

**DEMAND SIDE FACTORS INFLUENCING ACCESSIBILITY OF LOANS  
BY SMALL AND MEDIUM ENTERPRISES FROM BANKS IN  
MACHAKOS COUNTY.**

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**DECLARATION**

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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## **ABSTRACT**

The purpose of carrying out this study was to carry out assess the demand side factors that influence accessibility of credit from banks in Kenya: a case study of SMEs in Machakos town. The researcher chose Machakos town due to fact that it's a prolific trading center in the country and a study conducted by Mbula in 2018 outlined that most SMEs in the town were collapsing due to limitations of funds from banks. The study sought to understand how the demand side factors influence the access to funds. The study was guided by the following objectives; determining how firms characteristics, Entrepreneur characteristics and financial characteristics influence the lending decision by banks. A descriptive research design was adopted to come up with quantifiable data through the use of questionnaires bearing both open and closed ended questions. The target population was 626 registered enterprises but the selected sample size through a stratified sampling technique was narrowed to 63 firms. The Statistical Package for Social Sciences (SPSS) version 20 was used for data analysis. The study data was analyzed for descriptive statistics (frequencies and percentages), while inferential statistics were analyzed for correlation and regression.

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## **ABBREVIATIONS AND ACRONYMS**

ERIA – Economic Research Institute for ASEAN and East Asia

GOK – Government of Kenya

GDP - Gross Domestic Product

IFC - International Finance Corporation

MFIs – Microfinance Institutions

SACCOs - Savings and Credit Cooperative Societies

SMEs – Small and Medium Enterprises

## **DEDICATION**

To my mother, father and brother, for your love, encouragement and support that you have given that has brought me this far. To the Almighty God for His unceasing blessings without which it is impossible to accomplish anything.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

This chapter entails the background information which will inform the topic under study. The chapter therefore will entail background information to the study, statement of the problem which warrants the researcher to pick the topic of study, formulation of research objectives as well as research questions which will guide the researcher in fulfilling the objectives set and finally the significance of carrying out the research.

### 1.2 Background of Study

Small and Medium Enterprises(SMEs) are considered to be very vital for economic growth and development in both developing and already industrialized countries because of the simple fact that they create jobs which are a source of income to the greater majority of workforce in any country thus acting as a great contributor to poverty alleviation. SMEs play an important role in achieving a market oriented growth. SMEs are greatly praised for their pivotal role they play in promoting grass root economic growth in all economies worldwide (Vera and Onji, 2010). Closely linked and related to all businesses development is the idea of financing. SMEs require financing so as to be able to implement their business plans and ideas, to be able to reach out to their existing and potential customers through marketing of their products and services and to be able to manage their liquidity needs especially during unfriendly business times and environments.

In most cases, small size businesses start as just an amazing from one or just a few people who choose to take their chances and invest their funds and probably approach friends and family for financial assistance in exchange for a stake in the business. However, if in the course of time this business is successful, it comes a time when development and expansion of the enterprise is crucial and it's at this times that these SMEs run into problems and are faced with challenges in accessing this funding from financing Institutions. This is because it is not easy for them to get financing as it is for large businesses (Mulanji, 2013). According to one Aldaba (2012) lack of access or difficulty in accessing finance implies that a substantial number of SMEs cannot stand the test of time and end up collapsing and shutting down.

The SME sector is an outstanding example of enterprise activities which have led to successful growth and development of the Kenyan economy. Despite the SMEs significance, past statistics as outlined by world Bank Report(2010), 3 out of 5 businesses in the country Kenya fail within their first year of operation. For those that survive the first year 80% of them fail within the fifth year. Iota and Wehinger(2015) study identified a number of challenges faced by SMEs which was a combination of lack of managerial training and skills, scanty market information, lack of innovative capacity and experience, inadequate educational skills, technological changes, poor infrastructure and lack of access to credit. However, Lack of access to credit was pointed out to being the most predominant challenge of them all. The financial determinants of the accessibility of finance by SMEs include interest rates, cost of credit, credit rationing and business risk.

Cost of credit which is the additional amount above the borrowed amount that the borrowing party pays. It is a combination of interest payable, loan arrangement fees, legal fees and any other mandatory fees required by the lender. According to Kungu (2011), the incomplete nature of financial markets rises the transaction costs associated with financial services. It has been observed that Organizations which maintain close relationships with lending institutions tend to have easier access to credit. This is because constant interactions with financial institution improves the knowledge about the firm which in turn leads to reduction in the adverse selection. This being to the advantage of the borrowing SME, the cost of credit may be reduced due to reduced interest charge. (Gichuki, Njeru and Tirimba, 2014)

Interest rates can be said to be the game changer for all MFIs. They are central to most lending behaviors of MFIs. High interest rates are a great discouragement to SMEs borrowing because they cannot be able to meet the interest charge requirements. This locks out the small and medium sized enterprises. Banks trade on deposits made by customers therefore they have to lend at interest rates that are high enough to cater for the overhead costs and leave a balance for the purposes of compensating customers whose deposits are being loaned out (Makena, 2011). The incidence of Pyramid Schemes witnessed in 2008 in Kenya spoke volumes when it comes to common and low earning entrepreneurs. This is because most of them were seen investing in the schemes because there was no interest charged on their investment and it was an easy way out of accessing funds.

The act of credit rationing by lending institutions has locked out so many SMEs as only large businesses are able to meet the conditions outlined by MFIs. This is again backed up by the

understanding that the conditions set for financing by MFIs are tailored to lock out SMEs. Small firms are rationed because they are considered to be more risky (their default risk is usually high) even when they are willing to pay for the additional risk. (Stiglitz and Weiss, 1981) state that the act of credit rationing can be theoretically influenced by a number of factors which include borrower's unique observable characteristics (Age, gender, work experience), firms' characteristics (firms performance, age of the firm, business experience) and loan characteristics (Collateral demanded, amount demanded, interest charge). In a study carried out by Mole and Namusonge (2018) to assess the effects of interest rate capping in Kenya, they pointed out that the government intentions in capping the interest rates was to encourage more borrowing and access to financing by SMEs. However, this worked the opposite of what was intended. Instead of lending more, MFIs chose to freeze lending to MFIs through rationing and turned into investing in government securities which are more secure.

From a global point of view, SMEs are facing many challenges in which some are similar in different nations whereas others are unique on their own. The main challenge which comes out predominantly is the issue of accessing finance from lending institutions. Taking an example of Cambodia, according to ERIA research project (2010) the challenge of access to funding is as a result of the early development stages of the financial sector. It is known that lending institutions are profit driven and oriented in nature and most will focus on big business transactions to maximize profit which will not be made possible by turning their focusing on Small and Medium Enterprises. The Microfinance institutions which tailor credit for SMEs in most cases offer small sized loans with a high interest charge and allow short maturity so as to ensure certainty and reduce risk of loss by all means (Matilda,2010)

According to Hamilton and Beck (2016) The Korean Republic economy has become the envy of many countries worldwide because of its transition from one of the world's poorest nations in the 1960's to being the 12<sup>th</sup> largest economy in terms of GDP. In the year 2012, 90% of all companies in Korea were SMEs accounting to 87.7% of all employees in the country. The sector is characterized by hefty reliance of bank funding to sustain and meet their financial needs.

The government of Korea has played a crucial role in supporting the development of SMEs in the country. This has been seen through the direct supply of public funds to SMEs as well as through credit guarantee schemes.

In Malaysia, according to ERIA research project (2010) SMEs are faced with the challenge of obtaining finance with the biggest contributor being the lack of collateral to secure the loans and lack of sufficient documentation to back up their Loan application proposals. The lack of a track record of the financial transactions and audited financial statements is the main constraint faced by the SMEs in Malaysia in a bid to access finance (Haron et., 2013). According to Gunto (2014) the Malaysian government has given priority to SMEs as they take up more than 80% in terms of providing employment in the country. This has been through the establishment of a financial framework and policies to address the growth and development needs (UNDP, 2007). The framework “Funds for Small and Medium size industries” aims at developing SMEs through provision of financial assistance as a directive from the government.

Looking into this subject in the Continent of Africa, Most if not all SMEs are going through the same challenges. According to Osano and Languitone (2016) in Mozambique, 98.6% of the total firms in the country are SMEs. They provide diversification, employment and are the driving force of the economy. The limitation in access to funds is associated with high interest rates, lack of clear financial plans, lack of sufficient collateral and credit rationing by MFIs.

In Libya, as indicated by a study by Tarek et al.(2013) the private sector makes up 80% of the SMEs while the remaining 20% is dominated by small corporations and families. SMEs in the country suffer from a number of problems which act as a hindrance to them flourishing. Among these problems, easy access to financing comes out as the main one. According to Abdesamed and Wahab (2013) a survey ranked Libya as among the last countries in the continent in matters to do with financial market sophistication. The absence of financial market leaves a great burden to the banking sector to shoulder the major responsibility of the country’s development.

In West African side of the continent, according to Taiwo (2016), SMEs in Nigeria have not being performing well due to financial constraints and in lieu of that they have failed in achieving the expected goal in economic growth and development in the country. The role these firms ought to play in the economy is constrained by limited funding and poor management. SMEs in Nigeria constitute 90% of the Nigerian businesses but have been contributing less than 10% of the country’s GDP. This low percentage contribution can be attributed to unfriendly and harsh business environment, limited access to funding and limited access to modern technology (Gbandi

and Amissah, 2014). According to World Bank Report (2001) most SMEs in Nigeria lack the funds to sustain their liquidity needs and are in turn are forced to close shop and leave the market.

In the country Kenya, the economic contribution by Small and Medium sized enterprises is widely acknowledged. This can be backed up by the simple fact that it employs 85% of the workforce in the country. In a conference held in Strathmore University in 2018 with the theme focusing on SMEs funding by MFIs, the president Uhuru Kenyatta showed great concern in the development of the sector. Despite the significance of these SMEs in the country's economy, little effort is being put to ensure these SMEs stand the test of time especially in this harsh business environments. According to Mutai (2015) SMEs have become important players in the Kenyan market but go through great straining to sustain their entrepreneurial activities due to lack of financing. A number of factors have been pointed out in a bid to explain the problem with information asymmetry between lenders and borrowers coming out as a major challenge. On the supply side of the curve, most MFIs consider SMEs uncreditworthy thus intentionally denying them loans. According to CMA Report (2010) SMEs in Kenya suffer from unique firm characteristics which lower their resilience to risk. Financial muscles of a firm is key to its ability to survive. Political instability in the country has disoriented the lending patterns of MFIs in the nation making lending Institutions to be very picky (adverse selection) in who they advance loans to and where they invest their money in (Mutia, 2010). The post-election violence and continued political tension led MFIs to rationing credit as the market and business environment was clouded with great uncertainty which in turn affected the operations of many SMEs. With this unfriendly business environment coupled up with credit rationing by MFIs most SMEs collapses and bouncing back was an uphill task.

Past Studies have been made on SMEs development in Kenya for example (Mira & Ogollah; Kiraithe 2015). However there is no specific study has been put in studying the proposed area in Machakos County. The proposed are of Study is a prolific business towns in Kenya with just few documentations on SME financing. This therefore makes the basis of my investigation.

### **1.3 Statement of the Problem**

Availability and Access to credit facilities has proved to be a very critical factor in the growth development of SMEs. Most studies have shown that access to credit enables the not well off entrepreneurs to overcome their liquidity constraint and take up investment decisions comfortably. However, the continued lack of access to credit by SMEs is continuously and progressively crippling this sector of the economy. Ranging from a global perspective all the way to the local level, SMEs accessibility to finance has been identified as the greatest challenge that threatens the survival of these enterprises. Banks and MFIs tend to remain very reluctant to advance credit to SMES who are considered to be risky customers (Muguchu, 2013). This leaves these entrepreneurs' with self-financing and reliance on the goodwill of family members and friends who are willing to invest in their dream which is not sufficient to sustain their operations.

The World Bank Report (2015) clearly outlined that 3 out of 5 SMEs in Kenya collapsed within their first year of operation and of those that made it through, 80% went down within the fifth year. SMEs face unique challenges influencing their growth, development and sustainability, and most crucial of them all is the challenge of limited access to credit facilities. Though significant effort has been made towards changing this narrative, the SMEs are going through tough times due to lack of financing.

The observable outcome eventually is often closing shop for SMEs who are unable to meet their financial obligations and liquidity needs, Acquisition by other enterprises, selling off of assets so as to sustain their operational expenses. By collapsing of these SMEs the blowback is on the country's economic development as most people lose their jobs which results to retarded economic growth. In a study conducted by Mbula (2019) on SMEs survival rates in Machakos County, she established that most SMEs collapsed due to lack of finance to sustain their businesses. The researcher did not however carry out a follow up research to determine why most SMEs are finding it difficult to access loans from banks. This was the first reason which necessitated the need to carry out this research and fill this gap.

SMEs are very crucial in any country as they are key economic drivers thus great attention should be given to these enterprises because the economies of many nations depend on the contribution. Many SMEs in Machakos county have been closing shop and this inspired the need to carry out this investigation a Machakos is one of the most prolific and business countries in the country. In

this study therefore the researcher seeks to fill this gap of examining demand side factors that influence the accessibility of these funds to SMEs in Machakos County.

## **1.4 Research Objectives**

### **1.4.1 General Objective**

The general objective of this study is to establish how demand side factors influence the accessibility of loans by SMEs in Machakos County.

### **1.4.2 Specific Objectives**

This research study will be guided by following research objectives

1. To investigate how firm's characteristics influence accessibility of credit by SMEs in in Machakos town.
2. To examine the effect of entrepreneur's characteristics in accessing credit by SME's in Machakos town.
3. To analyze how financial characteristics influence accessibility of credit by SMEs in Machakos town.

## **1.5 Research questions**

The three research questions highlighted below will help act as a guidance in answering and fulfilling the objectives of this study.

1. How do Firm's characteristics act as a determinant of financial accessibility in Machakos town?
2. How do Entrepreneur's characteristics influence the financial accessibility of credit to SMEs in Machakos town?

3. How do financial characteristics determine the financial accessibility to SMEs in Machakos town?

### **1.6 Scope of the Study**

The scope of this research will only be limited to SMEs which are registered in Machakos town, Single Registration Licenses (2016). The study will lay emphasis on demand side factors which influence financial accessibility by SME's in Machakos town. The number of SMEs in Machakos town have continued to collapse and according to Mbula (2018) the main reason was lack of access to financial assistance from banks and other lending institutions. The study will be look into how firm characteristics, entrepreneur characteristics and financial characteristics (demand side factors) have an influence in access to finance by SMEs operating in the area of study.

### **1.7 Significance of the Study**

#### **SMES in Machakos County**

The first hand beneficiaries from the findings of this take a look at are SMEs in Machakos County as this have a look at entails statistics collected directly from them. This findings can be useful to these SMEs as they could use this records to place themselves favorably and take advantage of credit score facilities to finance their business activities

### Academicians and Researchers

The effects derived from this research will construct at the already current know-how of things influencing get right of entry to to credit by means of SMEs. It may also shape a basis to destiny researchers who may need to utilize those findings to form a basis for advancing their arguments.

### Government Policy Makers

This research observe will provide the policy makers with dependable and precious insights at the want to have SMEs gaining access to credit score extra effortlessly and the effect of budget superior to SMEs have on their increase and overall performance. This study is of importance to the government of Kenya which consistent with Vision 2030, is working in the direction of achieving a stable economic system. This studies provide findings which can be in line this imaginative and prescient which hopes to obtain the goals like fixing the hassle of multiplied unemployment and reducing the ranges of poverty.

### Financial Institutions

Financial institutions will be capable of see the various methods wherein provision of credit to SMEs impacts their overall performance. The boom and development of SMEs as well as their sustenance is prime to monetary development. This examine will advantage the financial institutions which might be credit averse and have a poor mind-set in terms of lending money to SMEs.

### Potential and Existing Investors in SMEs

Existing and ability buyers will gain from this take a look at because it gives perception approximately financing that is an area of high-quality problem to any investor. Other SMEs will accrue cost from this take a look at as it will shed mild to existing and capability traders at the various types of credit that is to be had to them and the way they are able to advantage from it and improve their performance.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter deals with analyzing literature which is existing on the subject of accessibility of finance by SMEs. It looks into theoretical and conceptual framework, empirical review which entails comparing and contrasting different views by different authors on the topic of study and coming up a solid conclusion while highlighting gaps in the research.

#### **2.2 Theoretical Review of Literature**

This segment looks into several theories which inform and are related to credit accessibility to SMEs. Many theories have been used to explain how different factors affect the uptake of loans and the accessibility of these loans. However, for the purposes of this research two theories will be put into perspective which are: Credit Rationing Theory and Financial Intermediation Theory.

##### **2.2.1 Credit Rationing Theory**

Of the many theories discussing financing gap to SMEs, credit rationing theory comes out strongly as an important theory for this study. This theory was formulated by Stiglitz and Weiss in 1981. In their formulation, they put across an argument that agency problems [i.e. conflict arising between the interests of the managers (agents) and the expectations of the shareholders (owners) of the organization] and asymmetry of information were the leading reasons as to why SMEs have limited access to credit facilities. They argued that only the management of SMEs know their true financial structures, the real strength in the investment projects and the effective intent to payback the borrowed amount. This is to mean that firms have information that other parties outside the organization do not have access to (Information Asymmetry). Therefore, the lending officer makes the lending decision under asymmetric information which is clouded by moral hazard and adverse selection risk.

More to this theory is that Stiglitz and Weiss (1981) explained the choice made in deciding the financing source under the conditions of information asymmetry and rationing of credit. Limited access to finance originating from financial institutions credit rationing behavior is mostly not

efficient because bank managers will make this lending decision. The results to this is financing less profitable ventures and leaving out more profitable investments and thus resulting to adverse selection risk. Moreover, the theory informs that safe borrowers cannot tolerate high interest rates because in case of default, they would have to payback large amounts to the lending entity. On the other end, risky borrowers will be willing to accept higher rates to compensate for the additional level of risk but lending institutions are not willing to take the risk.

Small firms and startups are seen to be very risky and are often affected by asymmetry problems. A number of SMEs face additional problems, for example owners of SMEs in the interior and rural areas, location is a great hindrance in accessing funds. Startups are locked out as of the idea of age and experience in the industry. They are rationed because their level of riskiness is considered to be very high. Although in most instances they may give an option of paying more so as to cover up for the additional level of risk, banks will refuse advancing credit to them.

Credit rationing theory has its relevance to this study as it has argued out that it is only the management of an organization that truly know their financial capabilities and hold private information which is off the limits of external parties. This then leaves lending officers with making the lending decision without sufficient information about the borrower. Bank credit rationing has usually been influenced by observable characteristics for example firm characteristics which include age and size of the firm, characteristics of the borrowing entrepreneur which includes age and work experience. Small firms are rationed more because their level of risk is seen to be high as compared to larger institutions.

### **2.2.2 Financial Intermediation Theory**

This principle turned into formulated via Saunder and Cornet (2011). The principle of economic intermediation describes how surplus units (savers) enhance their excess funds to economic institutions within the form of deposits. These financial establishments which consist of banks, SACCOs, mutual budget, insurance agencies will in turn act as intermediaries who channel out the price range to deficit gadgets (spenders and debtors)

According to Andries (2009) financial intermediation is the method of moving excess price range from savers to entities who are in deficit through economic intermediaries. This can be simply

placed as the shopping for and selling of capital related to transaction expenses among the savers, lending institution and borrower. Gorton and Winton (2003) describe it greater; economic intermediaries borrow from surplus entities and lend deficit entities. The borrowing and lending corporations are big and this enhances diversification on every aspect of the stability sheet, and that the claims issued to the borrowers and to the lenders have distinct kingdom contingent payoffs. This concept can be traced to the works of Gurley and Shaw who based totally their argument at the theory of facts asymmetry and enterprise idea. Moreover, Allen and Santomero (1998) expounded in this by way of discussing that those theories are based totally on the foundation of fashions which tell on aid reallocation and it's far the transaction fees and asymmetry of statistics which can be key in expertise the concept of monetary intermediation. Andries (2009) states that the principle highlights some financial intermediaries features which includes transaction prices discount, provision of records and debt renegotiations. Financial intermediaries are tasked with bringing collectively the borrowers and the depositors and suit their transaction needs as they provide other offerings and in end result reduce the transaction charges and remove facts charges. Savers trust their finances with economic institutions who on the other stop invest those finances by advancing loans to borrowing entities e.G. SMEs. SMEs involvement with monetary institutions can be installed summary by the roles they play as intermediaries. SMEs can be available in as either depositors or borrowers and are certain to get services from lending institutions which range from provision of liquidity, consultancy offerings, evaluation and analysis of assets, loan granting, insurance services, risk management among others (Andries, 2009, Diamond and Dybvig, 1986, Allen and Santomero, 1998).

This theory pertains to is examine as it informs on the jobs economic intermediaries play which incorporates development of credit score facilities, SMEs consequently are bound to get hold of economic services from these financial establishments.

### **2.3 Empirical Review of the literature**

Past studies have informed of several factors that influence assessment of lending officers in regard to financing SMEs. This section puts together factors derived from literature to see if they are related to each other and how they affect access to credit from providers of finance. Under this study the explanatory variables have been grouped into three categories; firm characteristics,

Entrepreneur's characteristics and financial characteristics. These variables are explored further in the review below.

### **2.3.1 Entrepreneur Characteristics**

Entrepreneur's characteristics, in many cases are difficult to differentiate from those of the business. Lucas (1978) observed that individuals have particular business and managerial skills which have influence on the success of the business. Lending institutions look into these specific characteristics possessed by entrepreneurs when making the lending decision.

#### ***2.3.1.1 Educational background***

Previous researchers have established a positive relationship existing between higher levels of education and business growth (Kozan and Ozsoy, 2006). Education plays a key role in improving the exploratory skills, communication skills, and spatial awareness of the entrepreneur. These skills are important in putting up a solid case for financing to the lending institution at the time of constructing a plausible loan proposal.

According to Kumar and Francisco (2005) there exist a strong relationship between level of education and access to financial services in a study carried out in Brazil. They further noted that graduates had the least problems in raising finance from banks. This was attributed to the following; more educated entrepreneurs possess the ability to present better business plans, financial plans and loan proposals. Moreover, they are considered to be better in maintaining relationships with banks in comparison to less educated entrepreneurs. Second is that educated entrepreneurs have managerial skills of different functions in the business such as finance, accounting, marketing, human resource which offers them an upper hand as compared to less educated entrepreneurs who have learnt the business informally through apprenticeship. The third point, which emanates from the supply side is that bank manager's value and have more confidence in educated entrepreneurs in the loan approval process.

The entrepreneur's academic level increases the chances of accessing credit. This is attributed to the fact that educated owners are efficient and effective in their work. Moreover, fund providers have more confidence in advancing loans to more educated entrepreneurs (Berger and Udell, 2006). Nevertheless, most owners of SMEs in developing nations tend to have low levels of formal education. Most of them learn the art of business through apprenticeship (Aryeetey, 2014) several studies agree that the quality of human capital increases with the level of training and education.

From the supply side of the funds, financial institutions perceive small enterprise owners with higher education qualifications as more creditworthy, therefore bringing in the conclusion that they have a higher likelihood of accessing loans as compared to uneducated entrepreneurs. Kasseeah and Thoplan (2012) also suggested that educated owners have necessary confidence and skills to overcome barriers when it comes to seeking credit and that explains why more educated business owners tend to apply for loans more.

Of a different opinion, Han (2008) argued that business owners with undergraduate degrees have a higher likelihood of being financially constrained than entrepreneurs without much of the formal education because educated entrepreneurs tend to ignore the traditional concept of a loan being risky and thus they borrow way too much than they can possibly manage repayment.

### **2.3.1.2 Gender**

Traditionally business has been viewed as a preserve of men. According to Mahaden (2001) women entrepreneurs in Africa remain invisible and silent partners and at the periphery of the national economy. Studies by Cole and Mehran (2009) on relationship existing between difference in gender and availability of finance in the United States indicated that firms owned by women are more likely to be credit constrained because they are more likely to be discouraged from applying for loans. In contrast to this Beck and Cull (2011) pointed out that female owned and managed firms are more likely to have access to credit as compared to male owned in the sub Saharan Africa. This was attributed to women running businesses have educational qualifications and are committed to their businesses. It was noted that most women in Sub Saharan Africa operated business they have skills and passion for.

According to a study by Beck and Honohan (2008) a lot of SMEs face difficulties in accessing credit facilities. More to this was that in both developing and developed countries women entrepreneur are faced with more challenges in getting financed as compared to male counterparts. In an opposing view, in a study conducted by Freel (2010) and Ewoudou (2010) results depicted that gender is not a factor consider critical by lending institution in assessing the creditworthiness of a borrower. This is because what matters is the quality of loan proposal submitted and the value of the investment project to be finance.

Macharia and Wanjiru(1998) did a study on Women small scale Entrepreneurs in Nyeri County operating in the textile industry. The findings of the study revealed that lack of startup capital, lack of awareness of existing lending institutions and schemes, lengthy and tiresome loan application procedures, high levels of interest rates charged and lack of collateral were the contributing factors to their limited access to credit.

The authors also pointed out that women in the area studied are perceived to be risky borrowers. Mahbubu (2000) in his study on impact of Women Entrepreneurs in Kenyan economy stated that women entrepreneurs are almost invisible to financial institutions as they only constitute 10% of the credit advanced by commercial banks.

### ***2.3.1.3 Entrepreneurs Experience***

Previous studies have established a strong positive relationship exists between the experience an entrepreneur has built in the course of running a business and the level of accessing finance (Davidsson and Wiklund, 1999). Moreover, in a study by Storey (1994) the researcher explained that this relationship was attributed to the intrinsic desire by entrepreneurs to exceed their wage level they gave up so as to become self-employed entrepreneurs. In addition to this, entrepreneurs with more work experience are preferred by lending institutions as they are considered to be mature in the business they are running and are more likely to avoid costly and expensive mistakes as compared to new and startups with no prior experience

### **2.3.2 Firms Characteristics**

Different firms have different characteristics and attributes which will influence their accessibility of credit. Under this variable this study will focus on three attributed which are firm size, age of the firm and location of the firm.

#### ***2.3.2.1 Size of the Firm***

A firm's size is a critical variable in access to credit. Previous studies have discussed that small and medium Enterprises face more financial constraints as compared to larger firms (Petersen, 2002) With regard to SMEs there is higher risk involved because SMEs have higher failure rate than larger firms.

According to Berger and Udell(2002) smaller and younger enterprises tend to incur higher cost of financing whereas lending institutions are require them to offer collateral which in most cases they lack. In order to tame the anticipated and unanticipated risk associated with SME lending, banks will use collateral security as rationing instrument. Beck (2008) asserts that banks see SMEs as very profitable segment in the economy but perceive the economic instability in developing countries as an obstacle to their operations. In addition, in comparison with larger firms, banks are less exposed to small scale enterprises: they charge them high interest rates and fees as a way of rationing credit.

Past researchers have outline several reasons as to why SMEs have limited access to credit. First, small firms are constrained by information opacity such that they are not able to provide financial statements or any financial transactions information (Binks, 1996). When a firm is small in most cases it is owned and run by an individual entrepreneur and there do not exist legal requirements to provide regular reports on financial information and therefore small firms rarely maintain audited statements or reports. Secondly, small firms are constrained by the fact that they have few asset to present as collateral security. Collateral acts as an assurance of recovering the principal amount in case of default. Limitation of collateral leads to limitation in accessing funds as banks are not willing to offer unsecured loans. Third is that SMEs have a higher risk involved as their failure rate is considered to be high. For example Schiffer and Weder (2001) did a sample of SMEs across a number of nations and established a negative relationship between the business size and the risk it might pose on the credit institution

According to Oliviera and Fortunato (2006) on firm growth and liquidity constraints established that small firms are faced with greater financial constraints which have a negative effect on their growth. Moreover, Burkart and Ellingsen (2004) state that the size of the firm has a great effect on the debt ratios as a firm with more real assets have greater access to credit. Larger firms are often diversified thus their chances of failing are very low, therefore the size of the firm can be considered to be an inverse proxy for the probability of bankruptcy.

#### ***2.3.2.2 Location of the firm***

According to a study by Berger and Udell (2002), geographical proximity between banks and their customers affects accessibility of credit. Financial Institutions that are closer to their customers are better able to access their credit worthiness and credit quality. Gilbert (2015) pointed out that the geographic location of a firm aha an implication on its access to markets and resources, in this case resources includes credit. Firms which are located in the urban areas have better opportunities to success as compared to those in the rural areas.

Pandula (2011) established that spatial variations are contributed to by a variety of factors which affect the availability of finance to SMEs. First, in rural areas there may be absence of financial institution or there may be just one lending institution. This results to monopoly of power as firms do not have an alternative source of financing. Due to this limitation the lending institution tends to dictate everything as the borrowing firms do not have an option. (E.g. high interest rates,

stringent loan covenants) Secondly, financial institutions are reluctant in granting loans to enterprises in the rural areas because of the value of the collateral offered by these firms. These firms might have sufficient collateral but the market value attached to it may be very low such that in case of default it might be difficult to realize the principal amount.

In an opposing view, Rand (2007) states that the probability of getting access to credit in the rural is higher. He explained that most local governments are keen in protecting these firms in the rural areas as they are geared towards serving the local market in the remote areas. Another supporting argument to this is that the distance that exists between the lenders and borrowers has no effect on financing small firms. This was explained by the increased development of new technology. This study asserted that the use of Technology has reduced search costs and made services available at gadget point. However this argument was opposed by Fatoki and Asah (2011) stating that this argument was not of great relevance to SMEs operating in developing countries as technology is not advanced to those levels for everyone. Moreover, most entrepreneurs in rural areas do not have the information technology literacy. These authors concluded that the location of a firm plays a great role in its access to external resources.

### ***2.3.2.3 Age of the firm***

Age of the firm is used as a control factor by lending officers by the simple fact that older firms possess more experience in applying for loans and have substantially longer relationships with financial institutions and therefore have higher chances of getting loans (La Rocca, 2011)

Businesses in the startup phase are faced with liquidity constraints in trying to manage their operating expenses. A number of studies have established that there is great correlation between the age of a firm and access to credit. Being in business for many years' shows that the business has mastered survival tactics and has learnt much about the industry it is in and the market it serves. The older the firm the less the information opacity.

Chandler (2009) puts across that the longer a firm is in operation, the more it builds persistence and resistance to unpleasant economic circumstances. This provides a level of confidence to the lending institution. According to Klapper (2010) young firms (5 years old and less) rely mostly on debt to finance their activities. Nguyen (2009) explained that this young firms face hardships in accessing funding due to information asymmetry between the banks and the firms. Lack of financial information leads to rejection of loan application proposals. Older firms mostly benefit

from already established relationships with lending institutions thus reducing information asymmetry problems (Berger and Udell, 2002). In addition to this in a study conducted by Kraft (2007) the researcher emphasizes that young firm's lack a financial track record which reduces their credit ratings resulting to being advanced small loans.

### **2.3.3 Financial characteristics**

Under this segment three variables will be reviewed which are collateral security (Asset tangibility), availability of audited financial statements and performance of the firm

#### ***2.3.3.1 Availability of collateral***

Collateral is the commitment of a borrowers assets as security for debt repayment (Gitman, 2013) this committed asset should be used as recovery to the principal amount in case of default by the borrower. SMEs generally offer collateral in the form of property (houses, cars, land, and anything that has value and can be used to bring back the principal) in case of default. In most banks, as a requirement to advance loans to SMEs, the collateral should either be equal to or more than the value of the loan being requested for (Garret, 2009)

According to Kamau (2009) in a survey to determine the impact of collateral on accessibility of funds, established that collateral security is a major factor that contributes to banks limiting the level of access to funds by SMEs. In this study, 92% of the firms studies had applied for loans and had been rejected because of lack of sufficient collateral. McMahon (2005) puts across that, holding all other factors constant, firms that own more intangible assets face more challenges in accessing funds as compared to enterprises with tangible assets. SMEs are generally have much to present as collateral and due to this financial institutions have adopted a negative attitude towards financing them.

According to Vuvor and Ackah (2011) who conducted a study in Ghana to assess the challenges faced by small and medium Enterprises in obtaining finance found out that in Ghana SMEs were faced by a range of challenges which were mentioned to be lack of collateral, high costs of loans as caused by high interest rates charged and lack of financial track record. Fatoki and Asah (2011) suggested that owners of SMEs ought to have tangible assets which will raise the value of the firm thus improving the chances of being financed.

According to Airs (2007) it is difficult for SMEs to be financed without collateral and documentation in developing countries. From the supply side, lenders consider SMEs to be very risky due to the vagueness in their transactions. This lack of financial information forces banks to use collateral security as the rationing tool. Haron (2013) supported the above study by asserting that collateral is very important in getting access to finance because it acts as secondary defense for lenders in case of default.

### ***2.3.3.2 Performance of the firm***

In as much as it is difficult to construct a measure of performance of firms in the SME sector, studies have shown that higher sales volume, profits and evidence of cash flows in the firm are linked to greater chances of accessing funds (Topalova, 2004). Moreover, The European Commission (2003) stated that overall poor performance by any business is one of the leading reasons why banks refuse to grant loans.

According to Akoten (2006) he stated that credit has great positive impact on the performance of SMEs. In a study conducted by Dalberg (2011) he confirmed the above proposition by stating that SMEs benefit more by getting loans from financial institution as compared to informal sources. In addition to this firms with increasing profits and sales would be expected to have less credit constraints and less struggle in paying back borrowed money.

### ***2.3.3.3 Availability of Audited financial Statements***

Banks require financial statements which are audited before granting any loan. Audited reports are very essential in determining and assessing the borrower (Pandula, 2010). In most cases SMEs hold multiple books which have not been audited thus resulting to being advanced loans at very high interest rates.

According to a study by McKenzie and Baker (2011) quality financial statements should act as an anchor of confidence between banks and SMEs in assessing the level of risk. This means that fair presentation of audited statements reflect transparency of the true financial position of the firm, cash flows and revenue projections thus ensuring the lending institution make an informed lending decision. Provision of statements reduces the level of information asymmetry as well.

According to Nanyondo (2014) quality of financial statements have a significant relationship with access to finance. In order for SMEs to get access to funds, quality of financial statements is

paramount. Levitt (1998) states that firms that have audited financial statements are able to access credit easily as banks are able to evaluate their financial capabilities. Wanjohi (2009) asserts that most SMEs in Kenya face a great challenge in accessing loans because of lack of proper financial statements. Libby (2005) narrates that among the sources which inform the lender on credit worthiness of the borrower, financial statements data is key. When dealing with financial institutions, audited reports are the most valuable and reliable sources of information in evaluating the real worth and financial position of the firm.

#### **2.4 Summary of the Reviewed Literature**

The firm's specific characteristics have been noted to have great influence on the lending decision which is made by financial institutions. The size of the firm is critical in assessment of the credit worthiness. Burkart and Ellingsen (2004) state that the size of the firm has a great effect on the debt ratios as a firm with more real assets have greater access to credit. Larger firms are often diversified thus their chances of failing are very low, therefore the size of the firm can be considered to be an inverse proxy for the probability of bankruptcy. This informs why financial institutions are reluctant to advance credit to small firms as they are considered risky.

It has been noted that of the financial characteristics, availability of collateral is used a rationing instruments by financial institutions. Whenever issuing loans banks will pace collateral security as a mandatory requirement which in most cases has to be equal ore more than the amount of credit being requested (Garret, 2009). However most SMEs do not possess sufficient assets which can be presented as collateral.

The attributes of the entrepreneur have great impact in accessing funds from banks. In a study conducted in India and Indonesia by Cole et al., (2009) established that entrepreneurs literacy level was the chief determinant of demand for loans. Most SMEs owners in developing countries have basic formal education which limits their accessibility to finance. These variables act independently or in association in determining accessibility of funds to SMEs

## **2.5 Research Gap**

From the empirical review done it is evident that a lot of research has been done to explain the determining factors which influence accessibility of finance by SMEs as this is a critical area in most economies. However, there is no sufficient documentation and information explaining accessibility of finance in the area selected. Machakos town is a prolific and business oriented center but in the past few years a number of businesses have been collapsing and closing shop with the main issue being access to credit facilities. (Mbula, 2018)

This study seeks to fill in this gap which has not been exploited by researchers by establishing how these factors affect the accessibility of funds to SMEs in Machakos town.

## **2.6 Conceptual Framework**

A conceptual framework is an illustration which shows the link between the independent variables and the dependent variable in a study. (Mugenda & Mugenda, 2003) This illustration helps provide a better understanding of the variables under discussion. The conceptual framework underlying this study relates to independent variables which are Firm characteristics, Entrepreneur's characteristics and financial characteristics whereas the dependent variable is accessibility of finance by small and medium enterprises in Machakos town.

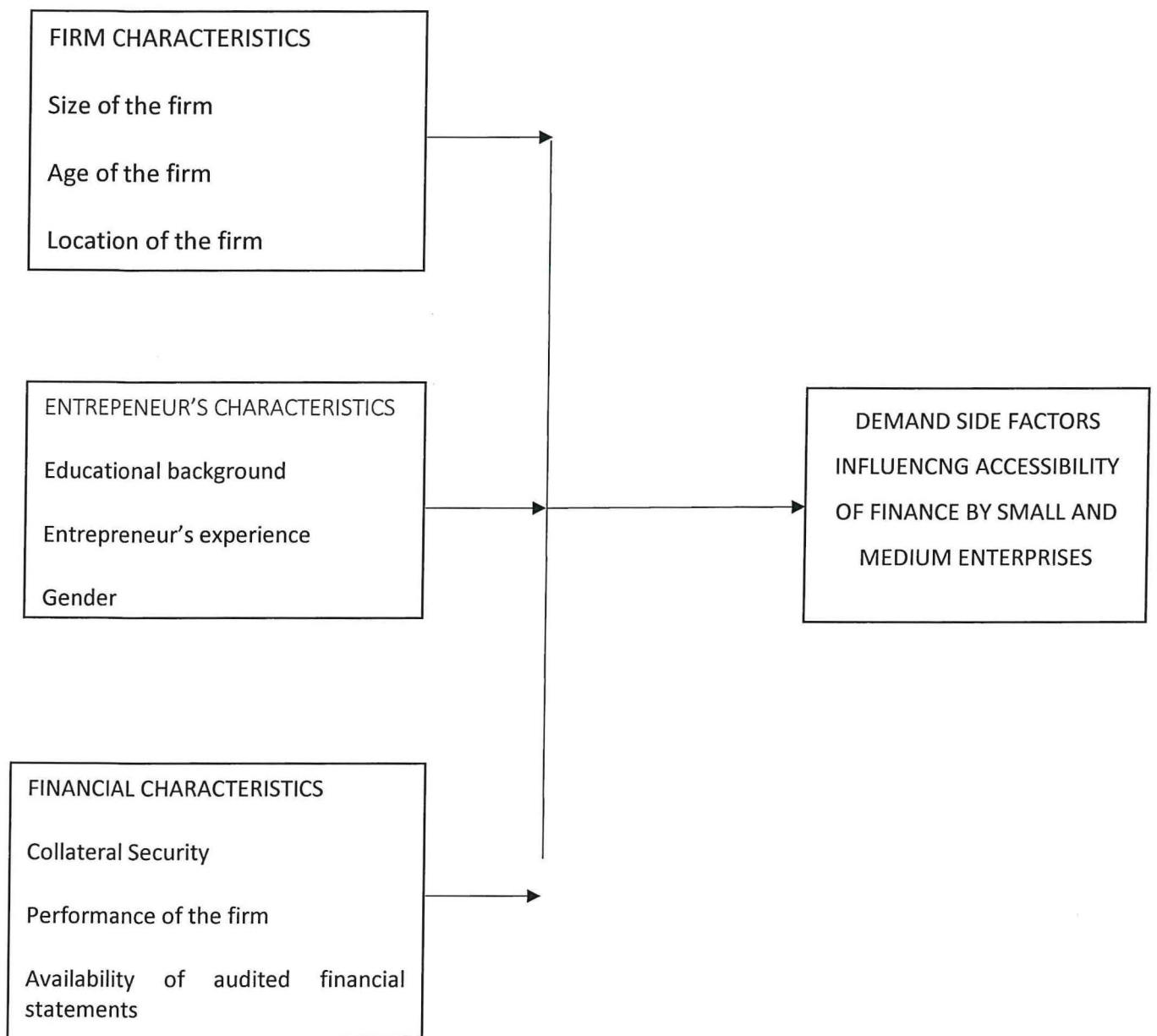


Figure 2.1 conceptual framework of determinants of accessibility of finance by SMEs

*Source: Author*

### 2.6.1 Discussion of Variables

The conceptual framework illustrates the relationship existing between the independent variables and the dependent variable.

Under the Firms characteristics studies have highlighted that size of the firm is critical in influencing the lending decision made by financial institutions. Small firms are generally considered to be risky because of their high probability of failure as compared to larger firms. Location of the firm has great implication on its access to resources. In this case resources includes access to credit facilities. Firms in the rural areas have hard time in accessing credit facilities as compared to enterprises in the urban areas. Age of the firm is used as a control factor by banks as older firms are considered to be more stable and experienced as they have been in business longer thus are considered less riskier as compared to younger firms.

Under the entrepreneur characteristics the experience of the entrepreneur is critical in assessment of creditworthiness as more experienced entrepreneurs are considered to be to be have better understanding of the markets they serve and are not likely to make expensive mistakes which can result to default. The gender of the entrepreneur has been seen to have effect in accessing credit but in recent studies gender doesn't seem to affect the accessibility of funds as banks are more interested in the quality of loan proposals submitted and the value of investment projects to be financed. Educational background influences the decision of lending officers as financial institutions tend to finance entrepreneurs who are educated.

Financial characteristics have been grouped into three categories and of the three variables availability of collateral comes out as a strong determinant of accessibility to funds. Banks will finance firms who offer sufficient collateral to cover the principal in case of default. Firm's performance will be measured by evaluating the financial statements they present to the bank during loan application process. Banks are reluctant to offer loans to SMEs whose performance is poor.

## **2.7 Chapter Summary**

This chapter has presented review of existing literature based on the research questions aforementioned and guided by the objectives of the study. The theories related to the topic were presented first with their contribution and relevance to the study. This was followed by empirical review of previous studies which inform on the variables. This segment also cited the research gap following the need for this research. Finally a conceptual framework was developed and discussed the variables of the study.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter will describe the methodology that was used to conduct the research and analyze the data collected. In this section the study shall present the research design to be used, target population which will form the respondents, sample design data collection methods, data analysis and presentation of methods to be used in the research.

#### **3.2 Research Design**

According to Chandran (2004) research design is the arrangement of conditions for the purpose of data analysis in a manner that aims to bring relevance to the research.

This study will use a descriptive research design. This is because it is one of the best methods for collecting the anticipated data that will explain the relationship between the variables. Bush & Bush (2010) asserted that a descriptive research design is a set of procedures which describes variables as it answers the question of what, how and why.

#### **3.3 Population and Sampling**

Population is defined as the whole number of individuals, activities or objects having commonplace observable characteristics if you want to be investigated (Mugenda & Mugenda, 2003). Population forms the problem of the examine. For the functions of this look at the goal populace will represent the small and medium length businesses working corporations which variety from shipping services, production, wholesale and retail traders amongst others in Machakos metropolis who've licenses or trading lets in from the county authorities. The populace of this have a look at centered on the 673 registered organizations running agencies in Machakos city.

A representative sample of 67(10% of the population) enterprises was selected for collection of relevant data. A sample of 10% - 30% if well selected is sufficient for generalization of the findings for the entire population. A stratified sampling technique will be used to select the 63 SMEs to be used in this study. This sampling procedure is commonly used because it ensures a balance of the sample on the researchers' side therefore enhancing the validity of the findings.

### **3.4 Data collection Methods**

Karoki (2013) states that information can both be number one or secondary. Also, it could be qualitative or quantitative. This observe will use each number one and secondary records. Primary records can be received by means of the usage of an established questionnaire with each open ended and closed ended questions. Prior to this facts collection the researcher will go to the selected SMEs to notify the proprietors of the intention to perform the research. Secondary data on the opposite side might be accrued from to be had records maintained by means of the county authorities regarding the SMEs. Moreover, any economic records held by way of the SMEs can be used as secondary records. This will consist of bank statements, cash waft statements and stability sheet for at least three financial years.

### **3.5 Data analysis**

This involves the interpretation of data collected from the respondents once the questionnaires and recording of the secondary data has been completed and collected. With the help of spreadsheets the data will be compiled to develop a relationship between the variables. Data will be analyzed both quantitatively and qualitatively to describe, inform and summarize the findings. This study will use frequency tables and graphs to present the data.

The data collected will be analyzed using inferential statistics to link the independent variables with the dependent variable. The formulae will take the form,

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

Where Y is the dependent variable Access to Credit

X1 – firm characteristics

X2 – entrepreneur characteristics

X3 – financial characteristics

From the model,  $\beta_0$  is the constant term while  $\beta_i = 1, \dots, 3$  will measure the sensitivity of the dependent variable(Y) to unit change of the predictor variable.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

This chapter presents results of the study and an analysis of the results. These results are organized based on the specific objectives and the questionnaire used.

##### 4.1.1 Response rate

Response rate is used to define the statistical authority of a test and the higher the response rate, the higher the power it has. In the case of this study, the researcher distributed 67 questionnaires and 59 of them were filled by the respondents and returned. This shows a response rate of 88% which is a remarkable rate.

Table 4.1 Response rate

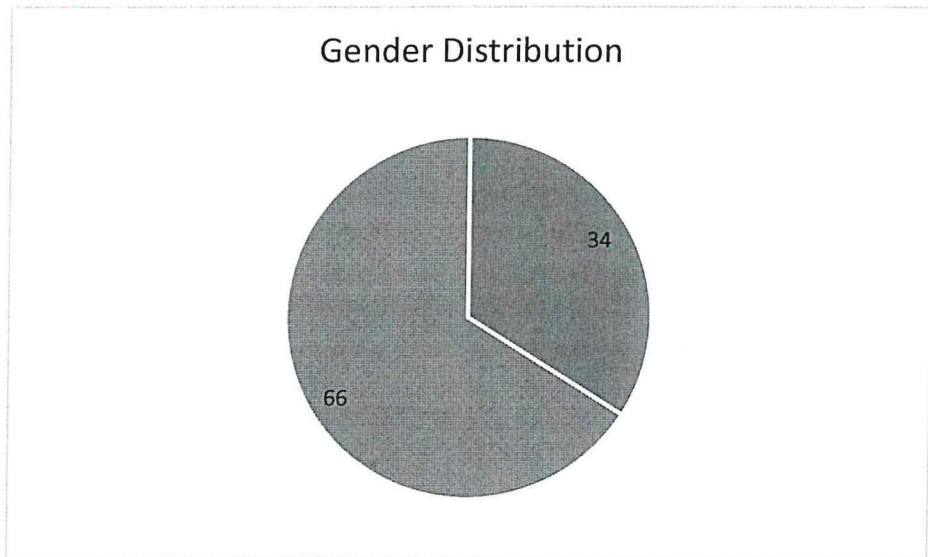
QUESTIONNAIRES	NUMBER	PERCENTAGE
FILLED AND RETURNED	59	88%
NOT RESPONDED	8	12%
TOTAL	67	100%

#### 4.2 Demographic factors

The research analyzed data with regard to demographic factors and results given as follows.

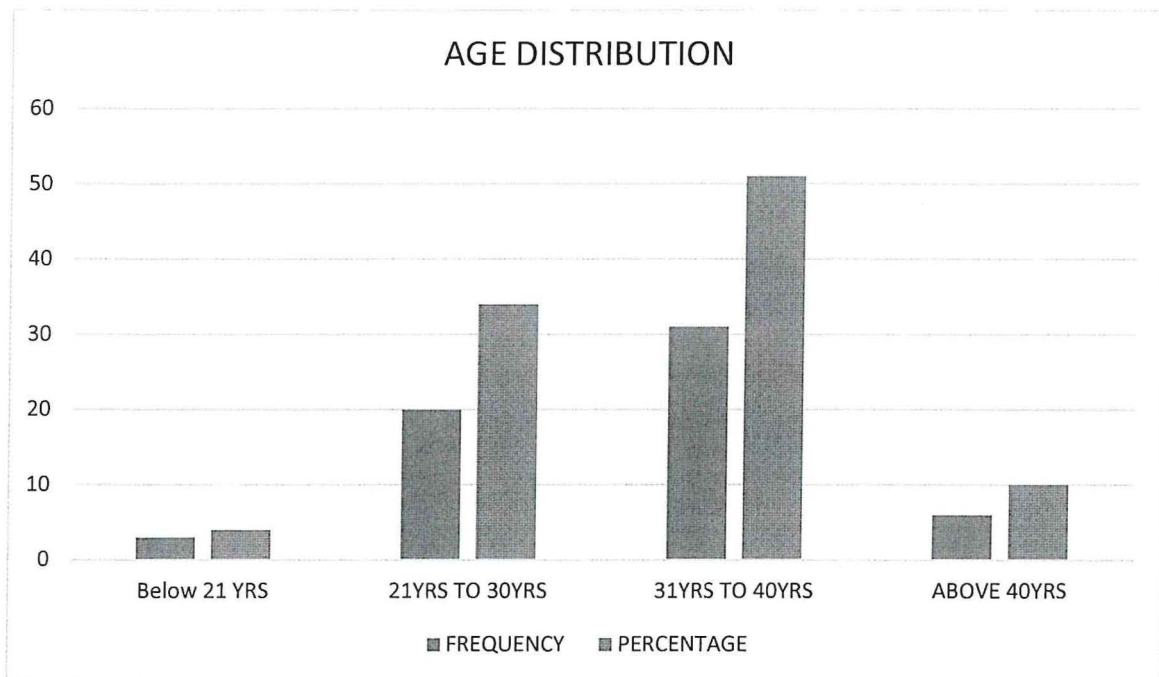
##### 4.2.1 Gender

Research findings revealed that the majority of the respondents were of the male gender representing 66% of the total population. The remaining 34% was the female part of the population. This Shows that more male SMEs operating in Machakos than females operating SMEs.



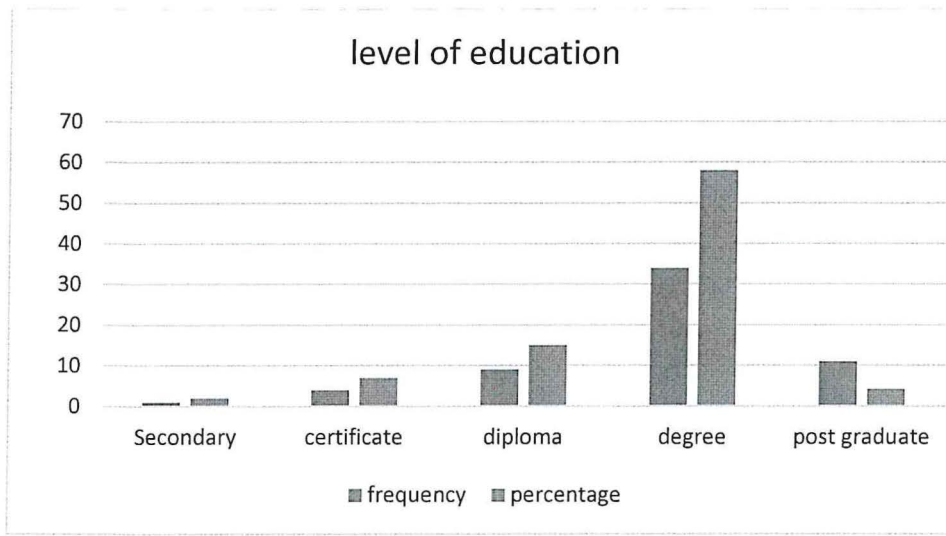
#### 4.2.2 Age

To analyze respondent's age, the study showed that 3 respondents fall under the age bracket below 21 years 5% of the populace, 20 respondents who are between 21 years and 30 years representing 34% of the population, 30 respondents were between 31-40 years this represents 51 % of the respondents and 6 respondents were above 40 years representing 10 % of the target population as shown in figure below. This clearly indicates that the age bracket of between 31 and 40 has the most SMEs under operation.



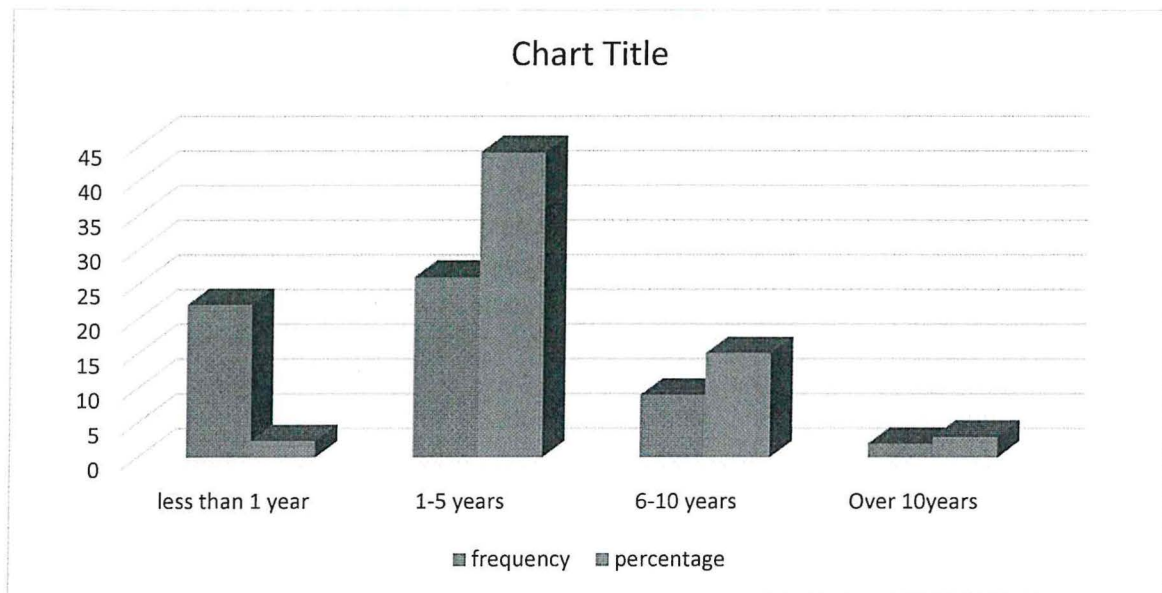
### 4.2.3 Level of Education

To analyze the highest level of education the result established that 1 respondent was a form four lever representing 2% of the total population, 4 respondents have a certificate representing 7% of the total population, 9 respondents have a diploma representing 15% of the population, 34 respondents have a degree this represents 58% of the total population, 11 respondents have post graduate representing 19% of the total population as shown in figure 4.3 below.



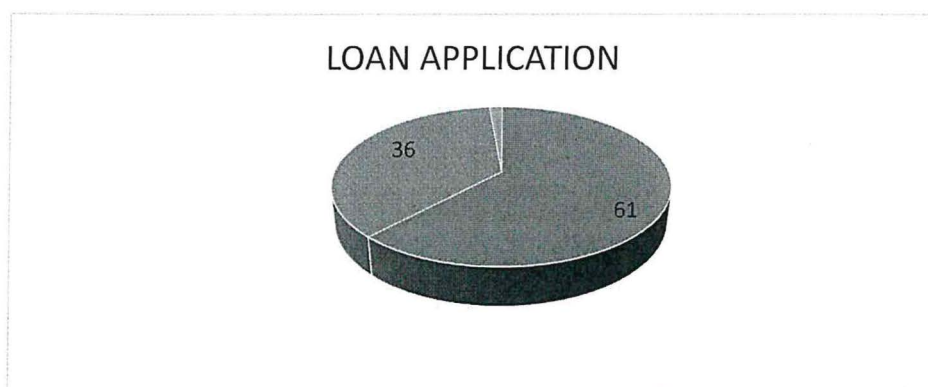
### 4.2.4 Years Business Has Been In Operation

To establish the year's respondents have been in the organization, findings revealed that 22 respondents have been in the organization for a period of less than a year representing 37% of the population, 26 respondents have been in the organization for a period of between one and five years this represents 44% of the population, 9 respondents have been in the organization for a period of between 6 years and 10 years representing 15% of the population and 2 respondents have been in the organization for over 10 years representing 3% of the population as shown in figure 4.4 below



#### 4.2.5 Loan Application

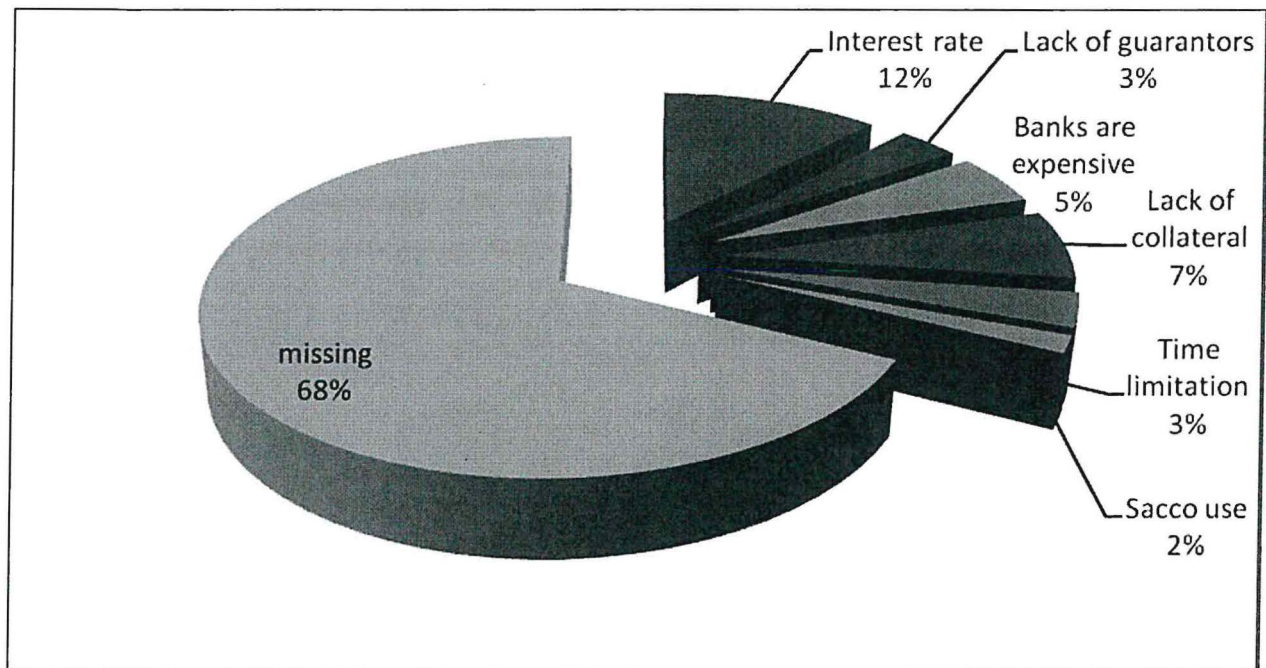
To investigate if respondents have ever applied for a loan from the bank 61% said “Yes” whereas 36% said “No” and 3% was missing as shown in figure 4.5 below.



##### 4.2.5.1 If You Said No Why?

In analyzing why SMEs have not been able to access loans from financial institutions, 12% of the entrepreneurs stated that interest rates were a major challenge, 7% of those responding said that lack of collateral was an hindrance, 5% outlined that managing bank transaction fees was generally expensive, 3% of the 31 respodents said that lack of loan guarantors made them lose out on loans

from banks and another 3% said that they preferred using SACCOs in comparison to banks. 68% of the respondents didn't answer this section as shown in the figure below.



### 4.3 Effects of Access to Credit

The study set to establish effects of access to credit. Respondents were asked a series of questions to ascertain to what degree they agreed or disagreed with the statements presented in relation to access to credit. Using a five point Likert scale where 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree

#### 4.3.1 Descriptive of access to Credit

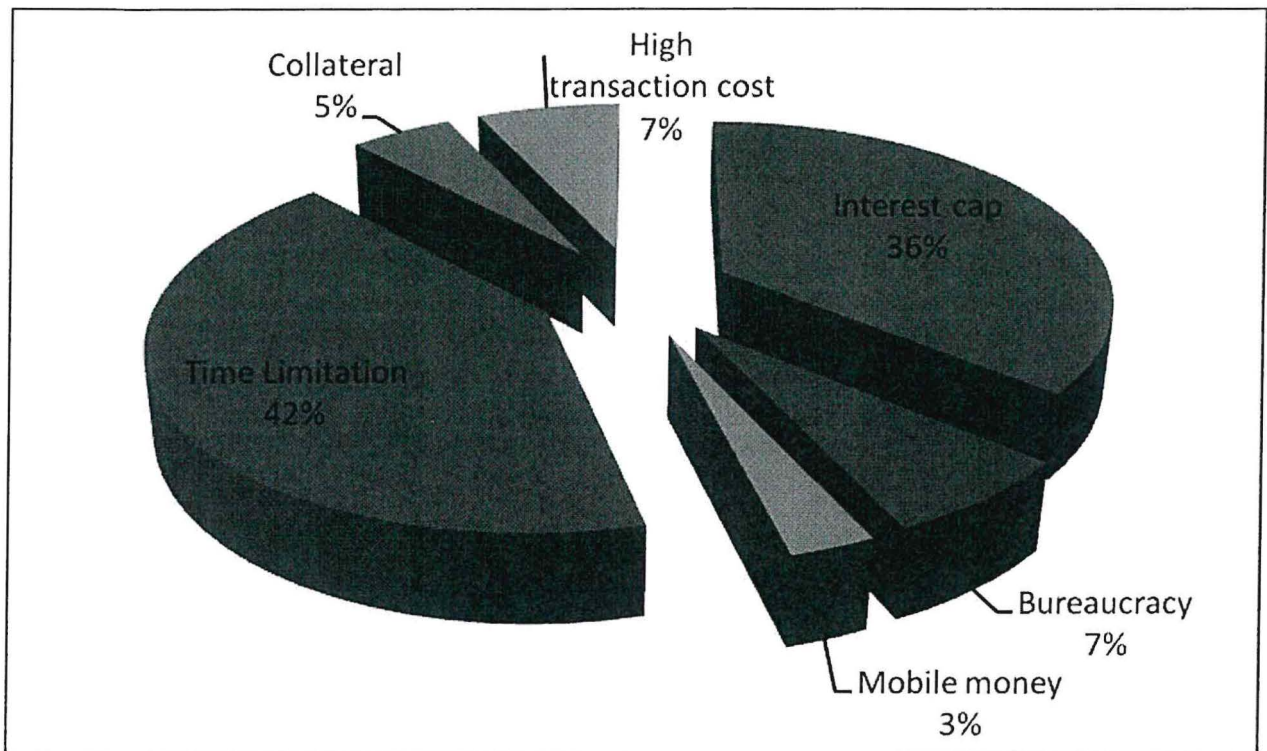
Many respondents agreed that they have more preference for personal loans from family and friends (4.15). There was however uncertainty on respondents have received loan from a bank where personal contacts existed (3.62), it is very difficult accessing credit (3.34). In addition, respondents disagreed on whether they consider loans from banks or other financial institutions as being expensive (2.35)

Table 4.2 Descriptive Access to Credit

VARIABLE	1	2	3	4	5	MEAN	STANDARD DEVIATION
	%	%	%	%	%		
Accessing loans from banks is very difficult	2	16	9	15	6	3.34	1.122
I have received loans where personal contact existed	7	22	9	15	6	3.62	1.244
I perceive loans from financial institutions to be expensive	0	5	6	26	22	2.35	0.899
I prefer funding from friends and family	5	10	7	20	17	4.15	1.286

### 4.3.2 Experience in Accessing Credit

In analyzing SME's experience when accessing credit 42% of the respondents agreed that it was quite difficult accessing credit due to the time limit given to them to repay the loan, 36% of the respondents attributed it to interest capping, 7% of the respondents stated that it was because of bureaucracy, and another 7% due to high transaction cost, 5% of the respondents agreed that collateral was required, and 3% of respondents agreed that they prefer using mobile money as shown in figure 4.7 below



#### 4.4 Firms Characteristics on SMEs access to Credit

This objective was set to establish how firm characteristics affect SME's access to credit. Responding parties were asked a number of questions to show to what degree they agreed or disagreed with statement presented in relation to effect of firm characteristics on SME's access to credit. Using a five point Likert scale where 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree

Majority of respondents agreed that small firms size have more challenges and problems in accessing loans than big firms (4.41), SME's in urban are successful in accessing credit from banks compared those located in rural areas (4.28) and older firm (more than 3 years) have more experience in applying for loans than younger firms (4.30). There was however uncertainty on credit enables SMEs to meet their expansion plan (3.97), younger firms (less than 3 years) face challenge accessing loans as compared to older firms (3.88) and financial institutions are unwilling to lend to small firms rural areas (3.85) as shown in table. On analyzing the standard deviation SMEs in urban are more successful in accessing to debt financing compared those rural areas had the highest deviation of 34 (1.765) whereas Older firm (more than 3 years) have more experiences

of applying for loans than younger firms below 3 years had the lowest deviation of (0.525). This means that there was little variation amongst respondents on those who agreed, disagreed and neutral

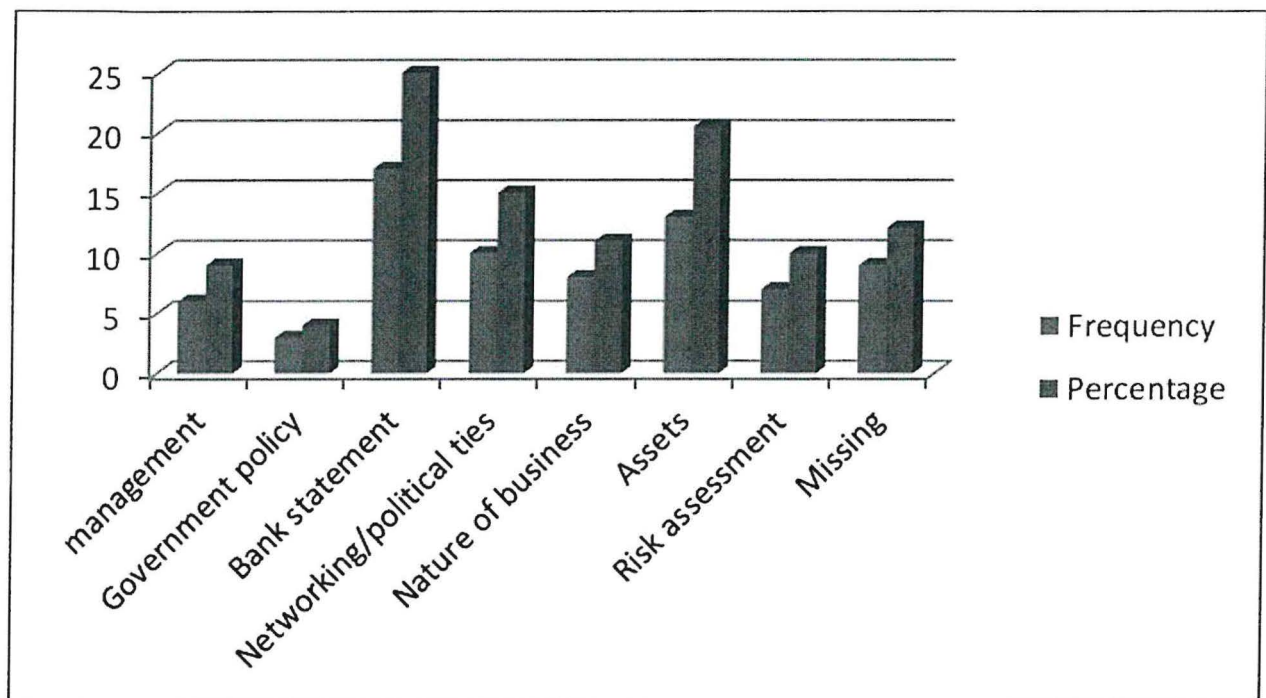
Table 4.3 Descriptive firm characteristics and access to credit

VARIABLE	1	2	3	4	5	MEAN	STANDARD DEVIATION
	%	%	%	%	%		
Small firms have problems in accessing loans than big firms	0	2	30	27	0	4.41	0.581
Credit enables SMEs to meet their expansion plan	0	4	7	35	13	3.97	0.784
Younger firms( less than 3years) face challenge of accessing loans as compared to older firms	1	6	10	26	16	3.88	0.985
Banks are unwilling to lend to small firms located in the rural	0	2	14	33	10	3.85	0.725
Does your business location influence your access to finance	5	2	15	6	0	4.28	1.765

1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree

#### 4.4.2 Other Firm Characteristics

In analyzing other firm characteristics that affect access to credit, results revealed that 4 respondents said that management affects access to finance which represented 7% of the population, 2 respondents stated that government initiated policies affects access to finance this represents 3% of the population, 14 respondents stated that the quality of bank statements influenced access to finance this represents 24% of the population, 8 respondents stated that networking/political affiliation affects access to finance representing 14% of the population, 7 respondents stated that nature of business affects access to finance representing 12% of the population, 11 respondents stated that assets base of the firm affects access to finance representing 19% of the population, 6 respondents stated that risk assessment affects access to finance this represent 10% of the population, as shown in the figure below



#### **4.5 Entrepreneur's Characteristics on SME's Access to Credit**

The second objective set to determine how entrepreneur's characteristics have influence on SME's access to credit. Respondents were asked a series of questions to indicate to what degree they agreed or disagreed with statement presented in relation to d entrepreneur's characteristics on SME's access to credit. Using a five point Likert scale where 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree, 39 respondents strongly disagreed and 49 strongly agree

##### **4.5.1 Entrepreneur's Characteristics on SME's Access to Credit**

Majority of respondents agreed that banks prefer men to women when issuing credit (4.25). There was however uncertainty on use of networking influences access to finance (3.74). In addition, respondents disagreed on applying a loan as a group is easy because of access to co guarantors (2.94), use of political ties helps an entrepreneur access finances (2.91), level of education/training affects access to finance (2.73) and banks consider training and skills one has to access credit (2.24) as shown in table 4.5

On analysis of the standard deviation banks prefer women to men when issuing credit had the highest deviation of (1.524) whereas Credit level of education / training affects access to finance had the lowest standard deviation of (0.953). This means that there was little variation amongst respondents on those who agreed, disagreed and neutral.

Table 4.4: Entrepreneur's Characteristics on SME's Access to Credit

VARIABLE	1	2	3	4	5	MEAN	STANDARD DEVIATION
	%	%	%	%	%		
Level of Education/training affects one in accessing finance	4	21	22	10	17	2.73	0.953
Through networking I have been able to access credit	0	10	11	21	17	3.74	1.042
The level of experience in the business you are running affects banks' lending behavior	18	13	14	4	18	2.24	0.978
Banks prefer men to women when issuing credit	5	3	7	19	5	4.25	1.524
Applying a loan as a group is easy because I can get co guarantors	5	18	19	13	4	2.94	1.036

#### 4.6 Financial Characteristics on SME's Access to Credit

The last objective set to establish the influence that financial characteristics of a firm has on SME's access to finance. Respondents were asked a set of questions to indicate to what extent they agree or disagreed with statement related to influence of financial characteristics on SME's access to credit. Using a five point Likert scale where 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly agree

#### **4.6.1 Financial Characteristics on SME's Access to Credit**

Majority of respondents opinionated that the fact that they have adequate financial records and clear book keeping records, it is easier for them to access credit (4.33), financial statements which have been audited are a necessity for the bank before a loan is approved (4.08) and absence of collateral/security affects access to finance (4.05). There was however uncertainty on firms that do not make profits experience challenges accessing credit (3.91) and financial institutions are reluctant to provide long term finance to SME's (3.47). In addition, respondent also disagreed on credit has a positive effect on business performance and growth (1.24) as shown in table below

On analyzing the standard deviation, it revealed that financial institutions are adamant to offer long term finance to SME's had the highest deviation of (1.765) whereas they disagreed that Credit has a positive effect on business performance and growth had the lowest deviation of (0.432). This means that there was little variation amongst respondents on those who agreed, disagreed and neutral

**Table 4.5: Descriptive of Financial Characteristics on SME's Access to Credit**

VARIABLE	1	2	3	4	5	MEAN	STANDARD DEVIATION
	%	%	%	%	%		
Lack of collateral affects access to credit	0	3	7	34	15	4.41	0.773
Financial institutions are adamant to provide long term finance to SMEs	4	6	12	31	6	3.47	1.026
I have adequate financial records and book keeping records making it easy for me to access credit	0	1	6	28	24	4.33	0.709
Financial statements which are audited are a necessity before a loan is approved	0	2	8	31	18	4.08	0.709
Firms that do not make profits have challenges accessing credit	1	3	13	22	18	3.91	0.955
Credit positively affects on business performance and growth	41	15	0	0	0	1.24	0.432

## 4.7 INFERENTIAL STATISTICS

### 4.7.1 Correlation between Access to Finance and Other factors

The study did a correlation analysis to find out the relationship between access to finance and other factors (variables under study). The findings revealed that only firm characteristics had a positive correlation with access to finance ( $r=0.292$ ,  $p<0.05$ ). These findings show that with every improvement on firm characteristics there is a positive increase in access to finance.

**Table 4.6: Correlation between Access to Finance and Other Factors**

	Access to Finance	Firm characteristics	Financial characteristics	Entrepreneur characteristics
Access to finance	1	.509*	-.086	-.472*
Sig. (2-tailed)		.037	.744	.041
Firm Characteristics	.509*	1	.409**	-.030
Sig. (2-tailed)	.037		.004	.838
Financial Characteristics	.086	.409**	1	.092
Sig. (2-tailed)	.744	.004		.514
Entrepreneur characteristics	-.472*	-.030	.092	1
Sig. (2-tailed)	.41	.838	.514	

Note that,

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

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

#### 4.7.2 Regression Analysis of Access to Finance and Other Factors

The study was set to determine factors influencing access to credit by small and medium enterprises in Machakos town. A regression analysis was done to determine if firm characteristics, financial characteristics and entrepreneur characteristics determines access to finance

##### 4.7.2.1 Model Summary

The results established that the R<sup>2</sup> was 0.104 which indicates that 10% of access to credit is determined by firm characteristics, financial characteristics and entrepreneur characteristics as shown in table 4.7 below

**Table 4.7: Model summary of Access to Finance and Other Variables**

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE	CHANGE STATISTICS				
					R CHANGE	F CHANGE	Df1	Df2	Sig. F CHANGE
1	.323 <sup>a</sup>	.104	.054	1.090	.104	2.093	3	54	.323 <sup>a</sup>

Predictors: (Constant), firm characteristics, financial characteristics, entrepreneur characteristics

##### 4.7.2.2 ANOVA

An ANOVA analysis was conducted amongst firm characteristics, financial characteristics and entrepreneur characteristics on access to finance. At a rate of 95% confidence level, the F value=2.093, P<0.095) therefore it is established that firm characteristics, financial characteristics and entrepreneur characteristics has a significant effect on access to finance the results are shown in table

Table 4.8 ANOVA Analysis Summary

<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Squares</b>	<b>F</b>	<b>Sig.</b>
<b>1</b>					
Regression	<b>7.457</b>	<b>3</b>	<b>2.486</b>	<b>2.093</b>	<b>.112<sup>b</sup></b>
Residual	<b>64.128</b>	<b>54</b>	<b>1.188</b>		
Total	<b>71.586</b>	<b>57</b>			

a. Dependent Variable: Access to finance

b. Predictors: (Constant), firm characteristics, financial characteristics and entrepreneur characteristics

**Table 4.9: Coefficients of Access to Finance and Other Factors**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
<b>Constant</b>	0.460	1.349		0.341	0.734
<b>Firm Characteristics</b>	0.502	0.268	0.252	1.870	0.067
<b>Financial characteristics</b>	0.001	0.193	0.001	0.007	0.995
<b>Entrepreneur characteristics</b>	0.159	0.144	0.149	1.101	0.276

a. Dependent Variable: Access to Credit

As indicated by the above Table 4.9, the equation ( $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3$ ) becomes:

$$Y = 0.460 + 0.502X_1 + 0.001X_2 + 0.159X_3$$

Where Y - dependent variable Access to Credit

X1 – firm characteristics

X2 – financial characteristics

X3 – entrepreneur characteristics

The regression equation in Table 4.9 has ascertained that putting all the three variables into account (firm , financial and entrepreneur) characteristics, and all other factors held constant access to

finance increased by 0.460. The results also showed that holding all other factors/variables at zero, a unit change in firm characteristics would lead to a 0.502 increase in access to finance, and a unit change in financial characteristics would lead to 0.001 increase in access to finance. Additionally, the study also showed that a unit change in entrepreneur characteristics would result in 0.159 increase in access to finance.

#### **4.7 Chapter Summary**

This chapter discusses results collected from data collected and findings. The initial part offered an analysis of demographic data of the respondents of the study, the second section was based on data on access to finance, the third part looked at the data on firm characteristics, the fourth part covered issues on financial characteristics and the fifth part discussed issues on entrepreneur characteristics. Finally the chapter discussed regression and correlation. Chapter five will present discussion conclusion and recommendation.

## **CHAPTER FIVE**

### **DISCUSSION CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

This chapter is a summarized copy of findings of the study. Findings are discussed in line to previous literature review. This will be delivered and organized based on the specific research objectives of the research which were inclined towards establishing how financial characteristics, firm characteristics and entrepreneur's characteristics affected access to finance to SMEs in Machakos town.

#### **5.2 Research Findings Summary**

The main reason of this study is to access factors influencing access to credit by SMEs in Kenya, a case study of Machakos town. The research was based on and guided by the three key objectives: to determine the influence of firm's characteristics on SMEs access to credit in Machakos town, to determine Entrepreneur's Characteristics on SMEs access to credit in Machakos town, to establish the influence of financial characteristics on SMEs access to credit in Machakos town.

The research design used was descriptive and was used to gather quantifiable data through the use of questionnaire bearing both open and closed ended questions. The target population was 672 SMEs which have been registered with the county government of Machakos. Stratified random sampling was used to select a sample size of 67. Descriptive statistics and Statistical Package of Social Sciences (SPSS) were used to analyze the data. Data obtained was inputted and coded in accordance to different variables and descriptive statistics such as, mode, mean percentiles, frequencies, variances and standard deviations was used to interpret. Tables, figures and charts were key for analysis and interpretation of data. Regression and Pearson correlation analysis was conducted to show the effect independent variables have on the dependent variable.

First, findings on firm characteristics and credit accessibility revealed majority of the respondents agreed that small firms size have more constraints and problems in accessing loans as compared to big firms, SME's in urban areas are successful in accessing credit from banks due to the ease in accessibility of the financial institutions as compared to those in the rural areas, older firm (more than 3 years) are more experienced in applying for loans than younger firms. However, there was uncertainty on having credit enables SMEs to meet their expansion plan.

The findings on financial characteristics influence on access to credit revealed that respondents agreed that by keeping adequate financial records has made it easy for them to access financing, a financial statements IRS are mandatory before a loan is approved and lack of collateral has a negative effects when accessing credit. There was however uncertainty on firms that do not make significant profits experience challenges accessing credit and banks and other financial institutions are reluctant to provide long term finance to SME's. In addition, majority of the respondent disagreed on the statement that credit positively affected performance and growth of the business as this was attributed to other factors

Entrepreneur characteristics and access to credit revealed that majority of respondents agreed that banks prefer men to women when issuing credit. There was uncertainty on use of networking influences access to finance. Moreover, respondents disagreed on applying a loan as a group is easy because of access to co guarantors, use of political ties helps an entrepreneur access finances, level of education / training affects access to finance and banks consider training and skills one has to access credit.

### **5.3 Discussion**

#### **5.3.1 Effect of Firm's Characteristics on SME's Access to Credit**

The findings revealed that small firms experience more challenges in accessing loans in comparison to big firms and older firm (being in operation for more than 3 years) have more experience in applying for loans than younger firms of below 3 years. This supports the study done by Berger and Udell (2002) who showed that the size of firm influences SME's access to finance. This is because smaller and younger SME's are in less favor of banks hence are faced with higher cost of financing as compared to big and older firms. In the same study, they revealed that there was a positive relationship existing between firm size and SMEs access to credit. In addition, Oliveira and Fortunato (2006) indicated that by smaller firms facing a challenge in accessing finance affects their growth because of lack of sufficient cash flow and are unable to rely on bank financing. Results revealed that SME's located in urban areas have a higher affinity to easily access debt financing than those located in rural areas. This coincides with the research conducted by Fatoki and Asah (2011) in their research findings revealed that there was a positive relationship access to debt financing by SME's and the physical location of the firm.

The research also revealed that banks are willing to lend to small firms located in rural areas even though not with great ease. This is in support to a study done by Rand (2007) who clearly outlined that SME's in rural areas are able to access credit from banks because most government bank credit are allocated towards rural areas growing SMEs. However this in a way contrasted the study by Pandula (2011) who indicated that banks are more reluctant to lend to small firms located in rural areas because their collateral in most cases have less market value and by any chance of defaulting, they may find it difficult to salvage the lost value. Finally, under this objective, it was revealed that there was a positive relationship between firm's age and access to debt financing by SME'S.

### **5.3.2 Effect of Financial Characteristics on SME's Access to Credit**

Findings revealed that most respondents have adequate book keeping records which has made it easy for them to have access to debt financing. Audited financial statements are a necessity to the bank before a loan is approved. This is line with a study done by Pandula (2010) and Nanyondo, (2014) who indicated quality of financial statement and availability of audited financial records has a significantly positive association with access to finance. Moreover, this finding is I support of a study done by Kotey and Sarapaivanich (2006) which indicated that young and small firms experience a challenge accessing credit due to lack of well-established record keeping system and readily available audited financial statements.

Findings revealed that majority of the respondents were in agreement that lack of collateral affects access to finance. This is in line with research done y done by Kamau (2009) and Vuvor and Ackah (2011) which indicated that SME's faces a great challenge accessing credit due to lack of collateral. Findings further revealed that financial institutions are adamant to provide long term financing to SME's, credit has no positive effect on business performance and growth as growth of a firm is not solely attributed to credit accessibility and firms that do not generate profits experience challenges accessing credit. This is in line with Rahaji and Fakayode, (2009); De Klerk, (2008) whose studies indicated that agricultural SME's are faced with unfavorable factors which hinders them from accessing finance and also financial service providers classify farmers as high risk clients who cannot use their farms as collateral for credit.

This also supports a study done by Wagenvoort, (2003) indicated that SME's performance and growth is unaffected by lack of accessing formal finance. In contrast to this, a Study done by Shinozaki (2012) revealed that access to credit has a positive effect on SMEs growth whereas a

study done by Malesky and Taussig (2009) revealed that there was no relationship between access to credit and firm performance.

### **5.3.3 Effect of Entrepreneurs Characteristics on SME's Access to Credit**

Findings revealed that respondents agreed that banks decide upon guys to ladies while issuing credit score. This is in guide of a observe carried out via Cole and Mehran (2009) who mentioned that women entrepreneurs are faced with greater demanding situations in gaining access to finance in comparison to their male counterparts. It is likewise consistent with have a look at performed by using Roper & Scott (2009) in their observe it was set up that that gender is a element influencing the call for for and availability of credit score. However, in an opposing examine completed by using Beck and Cull (2014) and Mama and Ewoudou (2010) findings indicated that gender is not a sustainable variable that influences get right of entry to credit score. Findings also revealed that use of networks have an impact on does no longer affect get right of entry to finance, making use of for a loan as a collection is simple because of get entry to co guarantors and there has been uncertainty that use of political ties helps an entrepreneur access price range. In contrast, in keeping with Atieno (2009), findings installed that networks offer recommendation, records asymmetry and capital to small corporations, social ties or expert associations lets in SME operators to establish relations with bankers This changed into also consistent with studies done by way of Pandula, (2011), McKenzie, (2009) who indicated that organization liability is a lot preferred by way of financial institutions, membership with an association growth SMEs' probabilities of get admission to finance, group lending will increase a firm's get entry to credit score and political surroundings exert a massive impact at the performance of SMEs. Findings revealed that education and stage of training of the entrepreneur does not affect access to finance and banks hardly ever recall schooling and capabilities one has to get right of entry to credit score. In evaluation to Zarooket al. (2013); Slavec and Prodan (2012) whose research found out that educational level of proprietors has large top notch correlation with get right of entry to monetary organization mortgage. Moreover, educational schooling level of the entrepreneur has tremendous impact on getting access to finance and additionally that SMEs with owner/manager who've academic qualification of schooling and past are much more likely to be favored by means of banks to access credit score.

## **5.4 Conclusions**

### **5.4.1 Firm Characteristics on SME's Access to Credit**

Small firms face more problems, challenges and constraints in accessing loans from financial institutions as compared to bigger SME's, the physical location of a firm also has influence over access to finance, older firms that have been in operation for a long time are more experience in loan application thus in turn in accessing finance than younger firms. Credit accessibility does not enable or help SME's achieve or meet their expansion plan. Expansion is more inclined to managerial activities.

### **5.4.2 Financial Characteristics on SME's Access to Credit**

SME's that have adequate book keeping records makes it easy for them to gain access to credit; audited financial statements and security( collateral) are a necessity to the bank before a loan has been approved. SME's are constrained in generating profits due to challenges accessing credit which enhances cash flows, SME's are not able to access long term financing due to the fact that banks consider them as being a risky market and credit does not have a positive effect on performance and growth as growth is attributed to a series of factors above just credit availability.

### **5.4.3 Entrepreneur's Characteristics on SME's Access to Credit**

Banks prefer financing men to women, access to finance is not influenced by the level of networks that the entrepreneur has, applying as a group or the political ties the entrepreneur might have. However, level of education and training and skills entrepreneurs have affect how banks perceive the entrepreneur's loan application.

## **5.5 Recommendations**

### **5.5.1 Recommendation for Improvement**

#### **5.5.1.1 Firm Characteristics on SME's Access to Credit**

It is recommended that financial institutions should develop products that will target SME's located in rural areas as they are the ones discriminated as compared to those in urban areas. Awareness about these products should also be created such that entrepreneurs are in the loop of what financial institutions are offering. Through this SME's will be motivated and encouraged to access credit from financial institutions.

### **5.5.1.2 Financial Characteristics on SME's Access to Credit**

It should be the duty of SME's to carry out their due diligence of ensuring that they have enough documentation and audited financial records before applying for a loan. Moreover, collateral for the loan being applied for should be readily available. Through this they will be able to reduce their limitation in access finance. Moreover, financial institutions will be less reluctant to give them long term loan. Access to credit will also enable SME's grow and invest.

### **5.5.1.3 Entrepreneur's Characteristics on SME's Access to Credit**

In as much as it is difficult, SME's should be encouraged to access credit as a group. This is attributed to being able to easily get guarantors hence making it easy to access loans. Entrepreneurs should be encouraged to attend training and seminars that will enable them network, share ideas and gain more knowledge of how to prepare a marketable business plan and access credit

### **5.5.2 Recommendation for Further Studies**

The study only focused access to credit by SME's operating in Machakos town. It is recommended that other studies be done to determine other factors that affect access to finance. Further studies should be conducted on the role of financial sector in in development and growth of SMEs in the country.

Research can also be done on the financial market on matters dealing with reachability of the financial services to the informal sector due to the significant impact SMEs have on our GDP.

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## **APPENDICES**

### **APPENDIX I: INTRODUCTORY LETTER**

RICHARD MASIKA

C/O STRATHMORE UNIVERSITY

P.O BOX 59857-00200

NAIROBI.

Dear Respondent,

**RE: REQUEST FOR YOUR PARTICIPATION IN MY RESEARCH PROPOSAL**

My name is Richard Masika, a fourth-year student in Strathmore University currently pursuing a degree in Bachelor of Commerce, a double major in Finance and Entrepreneurship options. I'm currently doing my research project which is a requirement by the school before graduation. I am conducting a study on "*demand Factors influencing SMEs Access to Financing: A Case of Machakos town*"

You have been selected randomly to participate in this study. Any information you provide will be treated confidentially. I highly appreciate your participation.

Yours Sincerely,

Richard Masika

## APPENDIX II: QUESTIONNAIRE

DEMAND SIDE FACTORS INFLUENCING ACCESSIBILITY OF LOANS TO SMEs IN KENYA. ACASE STUDY OF MACHAKOS TOWN.

### INSTRUCTIONS

All information collected by this questionnaire will be treated with confidentiality and will only be used for academic purposes.

The information will be protected from any unauthorized access

Kindly read through the questions carefully and respond appropriately.

### SECTION A: GENERAL INFORMATION

1. Gender

Male

Female

2. Age

Below 20 Years

21-30 Years.

31-40 Years

Above 40years

3. What's your highest level of education

Secondary school

Certificate

Diploma

Degree

Post graduate

4. How long have you been running your business?

Less than 1 Year

1 – 5 Years

6 – 10 Years

Over 10 Years

5. Have you ever applied for a loan before?

Yes

No

If No, why \_\_\_\_\_

### SECTION B

#### PART A: ACCESS TO FINANCE

Please indicate your opinion as per the level of disagreement or agreement with the outline statement using 1 to 5 scale guideline. **1= Strongly Disagree, 2= Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree**

statement	1	2	3	4	5
Accessing loans from banks is very difficult					
I have received loans where personal contact existed					
I consider loans from banks or other financial institutions to be expensive					
I prefer funding from friends and family					

In your opinion what is your experience in access to credit from banks \_\_\_\_\_

\_\_\_\_\_

PART B: Firm's Characteristics on SMEs Access to Credit.

Statement	1	2	3	4	5
Small firms size have problems in accessing loans than big firms					
Credit enables SMEs to meet their expansion plan					
Younger firms (less than 3 years) face challenge accessing loans as compared to older firms					
Banks are unwilling to lend to small firms located in rural areas					
Does your business location influence your access to finance?					

In your own opinion what other firm characteristics influence access to credit? \_\_\_\_\_

\_\_\_\_\_

PART C: Entrepreneurs Characteristics on SMEs access to Credit

Statement	1	2	3	4	5
The level of education / training one has affects in accessing finance					
Through networking I have been able to access credit					
The level of experience in the business you are running affects the lending behavior of banks					
Banks prefer men to women when issuing credit					
Applying a loan as a group is easy because I can get co guarantors					

PART C: Financial Characteristics on SMEs access to bank loans

Statement	1	2	3	4	5
Lack of collateral affects access to finance					
Financial institutions are reluctant to provide long term finance to SME's					
I have adequate book keeping records which has made it easy for me to access credit					
Audited financial statements are needed before a loan is approved					
Firms that do not generate profits have challenges accessing credit					
Credit has a positive effect on business performance and growth					

**THANK YOU FOR YOUR PARTICIPATION**



## Digital Receipt

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