate loan products for agricultural firms is, hence, considered to be one reason why the penetration of agricultural clients by MFIs is still low (Christen and Pearce, 2005; Lianto, 2007).

By analyzing the effect of a two-month grace period on loan delinquencies of non-agricultural borrowers, Field et al. (2010) find that for loan products with grace product among some customers there was a higher loan uptake given that the grace period was able to compensate cash-flow induced liquidity shortfalls. Higher credit uptake was enhanced by the fact that the borrower would be cushioned against loan delinquency in case cash flow shortfall. Similar findings were arrived at by Czura et al. (2011) who established that borrowers whose loans had pre-defined grace periods during cash flow with possibility of postponing up to two repayment installments at any time three months after loan disbursement could borrow more than in loan products with grace period. From the various studies reviewed, there seems to be no universally accepted SME product features among various lenders globally and many lenders consider varying factors during product development phase. The features vary from one SME sector to another, one lender to another, country to another etc. This was the knowledge gap which this sought to fill it by considering the product features and how it relates to access to finance among SMEs in Kenya.

2.4 Literature Summary

From the above literature review, it is evident that SME continue to play a critical role in economic development offering about 75% of the general employment and contributing about 18% of GDP in the Kenyan economy. The determinants of access to finance by SMEs continue to impede growth of SMEs with many shying away from SME funding given the

credit risk occasioned primarily by blanketing SME sector as a high risk making lack of access to credit remains a major constraint for the entrepreneurs in African countries.

Unlike larger firms, SMEs rarely have access to public equity markets in most countries.

Therefore, entrepreneurs do not have access to the public debt but instead, they turn to banks and the credit market (trade credit, money lenders, informal lending from family/friends, and rural finance) for both short- and long-term credit. Access to external resources is needed to ensure flexibility in resource allocation and reduce the impact of cash flow problems. SMEs with access to funding are able to build up inventories to avoid stocking out during crises, while the availability of credit increases the growth potential of the surviving firms during periods of macroeconomic instability. SME firms without access to funding are more vulnerable to external shocks because credit smooth out consumption in the face of varying incomes, provides income for investment and improves ability to cope with unexpected expenditure shocks. Poor product structure, firm characteristics as well as lender characteristics are among identified determinants of SMEs access to credit

Various research papers reviewed in this study has shown that access to credit has a positive impact on growth at both a household level and at a national level. Among the papers reviewed, it is clear that SMEs in general face credit access constraints given that there are varying factors that affect SMEs access to credit. Studies on credit access seem to concentrate on the development countries leaving the developing countries like Kenya despite the role played by SME in Kenyan economy. This leaves a knowledge gap as far as determinants of access to finance by Kenyan SMEs is concerned. The existing dearth of literature therefore necessitates this study to bridge this knowledge gap by assessing the determinants of finance access among SMEs in Kenya.

2.5 Conceptual Framework

The conceptual framework refers to a schematic diagram summarizing the relationships between the dependent and the independent variables.

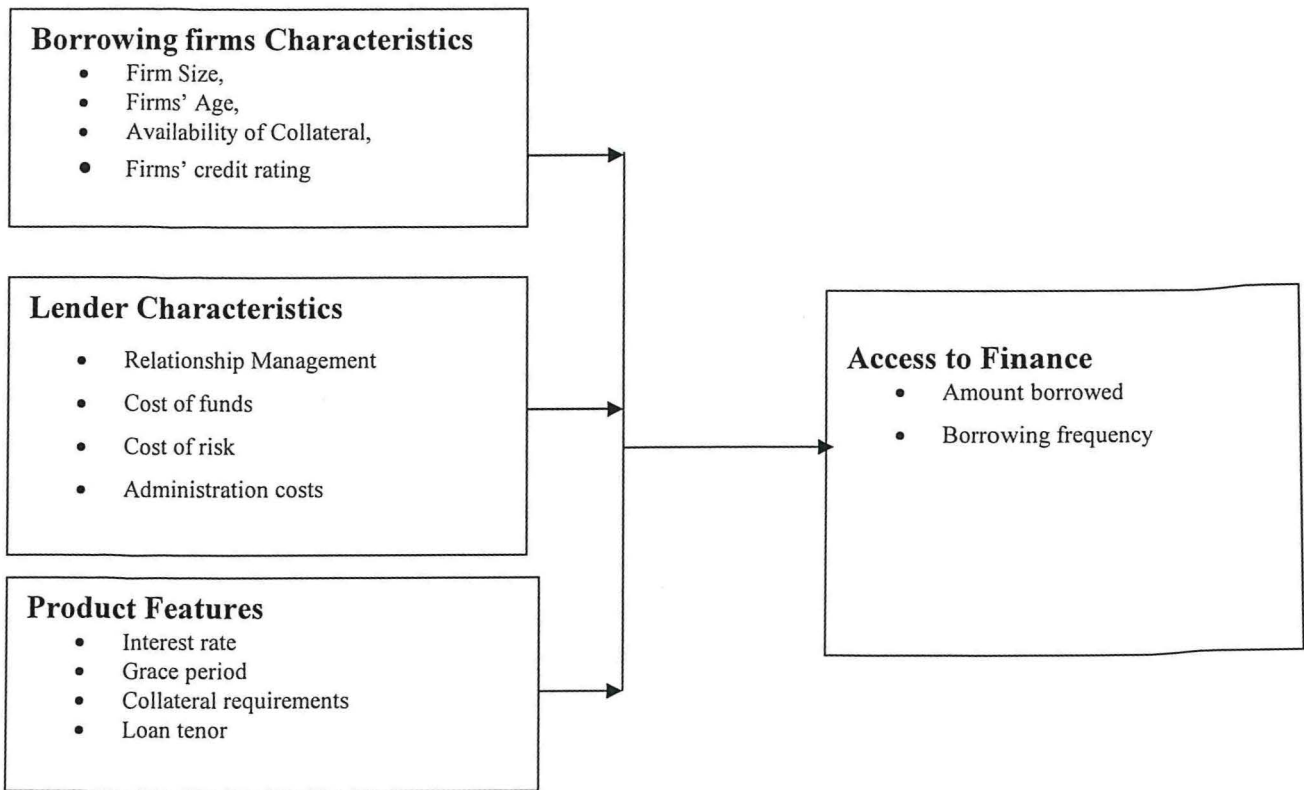


Figure 2.1 Conceptual Framework (Author, 2019)

Table 2.1: Operationalization of Variables

Nature of Variable	Variable Indicator	Unit of Measurement	Data Collection Method	Type of Scale	Type of Analysis	Level of Analysis
Dependent	Amount Annual Borrowing Frequency	Five point likert scale	Questionnaire	Ordinal for primary data	Quantitative	Frequencies Descriptive analysis Inferential analysis
Independent	Firm Size, Firms' Age, Availability of Collateral, Firms' credit rating	Five point likert scale	Questionnaire	Ordinal for primary data	Quantitative	Frequencies Descriptive analysis Inferential analysis
Independent	Relationship Management Cost of funds Cost of risk Administration costs Re	Five point likert scale	Questionnaire	Ordinal for primary data	Quantitative	Frequencies Descriptive analysis Inferential analysis
Independent	Interest rate Grace period Collateral requirements Loan tenor	Five point likert scale	Questionnaire	Ordinal for primary data	Quantitative	Frequencies Descriptive analysis Inferential analysis

Source: (Authors construct)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that was used in the research study. It describes the type of research design, the population of the study, target population, sample size, sampling design, research instrument, reliability and validity tests and data analysis.

3.2 Research Design

The study used a descriptive research design to establish determinants of access to finance by small and medium enterprises in Kajiado County, Kenya in year 2017 covering years 2012 to 2018. Descriptive research design has been used in other studies by Saeed (2010) who used it to study supply chain as well as risk management concepts on the oil industry and Moodley (2007) who used it to investigate the impact of employee satisfaction levels on customer service in the service utility at Telkom South Africa.

3.3 Target Population

Population refers to a universal set or a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. As shown in table 3.1, the population in this study was comprised of the owners and managers of the 9,181 SMEs (Kajiado County licensed SMEs database, 2016). The population is heterogeneous in nature and hence stratified sampling was done based on nature of business to ensure everyone has equal chance to be included in the final sample (Mugenda and Mugenda, 2003).

Table 3.1: Target Population

Category	Population	Percentage of Total
Food and Grocery	2206	24%
Clothing and Textile	1233	13%
Technology and Electronics	3107	34%
Other services	2635	29%
Total	9181	100%

Source (Kajiado County SME database, 2016)

3.4 Sampling Design

A sample is a subset of the population to be studied while sampling refers to the selection of a subset of individuals from within a population to yield some knowledge about the whole population, especially for the purposes of making predictions based on statistical inference (Scott & Wild, 2001; Black, 2004; 2011). Its main advantages are cost, speed, accuracy and quality of the data. The sampling process comprises of defining the population, sampling frame, sampling method, sample size and sample plan (Lavrakas, 2008). The target population is less than 10,000 (Kajiado County, 2018) hence regarded as a small population (Mugenda and Mugenda, 2005).

To determine an appropriate sample from a small population, this study adopted the formula recommended by Mugenda and Mugenda (2005)

$$n = \frac{Z^2 * p * (1-p)}{d^2} \dots \dots \dots \text{Equation (i)}$$

Defined as;

n = sample size of a big population i.e more than 10,000,

Z=Normal distribution Z value score, (1.96), p=Proportion of units in the sample size possessing the variables under study, where for this study it is set at 50% (0.5), d= Precision level desired for the study (0.05), N= 2,561 subjects. Based on the equation (i), the sample of a big population size can be established as; -

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384$$

With a small population of less than 10,000 (KNBS, 2015) like the one in this study, the required sample size will be smaller requiring the researcher to recalculate the final sample estimate, now using equation (ii) below (Mugenda and Mugenda ,2003)

$$n_d = \frac{n}{1 + \frac{(n-1)}{N}} \dots \dots \dots \text{Equation (ii)}$$

Where:

n_d = the desired sample size (when the population is less than 10,000)

n = the desired sample size (when the population is more than 10,000)

N = the estimate of the population size

The reduced sample size is hence established as; $384/(1+((384-1)/9181)) = 368$

The target sample size of 368 constituting 95% of the target population is adequate for research based on the Creswell (2007) recommendation who asserted that a sample of at least 10% to 15% is able to lead to meaningful generalizations about the general characteristics of a study population. The sample size is distributed within five strata among them; Food and Grocery, Clothing and Textile, Technology and Electronics and Other services to ensure that sample distribution is unbiased and balanced. The detailed sample distribution is as indicated in table 3.2.

Table 3.2: Sample Size

Category	Sample Size	Percentage of Total
Food and Grocery	88	24%
Clothing and Textile	49	13%
Technology and Electronics	125	34%
Other services	106	29%
Total	368	100%

Source: Kajiado County Licensed SMEs Database

3.5 Sampling Frame

Gill and Johnson (2002) describe a sampling frame as a list of members of the research population from which a random sample may be drawn. Mugenda and Mugenda (2003) and Kothari (2004) define the term sampling frame as a list that contains the names of all the elements in a universe. Polit and Beck (2003) refer to a sampling frame as the technical name for the list of the elements from which the sample is chosen from. In this study the sampling frame were the licensed SMEs' database maintained by the Kajiado County as at 31st December 2017. The database contained the names of the SMEs, location as well as contacts which is important in accessing the respondents

3.6 Data Collection

The researcher employed the services of research assistants who administered the structured open and closed ended questionnaires as the primary data collection instrument for a period of 21 days within which the questionnaires were distributed and collected back. Bryman (1995) puts it that structured questionnaires translates the research objectives into specific questions and answers for each question will provide the data for answering the research questions. The questionnaires were divided into sections representing the various variables adopted for the study with each section of the questionnaire targeting to address the specific objectives of the study. A drop and pick later strategy was employed for the questionnaire but later followed up with a well-spaced phone calls to enhance response rate.

The advantages of a questionnaire over other instruments include, information can be collected from large samples, no opportunity for bias since it is presented in paper form, confidentiality is upheld, and it saves on time. In view of the advantages and the need to gather more information a combination of open and closed ended questions were administered to the employees and owners of the SMEs. The questionnaires contained five sections detailing a back-ground section which details the demographic characteristics of the respondents and a section for every objective of the study which contains research questions to capture information for testing the hypothesis. The sections of the questionnaire covering the objectives was important in ensuring that the content validity for every objective is properly captured, detailed and checked prior to testing of the questionnaire during pilot.

3.7 Pilot Test

Kothari (2011), states that it is desirable to pre-test the data collection instruments before they are finally used for the study purposes. This is a pre-test done prior to the commencement of data collection to determine the accuracy of the research instruments (the questionnaires) that was applied in obtaining desired information (Cooper & Schindler, 2011). Pre-testing the instrumentation and the entire research design permits refinement before the commencement of the study. In particular, pilot testing helps to detect weaknesses in design and instrumentation and provide proxy data for selection of a sample. A pilot test was done on the questionnaire to ensure consistence, clarity and free from ambiguity by all. The feedback from the pilot study was used to improve the quality of instrumentation that was subsequently used during data collection and analysis.

Reliability and validity tests were done in the pilot study to ensure the questionnaire is of high quality. Reliability refers to the repeatability, stability or internal consistency of a questionnaire (Jack & Clarke, 1998). Cronbach's alpha coefficient set at 0.7 was used to test the reliability of the measures in the questionnaire (Cronbach, 1951). For research purposes, tests with a reliability score of 0.7 and above are accepted as reliable. In this study, the questionnaire was tested on 10% of the sample as recommended by Sekaran (2003) and Kothari (2004) who state that 5% to 10% of the sample can be adequate for running reliability tests. Reliability was tested by use of 20 questionnaires which were piloted with randomly selected respondents. The 20 questionnaires were then coded and input into SPSS for running the Cronbach reliability test. The closer the Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability.

Validity refers to whether a questionnaire is measuring what it purports to measure (Bryman & Cramer 1997). It describes validity as the degree of congruence between the explanations of the phenomena and the realities of the world. While absolute validity is difficult to establish, demonstrating the validity of a developing measure is very important in research (Bowling, 1997). This study used both construct validity and content validity. For construct validity, the questionnaire were divided into several sections to ensure that each section assessed information for a specific objective, and also ensured that the same closely ties to the conceptual framework for this study.

3.8 Data Analysis and Presentation

This included the coding of data for ease of summarize the essential features and relationships of data in order to facilitate data analysis. Before processing the responses, the completed questionnaires were edited for completeness and consistency. SPSS was used to generate descriptive and inferential statistics. Measures of central tendency among them means, frequencies, and percentages were used to describe the data patterns. The data was presented in form of pie charts as well as tables. Inferential statistics among them correlation coefficients, coefficients of determinations, ANOVA results were generated to describe the strengths of relationships as well as direction of the relationships between the variables and how significant they are using the P values compared with the confidence level of 5%. To analyze the data, linear regression models in the form described in equation 3.1 to 3.4 were used.

$$Y = \beta_0 + \beta_1 X_1 + e \dots \dots \dots (Equation 3.1)$$

$$Y = \beta_0 + \beta_2 X_2 + e \dots \dots \dots (Equation 3.2)$$

$$Y = \beta_0 + \beta_3 X_3 + e \dots \dots \dots (Equation 3.3)$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \dots \dots \dots (Equation 3.4)$$

Where:

- i. Y = the value of the dependent variable, Access to finance
- ii. $\{\beta_i; i=1,2,3\}$ = The coefficients for the various independent variables
- iii. X_i = Various independent various variables

Specifically: -

X1 = Borrowing Firms' Characteristics

X2 = Lender Characteristics

X3 = Product Features

3.9 Research Quality

Ethical considerations in research are essential because they discourage fabrication or falsifying data, and thus encourage the quest of knowledge and truth (Gregory, 2003). This research was committed to the autonomy of the research participants while respecting their dignity to ensure that they are just not used simply as a means of achieving the research objectives. Measures such as notification of participants in advance during the research process further were ensured to mitigate possible psychological or social risks. All respondents were issued with a letter of informed consent and signed to indicate willingness to take part in the study. The respondents were further informed that participation is voluntary, and their identities will remain anonymous. To ensure research quality in this study, the questionnaire was validated by discussing it with two randomly selected respondents. The views were then evaluated and incorporated to enhance construct validity of the questionnaire. Validity test was done on the research instrument using a method of Principal Component Analysis (PCA) to extract the factors. The criteria, as suggested by Hair *et al.*, (2010), was that factor loadings greater than 0.40 were considered statistically significant for studies with sample size greater than 200. Consequently, in this study, 0.40 was used as the cut- off for loadings since the sample size of the study is close to 10000. The higher the factor

loadings are, the greater they are related to the variable. Based on the pilot results shown on table 3.3, the research instrument was reliable given the reliability coefficient was above 0.7

Table 3.3 Reliability Test Result

Item	Cronbach Coefficient
Firm characteristics	0.823
Product Features	0.728
Lender characteristics	0.845
Average	0.799

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results and findings of this study as set out in the research objectives and research methodology. The purpose of this study was to establish the determinants of access to finance by small and medium enterprises in Kajiado County. The first section of this chapter covers demographic profiles of the respondents. The second section provides analysis on the three objectives of this study

4.2 Demographic Characteristics

The demographic characteristics of the respondents were age, education level, years of operation.

4.2.1 Response Rate

Out of the 368 questionnaires sent out to the respondents, 226 were returned fully complete representing 61.4% response rate. According to Mugenda and Mugenda (2005), 50% of returned questionnaires are an indication of a successful response rate. Figure 4.1 provides a summary of the response rate.

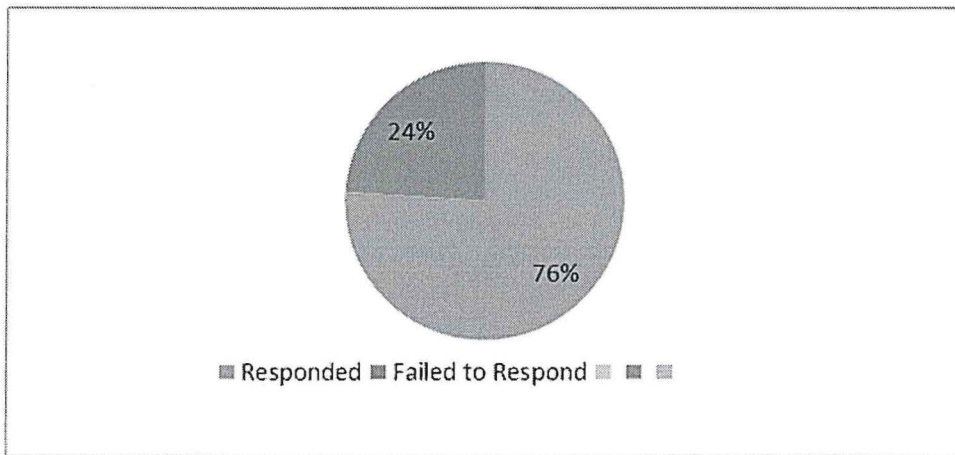


Figure 4.1: Response Rate

The study further proceeded to describe the demographic characteristics as summarized in table 4.1 showing the composition of respondents in each category.

Table 4.1: SME Owners Demographic Characteristics

Description	Frequency	Percentage
Age		
19-35 Years	45	20
36-45 Years	68	30
above 46Years	113	50
Experience		
2 Years	75	33
2-5 Years	133	59
Over 5 Years	18	8
Education		
Primary Level and Below	127	56
Secondary Level	70	31
Tertiary Level	18	8
University Level	11	5

4.2.2 Age Bracket

(20%) of the SME Owners are in the age bracket of (19-35) which means very few young Kenyans in business in Kajiado county; 30(30%) of the respondents are in the age bracket of (36-45) years; (50%) are in the age bracket above 46 years. Majority of the respondents were above 40 years meaning that these age brackets represent people who have experience in life. This is also in line with Kimuyu & Omiti (2000) who employed that age is associated to access to credit, older entrepreneurs are more likely to seek out credit. Therefore, this age grouping is the most relevant and valuable for this study as it provides useful and usable information that answer the questions asked in this research. Figure 4.2 provides a summary of the ages from the respondents engaged in this survey.

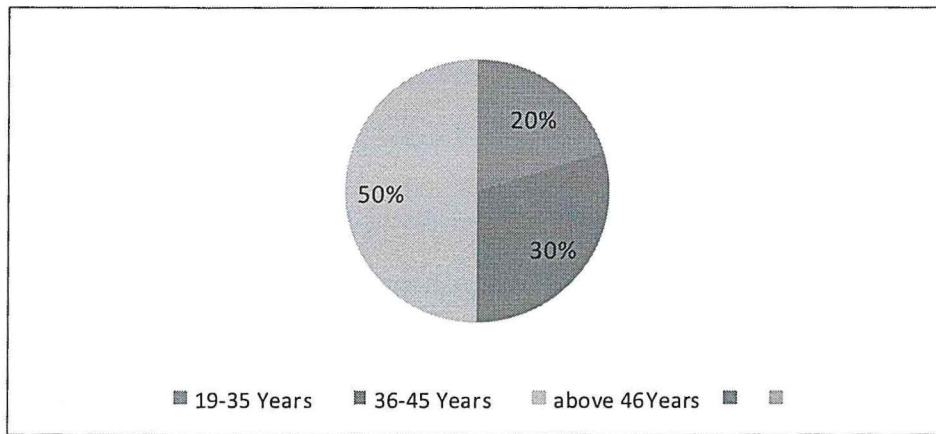


Figure 4.2: Age Bracket

4.2.4 Education Level

The study found that (56%) of the respondents which is the majority had a primary level or lower of education, (31%) had secondary level, (8%) had Tertiary level (college, polytechnics) and finally (5%) possessed University education. Figure 4.4 provides a summary of the respondents' education level. Education level is critical in access to finance as financiers consider educated people to make sound judgements in business management and hence less risky for banks to lend to.

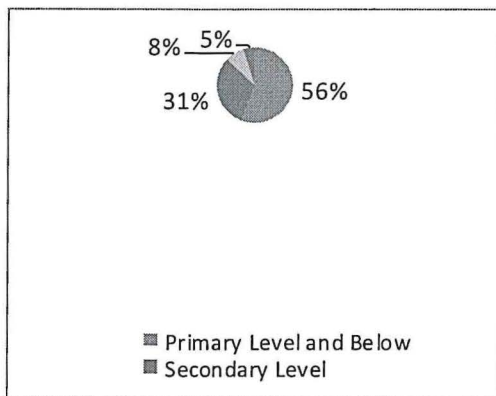


Figure 4.3: Education Level

4.2.5 Years in SME sector

The study established that (33%) of the respondents had less than 2 years' experience in the SME business, (59%) had 2 to 5 years and (8%) having over 5 years of experience. The study results in figure 4.5 show that majority of the SME entrepreneurs representing 92% had less than 5 years of experience. Age is critical in access to finance as financiers consider elderly

people to make sound judgements given their experience in business management and hence less risky for banks to lend to.

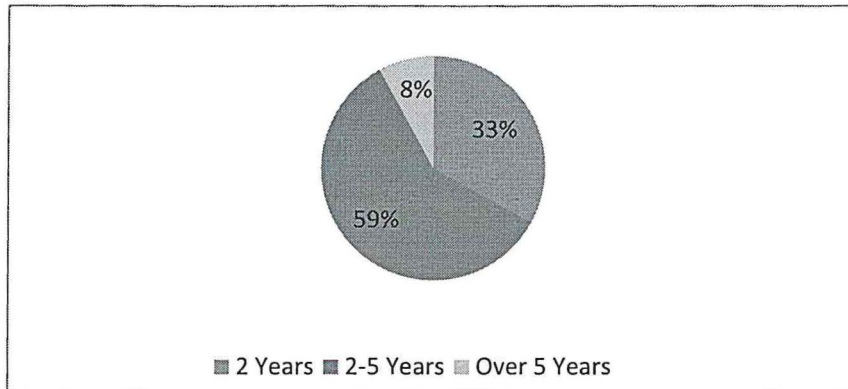


Figure 4.4: Years of Experience in SME Sector

4.2.6 Nature of Business Activity of the SME

From the figure 4.6 below, the results show the sample was drawn across all the SME categories with the highest of 32% from food and grocery and the lowest of 9% being clothing and textiles. The distribution of the businesses is an indicator that the sample was representative and suitable for this study.

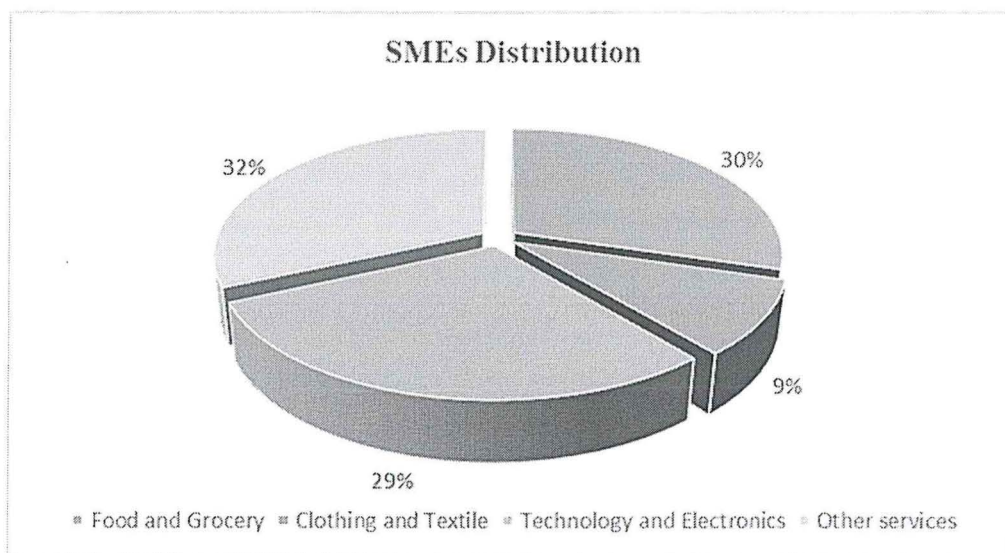


Figure 4.5: Nature of Business Activity

4.3 Access to Credit by SMEs in Kajiado.

From the results in table 4.2 below using Likert Likert 1-5 scale with 1 being Strongly Disagree, 2= Disagree, 3 = Neutral ,4 = Agree and 5=Strongly Agree., the researcher determined that the mean scores for the responses was 4 indicating that the respondents agreed to a great extent on the status of credit access in Kajiado County. The standard deviation of 1 indicates a spread around the mean of the majority of responses which also indicate more agreement with the status of credit access among the SMEs in Kajiado County.

Table 4.2: Access to Credit

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I have accessed a loan from financial institution over the last 1 year	20.00%	23.00%	15.00%	20.00%	22.00%	100.00%
I have over the years increased frequency of borrowing	8.00%	13.00%	54.00%	12.00%	13.00%	100.00%
I have not struggled to get loans from financial institutions	4.00%	6.00%	22.00%	39.00%	29.00%	100.00%
I have increased over time amount borrowed from financial institutions	15.00%	11.00%	16.00%	28.00%	30.00%	100.00%
Over the years, I get amount of loan applied for from financial institutions	12.00%	8.00%	55.00%	13.00%	12.00%	100.00%
Banks have loan products championing SMEs access to credit	20.00%	53.00%	13.00%	9.00%	5.00%	100.00%
Access to finance facilitates growth of SME business	2.00%	3.00%	7.00%	40.00%	48.00%	100.00%
Access to finance is not limited by distance and time	15.00%	11.00%	53.00%	12.00%	9.00%	100.00%
I have defaulted a loan in the financial institution	5.00%	12.00%	12.00%	51.00%	20.00%	100.00%
It is easy to get a security for a loan	24.00%	26.00%	33.00%	13.00%	4.00%	100.00%
I have multi-borrowed from financial institutions	3.00%	2.00%	18.00%	25.00%	52.00%	100.00%
I feel the financial value my SME by calling me for loans	7.00%	15.00%	31.00%	27.00%	20.00%	100.00%

4.4 Firm Characteristics on credit access by SMEs in Kajiado County

To determine status of credit access among the SMEs in Kajiado, the respondents were asked to indicate their 'level of agreement' to statements provided using a Likert 1-5 scale with 1 being Strongly Disagree, 2= Disagree, 3 = Neutral ,4 = Agree and 5=Strongly Agree. From the results in table 4.3 below, the researcher determined that on average 75% of the

respondents agreed that firm characteristics influence credit access among SMEs in Kajiado County with only 17% disagreeing and 8% remaining neutral.

Table 4.3: Firm Characteristics and credit access among SMEs in Kajiado

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Business location is a key consideration by banks before loan appraisal	11%	8%	7%	20%	54%	100%
Banks consider the size of business as key to a loan access	7%	20%	4%	39%	31%	100%
Business management skills is key in credit access	5%	5%	8%	52%	30%	100%
Capital structure of the business is a consideration for credit access in banks	5%	10%	5%	51%	29%	100%
Business continuity arrangements strongly supports credit access	13%	8%	10%	30%	39%	100%
My financial institution takes great consideration of cash flow trends in credit access by SMEs	2%	3%	1%	60%	34%	100%
My financial institutions consider the record keeping culture in SME loans	8.00%	15.00%	18.10%	38.00%	21.00%	100%
Total	51%	69%	53%	290%	238%	

4.5 Influence of firm characteristics on Credit Access

From table 4.4 the correlation coefficient equal to 0.726 implies that firm characteristics and access to credit have a strong and positive correlation. The correlation of determination, R Square equal to 0.527 implies that firm characteristics explain up to 52.7% of the variations in access to credit among the SMEs in Kajiado County.

Table 4.4: Model Summary

Indicator	Statistics
R	.726
R Square	.527
Adjusted R Square	.530
Sig.(2-Tailed)	.000

The coefficients in table 4.5 shows that firm characteristics, positively contribute significantly to the model since their p-value of 0.002 is less than 0.05 significance level. The positive coefficient equal to 0.523 is an indication that firm characteristics move in the same

direction with access to credit. A 1 unit change in firm characteristics leads to an increase in credit access by 0.523 units. The model established hence becomes;

$$\text{Access to credit} = 0.668 + 0.523 \text{ firm characteristics}$$

Table 4. 5: Coefficients of Product characteristics

Indicator	B	Std. Error	T	Sig.
Constant	0.668	.208	3.211	.000
Product Features	0.523	.165	3.169	.000

4.6 Product Features on credit access by SMEs Owners in Kajiado County

To determine whether product features affect access to credit for SMEs Owners in Kajiado County , the respondents were asked to indicate their ‘level of agreement’ to statements provided using a Likert Likert 1-5 scale with 1 being Strongly Disagree, 2= Disagree, 3 =Neutral ,4 = Agree and 5=Strongly Agree. From the results in table 4.6 below, the researcher found that on average only 33% of the respondents agreed on how the loan product features have influenced credit access among SMEs in Kajiado County with 55% disagreeing with statements about product features.

Table 4.6: Loan Product Features

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I have been involved by financial institutions in conducting research on SME related loan products	33%	31%	11%	11%	14%	100%
My financial institution offers a grace period well spelt in the letter of offer	39%	21%	13%	13%	14%	100%
My financial institution has a competitive interest on loans for all the SME loans	47%	33%	5%	8%	7%	100%
My financial institution has a flexible loan period	34%	43%	20%	1%	2%	100%
My financial institution has hidden charges during the loan period	12%	6%	13%	31%	38%	100%
My financial institution don't require collaterals for loans sought by SMEs	33%	36%	19%	6%	7%	101%
My financial institution restrict amount of loans granted to SMEs based on the business turnovers	5%	11%	6%	38%	40%	100%
Totals	203%	181%	87%	108%	122%	100%

4.7 Inferential Statistics on the Influence Of Product Features On Credit Access

The Influence of product features on credit access was evaluated by generation of correlation coefficient and coefficient of determination statistics. As shown in table 4.7, the correlation coefficient equal to .840 implies that product features and access to credit have a strong and positive correlation. The correlation of determination, R Square equal to 0.706 implies that product features explain up to 70.6% of the variations in access to credit among the SMEs in Kajiado County. This means that access to finance is influenced significantly by product features

Table 4.7: Model Summary

Indicator	Statistics
R	.840
R Square	.706
Adjusted R Square	.710
Sig.(2-Tailed)	.000

The coefficients in table 4.8 show that product features, positively contribute significantly to the model since their p-value of 0.000 is less than 0.05 significance level. The positive coefficient equal to 0.912 is an indication that product features move in the same direction with access to credit. A 1 unit change in product features leads to an increase in credit access by 0.912 units. The model established hence becomes;

$$\text{Access to credit} = 10.216 + 0.912 \text{ Product Features}$$

The R square means that product features significantly influences credit access among SMEs

Table 4.8: Coefficients of Product Features

Indicator	B	Std. Error	T	Sig.
Constant	10.216	.533	19.166	.000
Product Features	.912	.356	2.561	.000

4.8 Lenders' characteristics and access to finance by SME in Kajiado County

To determine whether lenders' characteristics have influence on access to finance by SME in Kajiado County, the respondents were asked to indicate their 'level of agreement' to statements; Neutral, 4 = Agree and 5=Strongly Agree. From the results in table 4.9, the researcher found that on average the majority of the respondents standing at 51% agreed that lender characteristics influence credit access among SMEs in Kajiado County.

Table 4.9: Lenders' characteristics and their influence on access to finance by SME

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree	Total
1. My financial institution have been meeting my financial services needs	32%	29%	11%	8%	20%	100%
2. My financial institution have been flexible on my financing requirements	11%	9%	11%	55%	14%	100%
3. My financial institution have been technology driven providing access channels of financial services 24*7*365	4%	2%	41%	1%	52%	100%
4. My financial institution network outreach has enabled ease of access of financial services	12%	13%	36%	16%	23%	100%
5. My financial institutions credit structures are friendly and have enhanced access of SME finance	9%	11%	13%	55%	12%	100%
6. I prefer informal lenders due to challenges posed by financial institutions on credit of SME loans,	50%	23%	9%	3%	15%	100%
7. I visit informal lenders for credit as their requirements are better than financial institutions	12%	6%	21%	10%	51%	100%
8. I have never experienced challenges with informal lenders while borrowing from them	13%	12%	12%	53%	10%	100%
9. I prefer informal lenders as they are within reach of my business	11%	6%	29%	10%	44%	100%
Total	154%	111%	183%	212%	241%	100%
Mean	17%	12%	20%	24%	27%	

4.9 Inferential Characteristics on Lender Characteristics Influence on Credit Access

From the table 4.10, the correlation coefficient equal to .439 implies that lender characteristics and access to credit have a moderate and positive correlation. The correlation of determination, R Square equal to 0.192 implies that lender characteristics explain up to 19.2% of the variations in access to credit among the SMEs in Kajiado County.

This implies that lender characteristics significantly influence access to finance among SMEs

Table 4.10: Model Summary

Indicator	Statistics
R	.439
R Square	.192
Adjusted R Square	.195
Sig.(2-Tailed)	.000

The coefficients in table 4.11 shows that lender characteristics, positively contribute significantly to the model since their p-value of 0.000 is less than 0.05 significance level. The positive coefficient equal to .365 is an indication that lender characteristics move in the same direction with access to credit. Based on the coefficient table 4.12, A 1 unit increase in lender characteristics leads to an increase in credit access by 0.365units. The model established is significant and hence becomes;

$$\text{Access to credit} = 5.113 + 0.365 \text{ lender characteristics}$$

Table 4.11: ANOVA Results

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	53.519	3	53.519	2.031	.000
Residual	2063.302	223	9.252		
Total	2116.821	226			

Table 4.12: Coefficients of lender characteristics

Indicator	B	Std. Error	T	Sig.
Constant	5.113	.689	7.420	.000
Lender characteristics	.365	.126	2.896	.000

4.10 Joint effects of product features, firm characteristics and lender characteristics on access to credit

The study further proceeded to establish the joint effect of product features, firm characteristics and lender characteristics on access to credit among the SMEs in Kajiado County. The linear regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$ was used to establish the joint relationships.

The model summary table 4.13 presents results for the coefficient of correlation, R equal to 0.844 while the coefficient of determination, R² is 0.698. The coefficient of determination indicates that 69.8% of the variations of access to credit in Kajiado County are explained by the joint relationship between firm characteristics, product features and lender characteristics.

Table 4.13: Model Summary

Indicator	Indicators
R	.836
R Square	.698
Adjusted R Square	.702
Sig.(2-Tailed)	.000

The ANOVA statistics in table 4.14 generated indicates that the regression model significantly predicts the outcome variable because the p-value of the joint relationships is less than 0.05 significance level. The ANOVA results indicate that statistically, the model applied can significantly predict the outcome of the dependent variable. Based on the p values, the study, therefore concluded that there is a joint relationship between product features firm characteristics and lender characteristics explaining up to 69.8% access to credit by SMEs. In this study the F statistic equal to 2.031 implies that regression model fits the data used in this study well.

The R square for the joint model implies that the model significantly influences access to finance up to 69.8%.

Table 4.14: ANOVA Results

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	53.519	3	53.519	2.031	.000
Residual	2063.302	223	9.252		
Total	2116.821	226			

The regression model: Credit Access = 0.693 Firm Charact + 0.768 Product Features. + 0.981 Lender Charact.

The coefficients in tables 4.15 shows that product features, lender characteristics and firm characteristics positively contribute significantly to the model since all the p-values equal to 0.000 are respectively less than 0.05 significance level. The results show firm characteristics have a positive and significant influence on credit access and that 1 unit change in firm characteristics leads to 0.693 units increase in access to credit, product features has a positive and significant influence on credit access and that a 1 unit change in product features leads to 0.768 units change in credit access.. Further, lender characteristics has a positive and significant relationship with credit access and that 1 unit increase in lender characteristics leads to 0.981 units in credit access among SMEs in Kajiado.

Table 4.15 Coefficients of Joint Relationship

Variable	B	Std. Error	T	Sig.
Firm Characteristics	0.693	.945	0.733	.000
Product Features	0.768	.668	1.149	.000
Lender Characteristics	0.981	.702	1.397	.000

Table 4.16: Chapter Summary

Variable	Model	Results
Firm characteristics	Credit Access = 0.668 + 0.523 firm characteristics	A positive and significant relationship exists between firm characteristics and credit access
Product Features	Credit Access = 10.216 + 0.912 Prod. Features	A positive and significant relationship exists between product features credit access
Lender characteristics	Credit Access = 5.113 + 0.365 lender char.	A positive and significant relationship exists between lender characteristics and credit access

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study sought to establish the determinants of access to finance by small and medium enterprises in Kajiado County. The determinants of access to finance included; product features, firm characteristics and lender characteristics. A summary of the study findings as well as conclusions are well recorded in this chapter, recommendations drawn while suggestions for further studies are highlighted as a way of bridging the gaps identified in the study. Conclusions of the study are well aligned against the objectives outlined in chapter one.

5.2 Summary of the Findings

The findings of this study based on the research objectives as outlined in this section revealed that the combined effect determinants of credit access influence credit access positively and significantly. These findings were supported by the responses from the respondents presented in form of measures of central tendency, percentages and frequencies. All the determinants of access to finance by small and medium enterprises in Kajiado County were found to influence the access to credit.

5.2.1 Firm Characteristics on credit access by SMEs in Kajiado County

On how firm characteristics determine credit access among SMEs, the study found that there is a positive and significant relationship given the p-value of 0.002 is less than 0.05 significance level. The positive coefficient equal to 0.523 is also an indication that firm characteristics move in the same direction with access to credit and that a 1 unit change in firm characteristics leads to an increase in credit access by 0.523 units. The correlation coefficient equal to 0.726 further implied that firm characteristics and access to credit have a strong and positive correlation while R Square equal to 0.527 implies that firm characteristics explain up to 52.7% of the variations in access to credit among the SMEs in Kajiado County.

The findings of this study agree with those of Bruns and Fletcher 2008; St-Pierre and Bahri 2011. Who in their study found that firms endowed with collateral are positively considered for loans by banks? Further banks are likely to charge higher interest rates for SME loan applicants that cannot meet the bank's collateral requirements. Other firm specific

characteristic considered by banks for loans include personal commitment from the owner-manager in addition to company guarantees. Secured loans tend to carry lower loss given default and will lead to lower risk premiums. This is the "loss mitigation" effect (Berger et al. 2011). The study findings that SME continue to face challenges in credit access are in harmony with the access to capital theory which stipulates that small companies are less able to satisfy loan requirements and therefore suffer from chronic undercapitalization which results to expensive funds due to desperation.

5.2.2 Product Features on credit access by SMEs Owners in Kajiado County

On the influence of product features on credit access, the study found that product features positively contribute significantly to credit access in that the p-value of 0.000 was less than 0.05 significance level. Further, the positive coefficient equal to 0.912 is an indication that product features move in the same direction with access to credit and that a 1 unit change in product features leads to an increase in credit access by 0.912 units. The correlation coefficient equal to .439 implies that lender characteristics and access to credit have a moderate and positive correlation.

The findings of this study on how product features influence credit access resonates well with those of Meyer (2002) who argued that firms with loan repayment schedules matching expected cash flows to the time of harvest demonstrated high credit uptake owing to the fact that the loan repayments are tagged against the time of cash flow generation. A further congruence of findings is noted in a study by Dalla Pellegrina (2011) who compared uptake of finance between informal money lenders who have flexible terms and conventional banks. He found that standard loans of banks are less suitable to finance businesses with sporadic cash flows given that in some months the business has low sales. The findings are also in agreement with those of Weber and Musshoff (2012) who found that standard loans might be the reason why agricultural firms have lower credit access probabilities than nonagricultural firms due to poorly structured product feature leading to low penetration in agriculture.

5.2.3 Lenders' characteristics and access to finance by SME in Kajiado County

On the influence of lender characteristics on credit access, the study found there is positive and significant relationship given the p-value of 0.000 was less than 0.05 significance level. The correlation coefficient equal to .439 implies that lender characteristics and access to credit have a moderate and positive correlation. The correlation of determination, R Square equal to 0.192 implies that lender characteristics explain up to 19.2% of the variations in

access to credit among the SMEs in Kajiado County. The findings in this study resonates well with the capital rationing theory that stipulates that lenders characteristics among them; cost of funds, cost of risks and cost of holding funds, administration costs of the loan and the lending relationship with the SMEs determines access to credit among the SMEs.

On the joint relationship, the study found that product features, lender characteristics and firm characteristics jointly and positively contribute significantly to the model since all the p-values equal to 0.000 are respectively less than 0.05 significance level. The results show product features, firm characteristics and lender characteristics move in the same direction with access to credit and that a 1 unit change in product features lead to 0.693 units increase in credit access, 1 unit change increase in firm characteristics lead to 0.768 units increase credit access while 1 unit increase in lender characteristics leads 0.981 units increase in access to credit. Jointly, correlation coefficient equal to 0.844 indicates strong and positive relationship while while the coefficients of determination equal to 0.698 indicates that 69.8% of the variations of access to credit in Kajiado County are explained by the joint relationship between firm characteristics, product features and lender characteristics

5.3 Conclusion

Based on literature review and findings of the study, the researcher found out that all the respondents agreed that credit access by SME owners' impacts on the performance of their enterprises. A further review of the variables studied here in revealed that product features explain up to 19.2% of the variations in credit access, firm characteristics explain up to 52.7% while the lender characteristics explain up to 70.6% of the variations. This showed that lender characteristics explain the highest influence on credit access among the SME enterprises in Kajiado County. Product features have the lowest influence on credit access explaining only 19.2% of the variations.

5.4 Recommendations

Given the significant role played by SME sector on employment creation leading to economic growth and the rallying call to empower Kenyans, there is a need for a concerted effort to focus on streamlining the access to credit policy among the SMEs, The policy need to be anchored on the challenges SMEs are facing in credit access touching on the existing financing frameworks in the country. Further review of various laws governing access to credit across key financial institutions need to be reviewed to reflect the current dynamics affecting credit access by SMES.

To further promote access to credit, management of financial institutions as well as SMEs need to establish frameworks that address key concerns on credit access among them collateral requirements, long credit application and approval processes, short or no grace period, high interest rate etc. This could suitably be done through targeted programs on SME management to enhance their capacity through entrepreneurship education and financial literacy that will in turn increase credit access among SMEs. Commercial banks management need to enhance their management competencies in SME lending that will go a long way in customizing product features; financial through periodic research on product requirements to offer the target clients customized products rather than a one size fit all products. Such research will enable financial institutions deliver products suiting women with such characteristics like grace period, competitive interest rates, flexible loan period, unnecessary hidden charges, social guarantees rather than tangible collaterals as well as ability to graduate women loans based on good credit history.

5.5 Limitations to the Study

The study was limited in terms of the target population given that it focused only on the SMEs while the business community is broad covering various strata like large SMEs, corporate, women SMEs, Youth owned SMEs etc. This implies that the study results may not address challenges faced by such other business given their unique characteristics

5.6 Suggested Areas for Further Studies

The study recommends areas for further research as follows: The role of research in SME products among commercial banks in Kenya as well as the contribution of managerial competencies on credit access among SMEs in Kenya.

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Appendix I: Introduction Letter

Date.....

CEOenterprises

P.O Box

Dear Sir,

RE: ACADEMIC RESEARCH PROJECT

I am an MBA student at the Strathmore University. I wish to conduct a research entitled **“DETERMINANTS OF ACCESS TO FINANCE BY SMALL AND MEDIUM ENTERPRISES IN KAJIADO COUNTY**. A questionnaire has been designed and will be used to gather relevant information to address the research objectives of the study. The purpose of writing to you is to kindly request you to grant me permission to collect information on this important subject from randomly selected senior and middle level management.

Please note that the study will be conducted as an academic research and the information provided will be treated in strict confidence. Strict ethical principles will be observed to ensure confidentiality and the study outcomes and reports will not include reference to any individuals.

Your acceptance will be highly appreciated.

Yours Sincerely



Joseph Dau

Appendix II: Questionnaire

This questionnaire has statements regarding the **determinants of access to finance among small and medium enterprises in Kajiado County, Kenya**. Your responses will be handled confidentially and ethically.

SECTION A: GENERAL /DEMOGRAPHIC DATA

1. Kindly indicate your gender

a) Male

b) Female

2. Please indicate the highest level of education you have ever attained

a) Secondary level

b) College level

c) University level

d) Post graduate level

3. How many years have you been involved in SME sector?

a) Less than 2 years

b) 2 to 5 years

c) Over 5 years

4. What is your age bracket?

a) 18 -35 36-45 Over 46 years

Section B: Access to Finance

Question 5. The statements below seeks to establish the status of access to finance by SMEs. Please indicate your agreement or otherwise with the following statements using the following Likert scale of 1 to 5.

Please indicate the extent of agreement with 5= Strongly Agree 4= Agree 3= Neutral 2= Disagree 1= Strongly Disagree

Statements	1	2	3	4	5
I have accessed a loan from financial institution over the last 1 year					
I have over the years increased frequency of borrowing					
I have not struggled to get loans from financial institutions					
I have increased over time amount borrowed from financial institutions					
Over the years, I get amount of loan applied for from financial institutions					
Banks have loan products championing SMEs access to credit					
Access to finance facilitates growth of SME business					
Access to finance is not limited by distance and time					
I have defaulted a loan in the financial institution					
It is easy to get a security for a loan					
I have multi-borrowed from financial institutions					
I feel the financial value for my SME by calling me for loans					

Section C: Product Features

Question 6. The statements below seek to establish the product features offered by financial institutions to SMEs in Kajiado County. Please indicate your agreement or otherwise with the following statements using the following Likert scale of 1 to 5.

Please indicate the extent of agreement with 5= Strongly Agree 4= Agree 3= Neutral 2= Disagree 1= Strongly Disagree					
Statements	1	2	3	4	5
I have been involved by financial institutions in conducting research on SME related loan products					

My financial institution offers a grace period well spelt in the letter of offer					
My financial institution has a competitive interest on loans for all the SME loans					
My financial institution has a flexible loan period					
My financial institution has hidden charges during the loan period					
My financial institution doesn't require collaterals for loans sought by SMEs					
My financial institution restricts amount of loans granted to SMEs based on the business turnovers					
My financial institution has better SME products than the industry					
I am notified in time on any changes of product offering by my financial institution					
My financial institution quickly customizes products and service based on my needs					

Section D: Borrowing Firm Characteristics

Question 7. The statements below seeks to establish the SME firms' characteristics and their influence on access to finance in Kajiado County. Please indicate your agreement or otherwise with the following statements using the following Likert scale of 1 to 5.

Please indicate the extent of agreement with 5= Strongly Agree 4= Agree 3= Neutral 2= Disagree 1= Strongly Disagree					
Statements	1	2	3	4	5
My financial institution considers business location as key institutions before loan appraisal					
My financial institutions consider the level of education of SME owners prior to loan access					
My financial institution considers the size of business as key to a loan access					
My financial institution values customer business					

management skills before access to finance					
My financial institution considers the composition of capital structure of the business for access to finance					
My financial institution considers business continuity arrangements strongly as a determinant of credit access					
My financial institution takes great consideration of cash flows trends in credit access by SMEs					
My financial institution values SME record management practices during loan appraisal					

Section E: Lender Characteristics

Question 8. The statements below seeks to establish the lenders’ characteristics and their influence on access to finance by SME in Kajiado County. Please indicate your agreement or otherwise with the following statements using the following Likert scale of 1 to 5.

Please indicate the extent of agreement with 5= Strongly Agree 4= Agree 3= Neutral 2= Disagree 1= Strongly Disagree					
Statements	1	2	3	4	5
My financial institution has been meeting my financial services needs					
My financial institution has been flexible on my financing requirements					
My financial institution has been technology driven providing access channels of financial services 24*7*365 (check this)					
My financial institution network outreach has enabled ease of access of financial services					
My financial institutions credit structures are friendly and have enhanced access of SME finance					
I prefer informal lenders due to challenges posed by					

financial institutions on credit of SME loans,					
I visit informal lenders for credit as their requirements are better than financial institutions					
I have never experienced challenges with informal lenders while borrowing from them					
I prefer informal lenders as they are within reach of my business					