FACTORS LIMITING SMALL AND MEDIUM ENTERPRISES ACCESS TO CREDIT IN UASIN GISHU COUNTY, KENYA

DANIEL KIMAIYO

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DECLARATION

I, Daniel Kimaiyo solemnly submit that this research project and all the work presented in it are entirely my work. It has not been published or accepted for the purpose of awarding any other degree or diploma in any learning institution.

I also confirm that to the best of my belief and knowledge all main sources have been duly acknowledged.

Signed:……………………….. Date:……………………………..

Daniel Kimaiyo

D61/75796/2009

This research project has been submitted for examination with my approval as university supervisor.

Signed:……………………….. Date:……………………………..

Dr Luther Otieno

School of Business

University of Nairobi

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Without the unconditional love of my wife and parents, I would not be where I am today and this project would not have been possible. I sincerely thank you all for continuous support and guidance in all what I have done so far. Thank you also for encouraging me to pursue my career goals in the various organizations I have worked for. I would also like to thank all my MBA lecturers for impacting knowledge to me and especially to my supervisor, Dr Luther Otieno who provided useful guidance to enable me complete this project. I hold the upmost respect and deepest gratitude for everyone one of you, from the bottom of my heart, thank you.

DEDICATION

I truly dedicate this project to every person who in one way or another encouraged me to work harder and complete this research project.

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CBK- Central Bank of Kenya

FSD- Financial Sector Deepening

GoK -Government of Kenya

KBRR- Kenya Banks Reference Rate

KES-Kenyan Shillings

Km^2 – Square Kilometers

KNBS-Kenya National Bureau of Statistics

SMEs- Small & Medium Enterprises

SPSS-Statistical Package for the Social Science

US$-United States Dollar

ABSTRACT

SMEs have been recognized as the engine that drives economic growth and development through creation of job opportunities as well as providing most of the needed goods and services. Despite SMEs significant contribution to country's wellbeing, many factors hinder their growth and development chief among them being availability of financing for the emergence, growth and development of SMEs.

The purpose of this study was to determine/establish factors limiting small and medium enterprises access to credit in Uasin Gishu County in Kenya. The literature explored in this study outlined financial access theories, credit access empirical literature as well as factors that dictate credit access. In this study, SMEs specific characteristics formed the independent variables that influence the dependent variable (being awarded a credit facility). The study used a descriptive approach where 392 SMEs in Uasin-Gishu County were sample and interviewed using an interviewer administered questionnaire. From the findings, the study concludes that majority of SMEs in the county did not for credit facilities citing reasons of complex application procedures, high interest rate, and insufficient collateral and poor record keeping. Only 27% of SMEs who applied loans were granted and majority of the rejected applicants cited lack of adequate collateral and inadequate historic information as the reasons of the decline of application. The study also revealed that increasing age and number of employees increased the probability of being awarded a loan facility. It also found out that men had higher chances of getting a credit facility as compared to women.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Limited access to financial resources has been cited (Memba et al, 2012) as one of the key obstacles that hinder robust growth and development of businesses in many developing nations like Kenya. This reality is attributed to many factors including but not limited to non-disclosure, gender bias, age of the businesses, failure to apply due to fear of rejection and level of education among many other factors. Businesses' limited access to financial resources, especially those provided by banks has become a major subject of interest for many scholars and development agencies as indicated by number of empirical data from previous studies in Kenya and other countries (Berg & Fuchs, 2013; Essien & Arene 2014; Gichuki et al, 2014; Nguyen, Gan & Hu, 2015; and Wasihum and Paul 2010). The empirical studies imply that one of the ways of enhancing SMEs is to ensure that they get access to adequate funds when they need it. Nearly all businesses are funded using personal savings. However, this internal source is always inadequate especially in a situation where most owners of SMEs have no steady source of income because they are unemployed. Savings associations may help but the funds are also often inadequate or unreliable. Therefore, formal financial intermediaries become a more reliable partner for the provision of adequate and timely financial resources to SMEs.

A number of theories have been used to explain reasons behind SMEs limited access to finances. They include credit rationing theorem, irrelevance theory of capital structure, pecking order theory and trade off theory. Irrelevance theory of capital structure and pecking order theory stipulates that business owners prefer internal financing to external financing. Trade off theory is of the view that business people give priority to cheaper sources of finances and credit rationing theorem provides that some loan applicants may receive no loan facility or lesser amount than applied due to a number of factors.

Small and Medium Enterprises (SMEs) are key drivers for economic growth and prosperity. They make huge contributions to Kenya's economy through provision of goods and services that improves lives of many people as well as provision of employment opportunities to millions of Kenyans. They are also wealth creation vehicles as well as strategic linkages with large companies across the economy. As at 2015, SMEs employed more than 11 million people thus constituting about 82.7% of Kenya's total workforce (KNBS, 2015). In 2014 alone, the informal sector created about 693,000 employment opportunities. According to Kenya's Economic Survey of 2015, the informal sector has demonstrated upward growth since 2010. A growing SMEs sector has a positive impact on country's GDP through value addition, increased output and profits. Therefore, protecting and enhancing prosperity of SMEs is of strategic importance to country's economic wellbeing. Although these key enterprises play critical role in Kenya's economy, many still face limited credit access which has curtailed their emergence, growth and sustainability. Thus, the area of SMEs credit access to formal credit has become an area of focus to many researchers who attempt to identify ways of mitigating credit access limiting factors. The main variables in this study are the demographic characteristics such as age, gender, and level of education of borrowers. Other variables are size and age of the SME as well as factors such as credit lending conditions imposed by lenders. The study surveyed 392 SMEs across all economic sectors in Uasin Gishu County and the results of the study were analyzed using the logit framework. Results have been presented using tables and recommendations have been drawn.

1.1.1 Access to Credit

Access to credit refers to a situation where a business or a person can obtain loan facility from lenders. Lack or limited access to credit refers to obtaining less or no loan facility at all due to some reasons. Overall, Gichuki et al (2014) found out that in Kenya, 38% of adult population cannot access credit. They further revealed that only19% of the eligible population can access credit from financial institutions while 35% depend on informal credit. The reason offered for limited access of credit from formal sources included but not limited to lack or little income, lack of collateral and unsound business plans. According to Berg and Fuchs (2013) the commercial banks in Kenya lend 17.4% of their total bank lending to SMEs. These financial resources are necessary to assist SMEs to set up and expand their operations, create and develop new products as well as invest in new production facilities and staff (Infosys, n.d.). SMEs in Kenya are many and it is evident that despite the current 17.4% resources advanced by the formal financial institutions to SMEs, many SMEs in Kenya are still unable to access financial resources from banks. This view is corroborated by many authors. Memba et al (2012) observed that SMEs in Africa have little access to finances, which thus inhibit their emergence and eventual growth. Jokorvic (2014) also pointed out that limited and more often lack of financial credit has been cited as one most serious constraint hindering SMEs establishment, growth and development in Kenya.

The most significant obstacles to SMEs credit access are listed as follows; macroeconomic, SME specific, and bank specific limiting factors contribute 70%, 54% and 32% respectively. Additional limiting factors are legal framework affecting banks contribute 38%, legal framework affecting SMEs contribute 38%, contractual environment contribute 27%, competition in the SME market contribute 11%, characteristics of SME lending contribute 19% and Lack of adequate demand contribute 8% (Berg and Fuchs, 2013). Some of the critical factors that impact on credit accessibility include collateral, lack of transparency, in adequate project evaluation skills, extreme levels of inflation, political uncertainties and weak legal and regulatory framework among many other factors.

1.1.2 Small and Medium Enterprises in Kenya

SMEs definition and measures differs widely across institutions reporting SMEs statistics. However, Government of Kenya (GOK) has adopted a unified definition of SME segment in terms of number of employees, annual turnover and capital invested as indicated in the table 1 in the appendix. It is however important to note that in developing countries like Kenya as compared to developed countries like United States, the number of employees, turnover and size of invested capital for SMEs tend to be smaller. Small and medium enterprises in this study are also referred to as informal sector enterprise.

In this study, SMEs cut across the whole of Uasin Gishu County's economy. They are categorized into various sectors as follows; Agriculture and agricultural services, forestry and logging, construction and quarrying, manufacture, repair and installation, wholesale and retail trade; transport; accommodation; food and beverages service; information, communication and technology and agency businesses; institutions of learning; beauty services and health services. These enterprises are located in different places in the county and operated by owners or employees or both. Their main sources of capital are proceeds from disposal of assets, individuals savings, loans from relatives, friends and informal associations commonly referred to as ‘chamas’. These main sources are unsecure, often inadequate and unreliable.

According to GoK_1 (2013), Uasin Gishu County geographical area is 3,327Km^2 with about 894,179 people. Its six constituencies are Turbo, Soy, Moiben, Ainabkoi, Kesses and Kapseret. Of the 3,327Km^2 land cover, 2,995Km^2 is arable while 23.4Km^2 is land under water and the remainder is not arable. Uasin Gishu County borders with the following counties, Elgeyo Marakwet to the East, Kericho to the South, Transzoia to the North, Kakamega to the North West, Nandi to the South West and Baringo to the South East.

1.2 Research Problem

In Kenya, SMEs obtain financial resources to run their businesses from either informal or formal sources. Informal sources are many and varied including but not limited to personal savings, contribution or loans from friends and relatives, reinvested profits and sale of assets among others. This view is reflected by Gichuki et al (2014) when they stated that only19% of the eligible population can access credit from formal financial institutions. Thus it could be concluded that most business people use informal sources more often. Informal sources are the most preferred sources but may not be sufficient and reliable because many SMEs still lack sufficient funds to run their operations.

Limiting factors and reasons for SMEs limited access to credit has been explained by a number of theories, namely; credit rationing theory, irrelevance theory of capital structure, pecking order theory and trade off theory. Credit rationing theory highlights discrimination of borrowers by lenders based on issues such as type of business activity. Irrelevance theory of capital structure, pecking order theory and trade-off theory explain why SMEs choose their financing strategy based on factors such as convenience and cost implications. These theories find that internal source of financing are easier to obtain and offer most benefits to SMEs as compared to external sources.

Internal sources of funding may not be sufficient and reliable thus need to be complemented by formal financial institutions. However, many SMEs cannot obtain loan from banks due to many reasons as indicated by Berg and Fuchs (2013) who stated that the commercial banks in Kenya lend 17.4% of their total bank lending to SMEs; an amount which only serves few SMEs. According to Jakorvic (2014) and Memba et al (2012), shortage of credit has been cited as one most serious constraint hindering SMEs establishment, growth and development in Kenya. World Bank (2015) summarizes SMEs predicament by revealing that 50% of formal SMEs cannot secure formal credit. The financing gap is even widest if micro and informal enterprises are considered. Overall, more than 70% of all SMEs in developing nations cannot secure credit. This gap is larger in Africa and Asia a view also held by Botta (2014). In fact, World Bank estimates that the current credit gap worldwide is in excess of US$2.6 trillion.

Uasin Gishu County is preferred area of study like in other parts of Kenya; many SMEs do not access formal credit facilities (Jakorvic, 2014).

In light of the above facts, the key question for this study is as follows; what are the main factors that hinder SMEs from accessing loan facilities in Uasin Gishu County?

1.3 Research Objective

The objective of the study was to determine/establish factors limiting small and medium enterprises access to credit in Uasin Gishu County in Kenya.

1.4 Value of the Study

As a scholar in the finance discipline, I will benefit tremendously in terms of hands own experience which will further enhance my interviewing skills as well as analytical skills from the involvement in this study. Therefore, this study will enhance my research skills for future research engagements.

This study will discover and create new knowledge and understanding in the field of SMEs access to financial resources from banks. By establishing the limiting factors to credit access, both borrowers and lenders will use the new knowledge to develop ways of ensuring that SMEs access to financial resources is improved.

Finally, this study will also provide literature review for scholars who will wish to study related subject matter in future. The scholars will benefit from the empirical information that will be collected and analyzed.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter demonstrates a review of existing literature based on debt theories, empirical literature as well as factors inhibiting and facilitating SMEs access to finance. It also covers the banking sector in Kenya and intervening variables that affect credit access.

2.2 Theoretical Literature Review

The theories that have been used to help understand the concept of SMEs financing are credit rationing theorem, irrelevance theory of capital structure as well as the pecking order theory and trade-off theory. Irrelevance theory of capital structure and pecking order theory stipulate that business owners prefer internal financing to external financing. On the other hand, trade off theory opinion is that business people give priority to cheaper sources of finances while credit rationing theorem provides that some loan applicants may receive no loan facility or lesser amount than applied due to a number of factors.

2.2.1 Credit Rationing Theory

Stiglitz and Weiss (1981) contributed enormously to the credit rationing theory. According to Clemenz (2012), credit rationing refers to a situation where all or some loan applicants are not awarded all the loan amount they applied for at a prevailing interest rate. This theory is of the view that lenders do not provide all the loans that borrowers wish to obtain due to the fear of dishonest borrowers. The theory assumes imperfect credit markets due to information asymmetry, which lenders attempt to solve by imposing interest rate and collateral. It also assumes that demand for commercial bank loans exceeds their supply at the prevailing interest rate and that borrowers need to provide equal amount of collateral. The theory is also of the view that loan default probability increases with increase in interest rate. The theory was further categorized into pure credit rationing and redlining.

Pure credit rationing commonly referred to as type 1 credit rationing is a situation where some indistinguishable group of bank loan applicants fail to obtain bank loans while others are awarded (Clemenz, 2012). Pure rationing proposes that there is a single pool of borrowers that the bank could not distinguish between them. Hence the bank cannot distinguish between safe and risky borrowers.

In the credit rationing theory, interest rate amount is determined by the probability of repayment. According to this theory, the higher the probability of repayment, the lower the interest rate amount to be charged. However, interest rate may fail to act as a screening tool leading to what is referred to as adverse selection effect. This scenario occurs when interest rates increases causing borrowers with safer projects to drop out, leaving only borrowers with riskier projects to borrow.

Devinney (2012) explained that the second type of credit rationing is redlining and refers to a situation where there exists distinguishable groups of loan applicants, and in those different groups, one group receive part or all of the loan amount applied while the other groups do not receive the applied bank loan at all. However, the other group who do not receive the loan would have obtained it if there was increased credit supply.

Redlining assumes that there are two distinguishable groups of borrowers, those with risky and those with safer projects. The bank will then impose different interest rates for each group. For example, if a bank is satisfied that extending loans to riskier projects will cover interest rates and operating costs adequately, then if loans are available, all borrowers with risky projects will receive the loan while those with safer projects will not receive any loans at all irrespective of the amount of interest rate (Bonnet et al, 2010).

The credit rationing theory recognizes the role of collateral, existence of honest and dishonest borrower and discrimination of borrowers. These are elements that Kenyan banks also consider. However, the theory fails to take into consideration other economic factors such as inflation.

2.2.2 Irrelevance theorem of capital structure

There are a number of theories that attempt to answer the following question. “How do owners and managers of enterprises make financing decisions?” Modigliani and Miller in 1958 proposed irrelevance theorem of capital structure in an attempt to answer the above question. The theory is of the view that enterprises finance their businesses using internal funds, debt and equity. According to Goya & Frank (2005), when it becomes necessary to use debt and equity, the theory proposes that debt-equity ratio is determined in a manner that it divides cash flows among the different investors. This theory is relevant because it recognizes that business people first considers internal sources to external sources to finance their operations. This characteristic is also common to owners of business in Kenya.

This theory is faulted on the basis that it does not apply to the informal sectors and that it assumes that capital markets are perfect, which is not always the case. Furthermore, Modigliani-Miller irrelevance theory is not easy to test because of endogenous factors such as profits, collateral, economic environment and other business related growth opportunities. As a result, it makes it almost impossible to undertake a structural test of the theory by directly regressing the value on debt. Though the theory fails to provide a pragmatic explanation on how SMEs finance their trade operations, it provides a way of establishing reasons why funds are important.

2.2.3 Pecking Order Theory

Stewart Myers and Nicolas Majluf in 1984 proposed the Pecking order theory (Swinnen, Voordeckers & Vandemaele, n. d.). This theory is hinged on asymmetric information and the existence of transaction costs. Pecking order theory assumes that enterprises follow a financing hierarchy and that source of finance is either internal or external. In this case, according to Botta (2014), priority is given to internal funds over external funds. The theory stipulates that enterprises seek external funding only when internal resources are depleted. It follows then that external funds need to be necessary, safer and without control restrictions for the enterprise. For example, in the view of Domenichelli (n.d.), owners of enterprises prefer debt financing with little or no collateral or covenants. In addition, issue costs are least for internal funds, low for equity and highest for debt. This theory is applicable to Kenyan SMEs because it touches on collateral and that business owners in Kenya usually prefer internal sources of capital over the other sources.

2.2.4 Trade-Off Theory

Trade-off theory on the other hand attempts to explain use of debt financing. According to this proposition, owners of enterprises evaluate the various costs and benefits associated with alternative debt plans. It assumes that an internal solution is preferred so that marginal cost and benefits are balanced. According to the theory, an enterprise sets a target debt-to-value ratio and then gradually moves towards it. This target tries to balance debt tax advantages against costs associated with bankruptcy (Goyal & Frank, 2005).

This theory is not perfect because the debt-to-value ratio is not directly observable and that taxation is more complex than assumed by the theory. In addition, it assumes that bankruptcy costs are deadweight costs and that transaction cost takes a specific form.

2.3 Empirical Literature

Empirical research works are studies that used research questions that were clear and measurable and had the following elements; statement of methodology, literature review, citations and data presented to support findings. The empirical literature was from Kenya, Vietnam, Ethiopia, Nigeria and Tanzania.

There are many studies that have been done in a bid to establish reasons behind low uptake of financial resources by SMES from formal financial institutions. Nguyen, Gan & Hu (2015) revealed that networking, positive relationships and connections with credit providers enhance SMEs accessibility to credit in Vietnam. The results further indicated that male owned SMEs were 10.6% more likely to obtain credit than women owned SMEs. In addition, the study revealed that more women are more likely to restrain themselves from applying for bank loans because of fear that they will be rejected. This view is consistent with the trade-off theory in a way that rejection could be too difficult emotion to bear. Gichuki et al (2014) also established that more women are more likely to seek credit from informal sources as compared to men. This trend is explained by the fact that many women in developing countries participate in the informal credit groups as compared to men.

Gichuki et al (2014) found out that in Kenya, 38% of adult population cannot access credit, while 19% can access credit from financial institutions. Another 35% depend only on informal credit. The reason offered for limited access of credit from formal sources included but not limited to lack or little income, lack of collateral and unsound business plans (Kitili, 2012*)*. Studies carried out in Addis Ababa Ethiopia, identified to some extent that business persons with higher level of education and entrepreneurship trainings are more likely to seek for formal credit because their businesses are more likely to perform better (Wasihum and Paul 2010). In addition, their better chances of success are attributed to their ability to make informed choices, take risks and make visionary plans. According to Berg and Fuchs (2013) the commercial banks in Kenya lend 17.4% of their total bank lending to SMEs. The remainder is advanced to government, large companies and individual persons. On the other hand, SMEs contribute 20.5% of bank net revenues. The most significant obstacles to SMEs credit access are listed as follows; macroeconomic, SME specific, and bank specific factors contribute 70%, 54% and 32% respectively. Additional factors are legal framework affecting banks at 38%, legal framework affecting SMEs at 38%, contractual environment at 27%, competition in the

SME market at 11%, characteristics of SME lending at 19% and Lack of adequate demand at 8% (Berg and Fuchs, 2013).

The study of Essien and Arene (2014) which was carried out in the Niger Delta Region of Nigeria pointed out a number of determinants. The study showed that the probability of accessing formal credit increased with the level of education of the borrower.

It further discovered that the longer the enterprise had existed, the greater the chances of it accessing formal credit. It also reported that the bigger the enterprise in terms of asset values the higher probability of an enterprise accessing formal credit. The study further revealed that the probability of an enterprise accessing a loan increases with the availability of collateral a view that agrees with findings of Osano & Languitone (2016).

According to Kira & He (2012), the study of 169 SMEs was carried at Dar es Salaam, Arusha, Unguja and Mbeya in United Republic of Tanzania. The study showed that the size of the business measured by the number of employees had a positive relationship with accessibility to debt financing. This meant that the larger the business enterprise the greater the chances of it accessing bank credit. The study also established that lenders often utilize financial information disclosed by businesses to evaluate and determine future performance of the business. This indicated that businesses that keep business records had a greater probability of accessing bank credit as also observed by Kitili (2012*)* as compared to those that did not keep the records. It also revealed that the older the business enterprise the greater the chance of it accessing credit services from the banks.

The study also revealed that businesses that have collateral had greater probability of accessing formal credit as compared to businesses that did not have.

2.4 Factors Limiting Access to Credit

The most significant obstacles to SMEs credit access are listed as follows; macroeconomic, SME specific, and bank specific factors. Additional factors are legal framework affecting banks, contractual environment, competition in the SME market, characteristics of SME lending, and Lack of adequate demand (Berg and Fuchs, 2013).

2.4.1 Lenders Driven Conditions

Banks evaluate SMEs on the basis of a criterion which include but not limited to scrutiny of audited financial statement, project proposals, financing projection, monitoring cost, credit or default risk and enforcement costs among many others. Many financial intermediaries consider SMEs high risk activity as it generates higher transaction costs and low returns on investments. As a result SMEs are perceived as high risk and commercially unviable (FSD, 2015) and in response, banks set conditions that most SMEs rarely meet and thus are excluded from accessing finances.

Some potential borrowers believe that cost of formal financiers is high and they could not afford. Since most SMES are considered risky, the banks charge higher interest rates as also observed by findings of Kung'u (2011) as well as impose stricter and many lending conditions, which include but not limited to asking them to carry all certificates (Turner 2013). This then make it nearly impossible for the small entrepreneur to access the loan facility (Maksimtsev et al 2013). Interest rates are higher as indicated by KNBS (2015), which shows that even though the Central Bank Rate (CBR) was modestly low at 8.5% in the year 2014, the weighted average commercial banks' leading rate was as high as

15.99%. On the other hand, where financial intermediaries provide credit, their financial products may fail to meet expectations of the SMEs especially if the credit facilities are not always forthcoming in the required amounts. This may frustrate their efforts of achieving the set business objectives. Furthermore, some of the small business owners feel that bank workers do not have trust in them hence they may not receive the attention they deserve.

2.4.2 Borrower Driven Factors

The report that highlighted formal financing of SMEs in Kenya that was commissioned by Central Bank of Kenya, The World Bank and FSD Kenya in the month of September 2015, singled out poor quality of financial records, inadequate (or complete lack of) collateral, informality, poor managerial practices and inability to manage risk as key obstacles that limit most SMEs from accessing finances (FSD, 2015). Furthermore, the existing regulatory and legal framework in Kenya fail to recognize innovative strategies that could have been used to lend SMEs thus result in financial exclusion among the SMEs. Majority of SME’s in the county are characterized by family owned, rely on low cost labor, low division, flexible and often small production runs, labor intensive, low capital formation as well as low-level technologies among others.

Fear of default and its consequences is also a factor that discourages business owners from applying for a loan (Zhang, 2013). The other fear is that of giving away their trade secrets to competitors. Hence they fail to declare key business information to lenders.

Also some entrepreneurs may not apply for the loans because they may not know the procedures that are followed when borrowing the loan.

2.4.3 Other Factors

Given that small businesses are susceptible to negative shocks in the economy, which may lead to unpredictable production and sales activities, business owners may not be comfortable in borrowing. This is because they believe that they may not meet payment deadlines (Zhang, 2013).

The size of the business may also warrant most owners to seek finances from informal sources. This is because the informal sources have no strict conditions and procedures and that they provide for flexible repayment periods. In addition, informal sources may not demand interest charges. However, Longenecker et al (2016) cites that entrepreneurs who borrow from friends and relatives put both their financial and personal relationships at risk especially during the business hard times.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, focus will be on the research design, procedures and methods used to select respondents as well as collect, record, analyze and present findings from primary data collected from Small and Medium Enterprises in Uasin Gishu County. The overall objective in this study is to determine the key factors that limit SMEs access to loan facilities in the county. This chapter's key focus is to align the research methods with the study objective.

3.2 Research Design

This is a descriptive study and has sampled SMEs in different sectors of the economy of Uasin Gishu County. Sample has been studied because it was not possible to study all the informal enterprises in the county, which are in thousands. Thus it saved time and cost. The main reason for sampling from nearly every sector was to try as much as possible to ensure that the sample represents the population (Smith and Albaum, 2012). In addition, this study surveyed three hundred and ninety two enterprises so as to minimize the sampling error.

3.3 Population

According to the Uasin Gishu County integrated development plan 2013-2018, there are 102 trading centers in the county. Each centre has over 100 SMEs ($GoK_1$2013). This indicates that they are over 10,200 SMEs in the county. This is a large population making census impossible. Therefore a sample is to be determined, which shall be a representative of the sampling frame based on the following formula (Salvia et al 2009).

$$ss = \frac{(StdDev(1 - StdDev)(z - score)^2}{(Margin\ of\ error)^2} = \frac{(0.5(1 - 0.5)(1.96)^2}{(0.05)^2}$$

$$ss = \frac{((0.25)(3.8416)}{0.0025} = \frac{0.9604}{0.0025} = 384.16$$

The sample size was rounded up to 392 SMEs in the county.

SS is the sample size

Margin of error in this study expresses the maximum expected difference in the population and is +/-5%. The confidence level for this study is 95%. This means that if the surveys are repeated many times in the county, the true percentage of computed parameter would fall within 5% margin of error 95% of the time (Salvia et al, 2009). The corresponding z-score, which is provided in the z-score table, is 1.96 and the confidence interval is expressed as the standard deviation. For this study, the standard deviation is 0.5.

The sample size for this study has been determined to be 392 samples. Considering that SMEs are under different sectors of the county's economy, SMEs has been categorized in line with the relevant sectors and which was considered a stratum so as to ensure adequate representation in the study. The samples in each of the sectors are selected on the basis of the perceived proportion in the population of SMEs in the county. After stratification, individual samples has been selected using simple random method .For the purpose of this study, the data has been collected from each stratum as indicated in the table 2 below;

Table: 2

Sectors and Specific Business Sampled

Sector	Examples	Number
Agriculture and Agriculture services	Dairy farmers, cash crop farmers, food crop farmers	39
Forestry & logging	Timber yards operators and loggers	40
Construction & Quarrying	Civil works contractors such as concrete block producers and stone harvesters.	28
Manufacturing	Carpenters and fabricated metal producers.	33
Repair and installation	Mechanics, electricians, and metal welders	41
Wholesale & Retail trade	Shops and groceries operators; electronic shops and hardware operators and butcheries operators	34
Transport	boda boda operators and cabs operators	39
Accommodation and food service	Restaurant and hotel operators	38
Information and communication and agency businesses	Cyber cafes and M-Pesa operators	39
Institutions of learning	Certificate and diploma college operators.	10
Beauty Services	Saloon and hair cut operators	40
Health Service	Dispensaries, Chemists and hospitals operators.	11

3.4 Sample Design

This study used simple random sampling method. The samples in each sector have been selected randomly.

3.5 Data Collection

This study collected primary data using prepared interviewer administered questionnaires comprising both closed and open ended questions. The units of the study are small and medium enterprises in Uasin Gishu County and business owners have been interviewed. The questionnaire comprised two parts. Part one has been used to describe the characteristics of the enterprise and that of the owner. Part two has been used to obtain information on factors as well as terms and conditions that influence credit accessibility.

The questionnaire was pretested using a group of respondents who represented the population that this study targeted. The feedback helped in refining the questionnaire. Any ambiguous words were replaced with clear and specific words. Retesting the questionnaire ensured that reliable and valid data was obtain during the study (Healey 2009).

3.6 Data Analysis

The data collected has been categorized, ordered, subjected to statistical analysis and summarized. Specifically, data analysis involved preparation of collected data by cleaning, organizing, editing, categorizing and computation of descriptive statistics. The second step was to present the results in an easy to read using tables. Thereafter, inference was drawn based on the results obtained.

3.6.1 Data Analysis Model

The depended variables for the study were loan approval and loan rejection. The qualitative depended logit model was used to analyze the data. Therefore, MSME access to credit MAC (MAC=1) or not (MAC=0) was explained by observable individual demographic, enterprise demand characteristics and lenders supply factors within the logit framework. The standard framework for the logit estimation is show in equation (1) and (2) below;

If X_1,……X_n are the characteristics associated with the outcome, the logistic model is given as

Pi= (Pr (Y=1; X=xi)

$$\text{Pi= (Prob (Yi=1)= Pi} = \frac{1}{1+e^{-(\beta o+\beta iXi+\cdots\beta nXn)x}} = \frac{e^{(\beta o+\beta iXi+\cdots\beta nXn)x}}{1+e^{-(\beta o+\beta iXi+\cdots\beta nXn)x}} \qquad (1)$$

$$\text{Pi} = \text{Prob}\ (\text{Y} = 0) = 1 - \text{Prob}(\text{Y} = 1) = \frac{1}{1+e^{-(\beta o+\beta iXi+\cdots\beta nXn)x}} \qquad (2)$$

Where Pi is the probability of Y taking the value 1 and 1-Pi is the probability that Y takes the value 0. E is the exponential constant.

Summary

The sample size for this study was determined to be 392 SMEs in the county across all major sectors. Data collection instrument used was tested and all ambiguous statements rectified. The data collected will then be analyzed using a logit model.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter reports the analysis and findings of the study as outlined in the research methodology. The outcome presented investigates the factors limiting SMEs access to finance in Uasin-Gishu County, Kenya. The data was collected using an interviewer administered questionnaire and the questions were framed according to the objectives of the study. Furthermore, the data was analyzed using SPSS analytical tool.

4.2 Demographic Characteristics of SMEs owners

Table 3.0 below discusses the demographic characteristics of SMEs owners. The data collected after sampling 392 SMEs from different economic sectors in Uasin Gishu County showed that men owned SMEs were 229 (58.4%) and women owned SMEs were 163 (41.6%). This could be attributed to the patriarchal nature of the society in the county. Referring to the level of education of the SMEs owners, 65.8% of SMEs owners held college and secondary certificates. This was followed by those with diploma certificates at 18.1% and by those with graduate certificates at 6.9%. Those with primary certificates were second last at 6.6% and those with post graduate certificate were the least in number at 3%. This state of affairs could be attributed to the fact that nearly all adult population hold post primary certificates. In addition, bulk of the adult population fall in between secondary and diploma level of education, a situation that do not enable them find white collar jobs easily thus turn into entrepreneurship as a way of making income and surviving.

Table 3.0: Demographic Characteristics of SMEs Owners

Variable	**Frequency**	**%**
Gender of owners		
Female	163	41.6%
Male	229	58.4%
Total	**392**	**100.0%**
Level of education		
Post graduate Certificate	10	2.6%
Graduate Certificate	27	6.9%
Diploma Certificate	71	18.1%
College Certificate	122	31.1%
Secondary Certificate	136	34.7%
Primary Certificate	26	6.6%
Total	**392**	**100.0%**

4.3 Demographic Characteristics of SMEs

The reports of these findings are presented in table 4.0 below. Regarding the age, 42.9% of the SMEs have been in operation for between 13 months and 24 months. Those that have been in operation for between 25 months and 36 months were 29.3% and those that have operated for 37 months and above were 21.7%. The remaining 6.1% of the SMEs reported a shorter life span of less than 12 months.

44.4% of the SMEs sampled employed between 3 and 5 employees, 31.6% of SMEs employed between 1 and 2 employees, while 22.7% employed between 6 and 10 staff. On the other hand, 0.3% and 1% of all SMEs employed between 21 employees to 49 employees and 10 employees to 20 employees respectively. Most SMEs employed 5 or less employees because their business activities were less and also they could not afford to pay many employees because most businesses had small annual turnover. 62.2% of the SMEs had an annual turnover of below KES1,000,000 while 26.5% had an annual turnover of between KES1,000,001 and KES3,000,000. Lastly, 11.2% of SMEs had an annual turnover of more than KES3, 000,000. This indicates that majority of SMEs in the county generates small annual sales because majority of them are labor intensive.

Table 4.0: Demographic Characteristics of SMEs

Age of SME		
37 months and above	85	21.7%
Between 25 months to 36 months years	115	29.3%
Between 13 months to 24 months years	168	42.9%
Less than 12 months	24	6.1%
Total	**392**	**100.0%**
Number of employees in the SME		
21 employee to 49 employees	1	0.3%

10 employee to 20 employees	4	1.0%
6 employee to 10 employees	89	22.7%
3 employee to 5 employees	174	44.4%
1 employee to 2 employees	124	31.6%
Total	**392**	**100.0%**
Turnover of the SME		
Above KES3,000, 000	44	11.2%
Between KES1,000,001 to - KES3,000,000	104	26.5%
Between KES500,001 to - KES1,000,000	122	31.1%
Less than KES500,000	122	31.1%
Total	**392**	**100.0%**

4.4 General Factors that Influence SMEs Access to Credit in Uasin Gishu County

With respect to problems that hinder progress of SMEs, access to finance and competition were shown to be the two top impediments as indicated by 45.9% and 25.5% of the responders respectively as shown in table 5.0 below. Problems with limited access to credit stem from inadequate collateral and competition is a problem because many SMEs provide identical products or services. Finding customers and cost of production or labor came third and fourth at 11.7% and 10.7% respectively. Lack of adequate skilled staff or experienced managers as well as regulation issues were cited by few respondents as their main obstacle to smooth operation of the SMEs at 5.1% and 1% respectively.

Too high interest rates and insufficient collateral guarantee are serious limiting factors for SMEs to access credit. This is evident from 49% and 44.4% of the respondents respectively. This explains why most SMEs continue to struggle to obtain loans to assist in running their businesses. Most of the respondents at 35.3% stated that they did not apply for a loan because the application is too difficult or that the application process proved difficult to them. This was followed by 19.3% of SMEs who asserted that interest rates were high. 12.9% of the respondents did not apply for loans due to high collateral requirement while 13.3% thought that their request will be turned down.

Finally, three main reasons were reported as the main reasons why SMEs who applied for credit were rejected. 57.5% of SMEs indicated that the reason why they were denied credit facility is due to insufficient security. The second important reason is the account performance history as reported by 15.1% of the SMEs since the banks felt that their account activities did not warrant them to be awarded loans. 10.4% of the SMEs cited inadequate historic information while 4% mentioned other reasons that led to loan denial.

Table 5.0: General Factors that Influence SMEs Access to Credit

Most pressing problem of the SME		
Regulation	4	1.0%
Availability of skilled staff or experienced managers	20	5.1%
Costs of production or labor	42	10.7%

Access to finance	180	45.9%
Competition	100	25.5%
Finding customers	46	11.7%
Total	**392**	**100.0%**
Most limiting factor in accessing credit facility		
Financing not available at all	21	5.4%
Interest rates or price too high	192	49.0%
Insufficient collateral or guarantee	175	44.6%
There are no obstacles	4	1.0%
Total	**392**	**100.0%**
Reasons for not applying a credit facility		
Time required for loan approval is long	6	2.4%
Size of loan or maturity is insufficient	24	9.6%
Collateral requirements are too high	32	12.9%
Interest rates are very high	48	19.3%
Applying for financing is too difficult/ Application procedures are complex	88	35.3%
Thought the request will be turned down	33	13.3%
No need for a loan	18	7.2%
Total	**249**	**100.0%**
Reasons why loan was declined		
No reason given/none	3	2.8%

Change in bank pricing policy	4	3.8%
Requested facility was sanctioned at lower level/different structure	2	1.9%
No longer a type of business to which the bank is prepared to lend	3	2.8%
Inadequate/insufficient security	61	57.5%
Change in bank lending policy	1	0.9%
Inadequate historic information provided	11	10.4%
Deterioration in business financial performance	1	0.9%
Account performance/history	16	15.1%
Inadequate repayment capacity	4	3.8%
Total	**106**	**100.0%**

4.5 Binomial logit Regression Analysis

The binomial logistic regression was used to predict whether the incidence of being awarded a loan can be predicted on the basis of gender, level of education, age of the enterprise, number of employees and SME turnover. The probability of being awarded a credit facility occur when the estimated probability is equal or greater than 50%.

Table 6.0: Classification Table showing loan award status

	Observed	Predicted	
		Loan status	Percentage

			Applied and awarded	Applied and not awarded	Correct
Step 1	Loan status	Applied and awarded	30	10	75.0
		Applied and not awarded	7	99	93.4
	Overall Percentage				88.4
a. The cut value is .500					

The explained variation in the depended variable based on binomial logistic regression in table 6.0 above is 88.4%. The binomial regression logistic model is statistically significant for loan award based on gender, level of education, age of the enterprise, number of employees and SME turnover. The correlation co-eficients for the variables are as follows; Gender (B=0.676), education (B=-0.599), age (B=0.423), employees (B=0.412) and turnover (B=-2.406). In addition, table 7.0 below shows that the binomial logistic regression is 44.9% and 64.9% based on Cox & Snell R^2 and Nagelkerke R^2 models respectively.

Table 7.0: Model Summary of -2 Log likelihood, Cox & Snell R^2 and Nagelkerke R^2

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	84.522[a]	.449	.649
a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.			

Table 8.0: Binomial Logit Estimate of the Factors Affecting SMEs Access to Credit

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Gender(1)	.676	.652	1.074	1	.300	1.966	.547	7.063
	Education	-.599	.269	4.976	1	.026	.549	.324	.930
	Age	.423	.358	1.398	1	.237	1.527	.757	3.081
	Employees	.412	.394	1.093	1	.296	1.510	.697	3.267
	Turnover	-2.406	.477	25.405	1	.000	.090	.035	.230
	Constant	5.619	1.411	15.849	1	.000	275.638		
a. Variable(s) entered on step 1: Gender, Education, Age, Employees, and Turnover.									

Table 8.0 indicates the contribution of each variable to the binomial logistic regression model and its statistical significance based on Nagelkerke R^2. The Wald test shows the statistical significance for each independent variable is significant. The result of the study indicate the following; education (p=0.026), age (p=0.237), gender (p=0.300), employees (p=0.296) and turnover (p=0.000) added significantly to the prediction of SME being awarded a loan. Males were 1.966 times more likely to be awarded a loan than females as shown in EXP (B) under gender. Likewise, increasing age of the SME and number of employees in a SME is associated with an increased likelihood of being awarded a loan by 1.5 times each respectively. However, increasing turnover and level of education was

associated with a reduction in the likelihood of being awarded a loan. It is worth noting that majority of the SMEs owners interviewed have a lower level of education. The variables of gender, age and number of employees concurs with the various literature reviews on the increased chances of accessing a loan facility.

Table 9.0: Gender * Loan Status Cross Tabulation

Count					
Gender	loan status				
	Applied and awarded		Applied and not awarded		
	Frequency	%	Frequency	%	Total
Male	27	29.0%	66	71.0%	93
Female	13	24.5%	40	75.5%	53
Total	40		106		146

As shown in table 9.0 above, the number of SMEs who applied for a loan were 146 (37.2% of the respondents) and only 40 (27.4%) applicants were awarded the credit by various banks in the county. This study also revealed that more men are more likely to apply for credit as compared to women and this could be attributed to the notion that most women cannot withstand rejection as compared to men. This demonstrate that majority (72.6%) of SMEs cannot access credit and this could be attributed mainly to lack of sufficient collateral or guarantee, poor account performance as well as non disclosure or poor records. These findings is in tandem with the empirical literature where majority of the researchers done have proved that majority of the SMEs in Kenya cannot access credit from formal financial institutions. In fact Berg and Fuchs (2013) found out that in Kenya, banks lend only 17.4% of their total loan book to SMEs while Gichuki et al (2014) discovered that only 19% of adult population in Kenya can access credit from formal financial institutions.

Table 10; Enterprise Sector * Loan status Cross Tabulation

Count					
Enterprise	loan status				
	Applied and awarded		Applied and not awarded		
	Frequency	%	Frequency	%	Total
Manufacturing	3	37.5%	5	62.5%	8
Construction & Quarrying	4	44%	5	56%	9
Wholesale or retail trade	11	73%	4	27%	15
Transport	11	44%	14	56%	25
Agriculture and Agriculture services	1	7%	13	93%	14
Information and communication and agency businesses	1	7%	14	93%	15
Beauty Services	0	0%	14	100%	14
Forestry & logging	6	32%	13	68%	19
Repair and installation	0	0%	9	100%	9
Health Service	0	0%	5	100%	5
Accommodation and food service	3	30%	7	70%	10

Institutions of learning	0	0%	3	100%	3
Total	40		106		146

Cross tabulation clearly show the type of sectors that are more likely to be awarded loans and those that have lesser or no chance of being awarded a credit facility. This study found out that wholesale or retail trade is a sector that has the highest chances of being loaned as indicated by 73% success rate. Other sectors with a better chance of being awarded a loan facility are construction & quarrying at 44%, transport 44%, manufacturing 38%, forestry & logging at 32% and accommodation and food service at 30% success rate. Information, communication and agency businesses have a success rate of 7% and Agriculture and agricultural services also have a success rate of 7%. Beauty services repair and installation, health service and institutions of learning were not awarded a loan facility though they applied.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECCOMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings of this study based on the analysis and discussion in chapter four and the objective of the study. Conclusions and recommendations for policy improvements have also been outlined in this chapter together with the limitations of the study and suggestion for further research.

5.2 Summary

The study found out that more men than women own SMEs and that majority of SMEs owners held college and secondary certificates. It also found out that a mere 3% of the owners held a post graduate certificate. Furthermore, the study found out that 93.9% of the SMEs have been in operation for more than one year. 68.4% of SMEs employed more than 3 employees and 62.2% of SMEs had an annual turnover of less than KES1, 000,000.

Many SMEs are not applying for credit facilities. On the other hand, those that apply have 27.4% chance of being awarded loans. Further, males have a higher chance of being awarded loans as compared to female. It also found out that lack of access to credit was a major problem, which was followed by high level of competition. In regard to credit accessibility, the study found out that too high interest rates and insufficient collateral or guarantee are serious limiting factors to access to credit.

When SMEs were asked to give reasons for non application for credit facilities, many stated that application is too difficult or that the application procedures proved difficult to them. Other significant concerns were the high cost of credit, collateral requirements and the fear that the request will be turned down. For the SMEs that applied for credit and rejected, majority believed that they were rejected because they did not have sufficient collateral or guarantees. Other significant reasons noted in the study were poor account performance history and insufficient historic information about the SME.

Wholesale and retail trade, construction & quarrying, transport, manufacturing, forestry & logging, accommodation and food service sectors were more likely to receive a loan facility as compared to Information and communication and agency businesses, Agriculture and agricultural services sectors. Beauty services repair and installation, health service and institutions of learning had zero chance of being awarded loan facility.

Increasing age of an enterprise, gender of the applicant and number of employees increases the likelihood of being awarded a loan. However, the study indicated that increasing level of SMEs turnover and level of education of the business owner does not increase the likelihood of being awarded a loan. Thus, the above variables could be used to predict whether SMEs can be awarded a loan or not using a binomial logistic regression model.

Many SMEs were optimistic about general economic outlook and the progress of their enterprises. The study also discovered that some SMEs were undecided on public financial support and banks willingness to provide loan.

5.3 Conclusion

Access to credit facilities has been identified as a major problem facing SMEs in Uasin Gishu County. The number of SMEs studied in the county was 392 from different sectors of the economy. The study shows that many SMEs that apply for credit are not accessing credit facilities from mainstream financial intermediaries. Worse still, many more SMEs are not applying for credit facilities though they need it.

This study established factors limiting small and medium enterprises access to credit in Uasin Gishu County in Kenya. Chief factors limiting SMEs access to credit were high interest rates; insufficient collateral or guarantee, complex loan application procedures, fear of rejection, poor record keeping and poor account performance. These factors manifested themselves in the following variables; gender of SME owner, level of education of SME owner, age of SME, number of employees and annual turnover of the SME. The study revealed except for annual turnover and levels education, that increasing age of an enterprise and number of employees increased the likelihood of being awarded a loan facility. It also found out that being a male increases one’s chances of being awarded credit facility as compared to being a female.

5.4 Recommendations

Taking into account the discussion in respect to SMEs access to credit, as determined in the study and empirical research, the following recommendations have been arrived at.

First, as credit have been shown to have a direct positive impact in the growth and development of SMEs, specifically for buying stock and developing infrastructure and to encourage more SMEs to borrow, it is strongly advised that banks incorporate credit sensitization and financial literacy campaigns in their marketing strategies. This is in a bid to help SMEs improve their account performances and develop sound and reliable business records.

Secondly, this study established a significant link between dependent variable of being awarded credit and independent variables namely; level of education of SME owner, age of the enterprise, gender of the applicant and number of employees. Most of these independent variables except gender orientation require time to be achieved and as such, SMEs are strongly advised to form and strengthen alternative sources of funds as a short term intervention.

Third, the study found out those high interest rates is among chief direct obstacles to credit access. In this regard, the government through central bank of Kenya is encouraged to continue influencing interest rates charged by banks downwards through systematic reduction of the bank rate.

Fourth, this study found out that SMEs perceive loan application as a complex process and that they are likely to be rejected if they apply. This could be a perception problem that could be solved by providing adequate and comprehensive information at a point of application so as to prepare the applicant well.

Fifth, competition also emerged as a second serious problem facing SMEs. This is rife in an economic environment where most business people run identical businesses and targeting the same market. Therefore, SMEs owners are strongly advised to attend entrepreneurship seminars, conferences and exhibitions trainings so as to equip them on different ways of distinguishing themselves. The trainings will also help them to identify and explore emerging economic activities and markets beyond their traditional areas of operations.

5.5 Limitation of the Study

This study identified two major limitations, namely; omission of statements that will have easily guided the participants to jump questions that did not apply to them and a smaller geographical area where the data was collected. Question number nine did not expressly ask the respondents who did not apply for the loan to instead proceed to the next question. As a result, some respondents had to inquire how to respond to that question and that delayed the response time. Secondly, the study envisioned that data will be collected from six major urban centers in the county. However, because of limited time and fewer financial resources, data was only collected from bigger trading centers and environs such as Eldoret town, Moi's Bridge and Matunda shopping centers. The major trading centers left out were Burnt Forest, Jua Kali and Turbo. Despite these limitations, all questions were answered satisfactorily and the number of SMEs interviewed met the determined sample size.

5.6 Suggestions for Further Research

The level of education of SMEs owners and level of SMEs turnover indicated negative correlation in terms of access to credit. Naturally, these variables ought to be positively correlated. Secondly, it is of interest to investigate why certain sectors had higher chances of receiving credit as compared to others. In our case, the study revealed that people in wholesale or retail business are more likely to receive credit while those offering beauty, repair and installation, health service and institutions of learning had very limited chance of receiving credit.

REFERENCES

Berg, G and Fuchs, M. (2013). *Bank Financing of SMEs in Five Sub-Saharan African Countries:The Role of Competition, Innovation, and the Government*, Washinton, DC: World Bank publications.

Bonnet, J., De Lema,D. & Auken , H. E., (2010).*The Entrepreneurial Society: How to Fill the Gap Between Knowledge and Innovation*. London: Edward Elgar Publishing

Botta, M. (2014). *Firm Financing in the Euro Area: How Asset Risk Affects Capital Structure Decisions Within the Monetary Union*. Hamburg: Anchor Academic Publishing (aap_verlag).

CBK (2016). *Directory of Licensed Commercial Banks, Mortgage Finance Institutions And Authorised Non-Operating Bank Holding Companies*. Nairobi: Government Press.

CBK (n. d.). *List of licensed Microfinance Banks*. Retrieved from Central Bank of Kenya website:https://www.centralbank.go.ke/index.php/bank-supervision/microfinance-institutions/14-bank-supervision/83-list-of-licensed-deposit-taking

CBK .(2015[1]). *Central Bank of Kenya Annual_Report_2015*. Nairobi: Government Press.

Chou, T. (2014). *International Conference on Social, Education and Management Engineering*. Lancaster, Pennsylvania: DEStech Publications.

Clemenz, G. (2012). *Credit Markets with Asymmetric Information*. Heidelberg: Springer Science & Business Media.

Cornwall, J. R., Vang, O.D. & Hartman, J. M. (2015). *Entrepreneurial Financial Management: An Applied Approach*. New York: M.E. Sharpe.

Dahan, F. (2015). *Research Handbook on Secured Financing in Commercial Transactions*. London: Edward Elgar Publishing.

Devinney, M. T., (2012). *Rationing in a Theory of the Banking Firm*. Heidelberg: Springer Science & Business Media

Domenichelli, O. (n.d.)*The pecking order theory in the context of small and medium -sized enterprises.* Retrieved from Rivistapiccolaimpresa website:http://rivistapiccolaimpresa.uniurb.it/index.php/piccola/article/download/99/107

Essien U. A. Arene & C. J. (2014). An Analysis of Access To Credit Markets And The Performance Of Small Scale Agro- Based Enterprises In The Niger Delta Region Of Nigeria. *International Journal of Food and Agricultural Economics* Vol. 2 No. 3. Department of Agricultural Economics, University of Nigeria

FSD (2008).*The Potential for Credit Scoring for SME Lending In Kenya*. Nairobi: FSD

FSD Kenya. (2015*). FinAccess Business – Supply Bank Financing of SMEs in Kenya. September 2015*. Nairobi: FSD.

Gichuki, C., Mulu-Mutuku, M.,& Kinuthia, L., (2014), Performance of women owned enterprises accessing credit from village credit and savings associations in Kenya *Journal of Global Entrepreneurship Research*. Heidelberg: Springer Science & Business Media.

GoK (2012). *Micro and Small Enterprises Act. No. 55 of 2012*. Nairobi: Government Press.

GoK$_1$ (2013). *Uasin Gishu County Integrated Development Plan 2013-2018*. Nairobi: Government Press.

Goyal, V. K. & Frank, M. Z. (2005). *Trade-off and Pecking Order Theories of Debt Department of Finance*. Hong Kong: Hong Kong University of Science and Technology.

Harford, J. (2014). *Corporate Cash Management, Excess Cash, and Acquisitions.* New York: Routledge.

Healey, J. (2009). *The essentials of statistics* (2nd ed.). New York: Cengage Learning.

Hurn, C. (2012). *The Entrepreneur's Secret to Creating Wealth: How the Smartest Business Owners Build Their Fortunes*. South Carolina: Advantage Media Group Charleston.

Infosys (n.d). *Banks! It's time to change your game in SME Lending.* Retrieved from Infosys website: https://www.infosys.com/industries/financial-services/white-papers/Documents/banks-change-game-SME.pdf

Jokorvic, M. (2014). *Factors Affecting Growth of SMEs in Gatundu Region North Sub-county*. Germany: GRIN Verlag.

Khasnabis, R. & Chakraborty, I. (2014). *Market, Regulations and Finance: Global Meltdown and the Indian Economy*. New Delhi: Springer Science & Business Media.

Kira, A. R. & He, Z. (2012). The Impact of Firm Characteristics in Access of Financing by Small and Medium-sized Enterprises in Tanzania. *International Journal of Business and Management*; Vol. 7, No. 24. Shanghai: Shanghai University of Finance and Economics, School of Finance

Kitili, E. K. (2012). *Factors Influencing Access To Credit Facilities Among Small and Medium Entrepreneurs In Island Division, Mombasa County*. Unpublished Research Project, Kenyatta University.

KNBS (2015). *Economic Survey 2015*. Nairobi: Government Press.

Kung'u, G. K. (2011). *Factors influencing SMEs access to Finance: A case study of Westland Division, Kenya*. Unpublished Research Project, Mount Kenya University.

Longenecker, J. G., Petty, W., Palich, L. E., & Hoy, F. (2016). *Small Business Management: Launching & Growing Entrepreneurial Ventures* (18th ed.). Boston, Ma: Cengage Learning.

Maksimtsev, I. A., Kuraev,A.A, Makarova, N. A., Baydukova, N. v., Sapotnitskiy, E. S., Vasushkin, E.M. (2013). *Report for the development of the draft of the final communique of the g20 young entrepreneurs' alliance summit*. St. Petersbur, Russia: Space of business LLC.

Mayo, H. B. (2015). *Basic Finance: An Introduction to Financial Institutions, Investments, and Management (11th ed.).* New York: Cengage Learning.

Memba S. F., Gakure W. R., & Karanja, K. (2012). Venture Capital (V C): It's Impact on Growth of Small and Medium Enterprises in Kenya. International Journal of Business and Social Science Vol. 3 No. 6; [Special Issue -March 2012].

Miller, M. M. & Nyauncho, E. (2014). *State Of Practice of SME Banking*. Nairobi: FSD

Munzele, S. M., Faye, I., &Triki, T. (2011). *Financing Africa: Through the Crisis and Beyond*. Washinton, DC: World Bank Publications.

Nguyen, N., Gan, C. & Hu, B (2015). An empirical analysis of credit accessibility of small and medium sized enterprises in Vietnam. Banks and Bank Systems, Vol 10, No. 1

Osano, H. M. & Languitone, H. (2016). *Factors influencing access to finance by SMEs in Mozambique: case of SMEs in Maputo central business district*.

Salvia,J., Ysseldyke,J. and Witmer, S. (2009). *Assessment: In Special and Inclusive Education (11th ed.)* New York: Cengage Learning.

Smith, S. M., & Albaum, G. S. (2012). *Basic Marketing Research: Volume 1; Handbook for Research Professionals*. Utah, USA: Qualtrics Labs Inc, Provo.

Stiglitz, J. E. & Weiss, A. M. (1981). Credit Rationing in Markets with Incomplete Information. *American Economic Review,* 71, 393-410.

Swinnen, S., Voordeckers, W. & Vandemaele, S. (n. d.). *Capital Structure In SMEs: Pecking Order Versus Static Trade-Off, Bounded Rationality and The Behavioural Principle*. Diepenbeek, Belgium: Limburg University Center, Faculty of Business Administration.

Turner, S. (2013). *Indonesia's Small Entrepreneurs: Trading on the Margins*. New York, NY: Routledge.

World Bank (2015). *Small and Medium Enterprises (SMEs) Finance* Retrieved from World Bank website: http://www.worldbank.org/en/topic/financialsector/brief/smes-finance

Zhang, Z. (2013). *Finance – Fundamental Problems and Solutions*. Heidelberg: Springer Science & Business Media.

APPENDIXES

Table 1

Definitions of micro and small enterprises in Kenya

Variables		Micro	Small
Annual Turnover		Less than KES500,000	KES500,001 to KES5,000,000
Employees		Less than 10 people	10 to 50 people
Total Assets and Financial Investment	Manufacturing Sector	Less than KES10,000,000	KES10,000,001 to KES50,000,000
	Service and Farming Enterprises	Less than KES5,000,000	KES5,000,001 to KES20,000,000

Source: Micro and Small Enterprises Act**.** No. 55 of 2012

Table 11

A 3x3 matrix of the Kenyan commercial banking sector as of June 2016

	Local banks	Foreign banks	Banks with government participation
Small	1. African Banking Corporation Ltd 2. Jamii Bora Bank Ltd 3. Credit Bank Ltd 4. Charterhouse Bank Ltd (Under - Statutory Management) 5. Equatorial Commercial Bank Ltd 6. Fidelity Commercial Bank Ltd 7. Giro Commercial Bank Ltd 8. Guardian Bank Ltd 9. Middle East Bank (K) Ltd 10. Oriental Commercial Bank Ltd 11. Paramount Universal Bank Ltd 12. Prime Bank Ltd	1. Habib Bank A.G. Zurich 2. Habib Bank Ltd 3. UBA Kenya Bank Limited 4. Sidian Bank Limited 5. Gulf Africa Bank (K) Ltd 6. First Community Bank Limited 7. GT Bank Ltd	1. Consolidated Bank of Kenya Ltd 2. Development Bank of Kenya Ltd

	13. Trans-National Bank Ltd 14. Victoria Commercial Bank Ltd		
Medium	1. Commercial Bank of Africa Ltd 2. Chase Bank (K) Ltd (In Receivership) 3. Family Bank Ltd 4. Imperial Bank Ltd (In Receivership) 5. NIC Bank Limited	1. Bank of India 2. Bank of Africa Kenya Limited 3. Citibank N.A. Kenya 4. Bank of Baroda (K) Ltd 5. Diamond Trust Bank Kenya Ltd 6. I & M Bank Limited 7. Ecobank Kenya Limited	1. Housing Finance Ltd 2. National Bank of Kenya Ltd
Large	1. Equity Bank Kenya Limited 2. Cooperative Bank of Kenya	1. Barclays Bank of Kenya 2. Standard Chartered Bank (K) Ltd	1. Kenya Commercial Bank Ltd 2. CFC Stanbic Bank Ltd

Source: CBK, 2016.

Table 12

The Kenyan Microfinance banks as of June 2016

1. Choice Microfinance Bank Limited	2. Caritas Microfinance Bank Ltd	3. Faulu Microfinance Bank Ltd
4. Daraja Microfinance Bank Ltd	5. U&I Microfinance Bank Ltd	6. Sumac Microfinance Bank Ltd
7. Century Microfinance Bank Ltd	8. Kenya Women Microfinance Bank Ltd	9. Uwezo Microfinance Bank Ltd
10. SMEP Microfinance Bank Ltd	11. Remu Microfinance Bank Ltd	12. Rafiki Microfinance Bank Ltd

Source: CBK, 2016

5.0 Questionnaire

A. General characteristic of the SME

1) What is the gender of the founder of the enterprise?

- Male
- Female

2) What is your highest level of education?

- Primary Certificate
- Secondary Certificate
- College Certificate
- Diploma Certificate
- Graduate Certificate
- Post graduate Certificate

3) How many years has your enterprise been in existence?

- Less than 12 months
- Between 13 months to 24 months years
- Between 25 months to 36 months years
- Between 37 months and above

4) How many persons does your enterprise currently employ?

☐ 1 employee to 2 employees

☐ 3 employee to 5 employees

☐ 6 employee to 10 employees

☐ 10 employee to 20 employees

☐ 21 employee to 49 employees

☐ Above 49 employees

5) What is the main activity of your enterprise?

☐ Manufacturing

☐ Construction

☐ Wholesale or retail trade

☐ Transport

☐ Agriculture

☐ Financial services

☐ Other specify……………………………………………………………

6) What was the annual turnover of your enterprise in 2015?

☐ Less than KES500,000

☐ Between KES500,001 to - KES1,000,000

☐ Between KES1,000,001 to - KES3,000,000

☐ Above KES3,000, 000

7) What is currently the most pressing problem your enterprise is facing?

- [ ] Finding customers
- [ ] Competition
- [ ] Access to finance
- [ ] Costs of production or labor
- [ ] Availability of skilled staff or experienced managers
- [ ] Regulation
- [ ] Other……………………………………………

B. Factors influencing demand for credit

8) What do you see as the most important limiting factor to get financing?

- [ ] There are no obstacles
- [ ] Insufficient collateral or guarantee
- [ ] Interest rates or price too high
- [ ] Financing not available at all
- [ ] Other

9) If you did not apply for credit, why did the business not seek external financing?

- [ ] No need for a loan
- [ ] Investment project postponed

- Thought the request will be turned down
- Applying for financing is too difficult/ Application procedures are complex
- Interest rates are very high
- Collateral requirements are too high
- Size of loan or maturity is insufficient
- We seek internal funding instead
- Poor economic climate—we have seen drop in business
- Time required for loan approval is long
- Informal payment needed to obtain bank loan
- Other

10) The availability of external financing depends on various factors, which are in part related to the general economic situation, your enterprise-specific situation and to lenders' attitudes. For each of the following factors, would you say that they have improved, remained unchanged or deteriorated over the past 12 months?

- General economic outlook…………………………………………………….
- Access to public financial support including guarantees……………………
- Your enterprise -specific outlook with respect to your sales and profitability or business plan…………………………………………………………………
- Your enterprise's own capital…………………………………………………..
- Your enterprise's credit history………………………………………………..
- Willingness of banks to provide a loan………………………………………

- Willingness of business partners to provide trade credit……………………..
- Willingness of investors to invest in equity…………………………………….
- Other ……………………………………………………………………………

11) If your application was rejected, why was the loan declined?

- Inadequate repayment capacity
- Account performance/history
- Deterioration in business financial performance
- Inadequate historic information provided
- Change in bank lending policy
- Inadequate/insufficient security
- No longer a sector to which the bank is prepared to lend
- No longer a type of business to which the bank is prepared to lend
- Requested facility was sanctioned at lower level/different structure
- Change in bank pricing policy
- Other
- No reason given/none