FACTORS AFFECTING CREDIT ACCESS AMONG SMALL AND MEDIUM ENTERPRISES IN MURANG’A COUNTY

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OCTOBER, 2016
DECLARATION

This project is my original work and has never been presented for a degree in any other university.

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This project has been submitted for presentation with my approval as the university supervisor.

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MR.J.M GICHANA
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ABSTRACT

Small and medium enterprises (SME's) play a very significant role in the economy of any country. They provide employment and improve the standard of living of individuals—both the employers and employees. They are a major source of entrepreneurial skills and innovations; the objective of this study was to identify factors that influence credit access by SMEs in Murang’a county. This study was intended to be of great importance to individual entrepreneurs, potential investors, lending institutions, and the county government of Murang’a to facilitate enabling credit policies and other researchers. The target population was 1020 SMEs operating in Murang’a. The study used stratified random sampling and then applied the simple random sampling to select respondents from the selected stratas out of which 102 respondents were selected. Data was gathered using questionnaires. The data collected was subjected to factor analysis and regression analysis was carried out to establish the relationship between the identified factors and credit uptake. It was then presented in tables and graphs. From the study, it emerged that number of lending institutions, interest charged on loans, collateral security and literacy levels are the most significant factors that affect access to credit among SMEs in Murang’a. The study recommends that: informal borrowing they should be discouraged through trainings, There was need to seek alternative means of collateral security, there is need to continuously educate SMEs on how to manage finances, prepare books of account, prepare income and expenditure statements and how to prepare budgets. The researcher also recommends that the number of lending institutions can be increased by formation of SACCOs for different categories to improve the level of financial deepening.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Bolton Committee (1971) defined Small and Medium Enterprises (SMEs) as an enterprise that has a relatively small share (in terms of sales turnover, number of employees, ownerships and assets) of their market place, those that are managed by owners or part owners in a personalized way and not through the medium of formalized management structure and are independent in the sense of forming a large enterprise. Small, micro and medium-sized enterprises (SMEs) play a very significant role in the economy of any country, both developing and developed nations as well as to the individuals. SMEs provide employment and improve the living standards of individuals—both the employers and employees. They are a major source of entrepreneurial skills and innovations. Entrepreneurship is progressively recognized as a vital driver of economic growth, creativity, productivity as well as career, which is generally recognized as being an essential area of economic dynamism. Transforming thoughts directly into economic opportunities could be the definitive difficulty regarding entrepreneurship. Heritage ensures that economic improvement is being considerably advanced by real people who are entrepreneurial as well as revolutionary, able to make use of opportunities as well as ready to consider pitfalls (Hisrich, 2005). Consequently, the role of entrepreneurship and an entrepreneurial culture in economic and social development has often been undervalued.

In Kenya 18% of the GDP and 80% of the workforce population are employed in SMEs, sector according to Kithae (2012). SMEs are seen to provide apparently goods and services at a reasonable price, employment and incomes to a large number of individuals (Kauffmann, 2006). Several research, have been conducted to establish the relationship between economic growth and business development (Sauser, 2005; Monk, 2000; Harris and Gibson, 2006). However, very few studies have been carried out in factors affecting credit accessibility among SMEs in Kenya. Like elsewhere in the Africa and the world in general, SMEs access to finance and costs of finance appears in surveys and analysis as one of the leading hurdles to realizing growth and operational efficiency. Since capital needs of these enterprises can be satisfied by use of internally generated funds and through debt. The source of fund from internal activities is subject to profit made by the firms in its operation. A close look into profit made by these enterprises seems to have greater variability in profit, which forms part of the many challenges that SMEs
face. Among other problems, there is a struggle for survival and growth. Previous research (Onugu, 2005) stated that less than 5% SMEs go beyond their first year of existence. Another challenge is regulatory burdens. The process of incorporation has been made too complex, lengthy and costly, which can be avoided by governments ensuring that there is one stop shop system where all information is available.

However, there have been several changes in Kenya to ease registration of SMEs. Huduma Centre is one of the most instrumental centre where registration process takes less time since all the government authority are found all under one roof present and willing to help. This centre has successfully managed to reduce inefficiencies, cost and corruption and in dealing with bureaucracy and ensuring compliance with government laws. Most of the governments’ operations have gone online which has enabled SMEs to do registration within the least time. Of recent time taken to register any business can be done in the comfort of one’s home by use of phone (Mwongera, 2014). It takes now 24 hours for registration from previous 14 days (Ndonga, 2014).

1.1.1 Access to Credit

Access to credit refers to the ability of individuals and enterprises to obtain external funding to enable them ease cash flow problems (Osoro & Muturi, 2013). Credit can be either short term or long term depending on the lenders assessment of the borrowers’ ability to repay. Access for credit by SMEs in Kenya has been identified as a necessary condition for job creation and economic growth. The ability to access credit for by businesses is a critical factor of private sector growth and especially for SMEs’ that most often lack adequate capital that they need to grow and expand. Credit access also has an impact on the agricultural sector where expenditure on inputs exceeds the returns from sale of the proceeds. (Martina & McCann)

Also (Monteiro, 2013) observed that smaller enterprises generally have limited access to non-bank lenders due to lack of creditworthiness in their information which is usually unpublished hence they are challenged by finance. The main concern of this study is the external credit facilities available to SMEs. According to Manasseh (2004) external financing or credit facilities is kind of finance provided by person(s) other than the actual owner of the company who are the company creditors. Manasseh further added that credit can be in any of the following forms;
overdrafts, trade creditors, lease financing, debentures, loans, overdrafts among others. All these external sources depend on the enterprises creditworthiness.

Internationally, in developing countries like Vietnam, (Minh, 2012) found that firm characteristics are not the main factor to influence SME financing, but if a business has higher financial leverage the higher the probability of obtaining bank loans. According to Minh the level of information in the possession of the SMEs, owners contributes to whether to borrow credit based on past audited data of the company. Elsewhere in the Malaysia investigation on factor influencing access to loan showed that presence of collateral plays a significant role in assessing repayability of the loan, especially in primary borrowing and it gives a higher chance for loan approval (Haron, Said, Jayaraman, & Ismail, 2013). Elsewhere study in Ghana revealed that lack of collateral, high cost borrowing, and absence of audited financial statement makes it difficult to access a bank loan, (Ackah & Vuvor, 2011). Aryetey et al., (1993) observed that in Ghana 75% SMEs are in dire need of loans for expansions, but lack of tangible security takes the lead in forming the basis of most small scale traders loan disapproval. In Nigeria study examining the credit accessibility in Niger Delta showed that social capital, enterprises age and gender significantly influence informal credit access -those that are not supervised and charges high interest like money lenders, societies etc.- while enterprise age, size, collateral and education had a significant influence on formal credit access -those that are supervised and lend marginally more credit at low interest like banks, traders etc. – according to Ubon & Chukwuemeka, (2014).

Of late the Kenya government has introduced “Uwezo Fund” in its budget to expand access to finance and promote the well-being of youth, women and people with disabilities led enterprises as outline in its blueprints of vision 2030. Mwongera (2014) found out that in Athi-River, collateral plays a big role in the decision by banks and microfinance whether to give a credit or not. Mwongera further noted that interest charged was not reasonable, the level of literacy had a negative influence on a borrowers awareness on how to and where to get loans to improve business and the number of lending institutions had a positive impact on accessibility to finance, since more institutions will meet the specific service needs required. In a case study of Meru Central District, Kenya, (Wangai & Omboi, 2011) observed that education level has a positive

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impact on an entrepreneur’s credit uptake. The level of education gave an added advantage to those who had good accounting knowledge, better management skills and adoption of technology when borrowing credit. Wangai and Omboi further added that wealthy individuals (those with accumulated collaterals) were more likely to succeed in obtaining credit from a formal financial institution that charge lower interest compared to others.

1.1.2 SMEs growth
According to a study on SME financial services undertaken in Namibia (Tonin et al 1998), provision of credit to SMEs was found to have great influence on the development and growth of SMEs. Credit has been referred to as the provision of capital by a lender to a borrower with an agreement for the repayment of a specific amount over a given period of time. Tonin et al (1998) also noted that the poor can reliably borrow when they are given the chance to start or to improve a viable business and become economically active. But due to lack of collateral security, access to credit by the small entrepreneurs is greatly hindered. Augusto et al (2010) noted that lending is just a fraction of what financial institutions offer to SMEs and that these institutions try to develop a wide range of products and services, with fees based products rising in importance, all aimed at serving the SMEs.

Kuntchev et al (2012) states that SMEs are more likely to be constrained than large firms are, and therefore are likely to use trade credit and informal sources of finance to fund their investment and working capital than larger firms would. It is commonly believed that SMEs in Kenya have got limited access to credit facilities, deposit facilities and other financial support services offered by formal financial institutions mainly because most of the SMEs cannot provide the necessary collateral required by these financial institution and at the same time, the stringent lending procedures demanded by these financial institutions also help to scare away the SMEs (Njeru, 2014). Formal financial institutions usually perceive SMEs as high risk and commercially unviable and as a result only a few have access to credit from these formal financial institutions (Mwewa, 2013).
1.1.3 Credit access and SMEs growth

The availability and accessibility of external financing has positively impacted on the growth and performance of any business (Osoro & Muturi, 2013). Financial institutions have packaged different credit facilities that are aimed at different forms of business. These products when offered to SMEs help them improve their performance; by raising productivity, improving returns on investment, and increasing incomes (Njeri, 2012). The trainings that some of the financial institutions provide to their clients help entrepreneurs to understand basic issues like record keeping which in turn help them better understand their business operations. Trainings add to the skills of the entrepreneurs, change their attitude on how they perceive and conduct business activities and in turn enhance the ability of their firms to perform better. A financially literate entrepreneur can make better decisions regarding utilization of other financial services like saving more, taking full advantage of credit facilities, and mitigating risks through the utilization of insurance services (Andoh & Nunoo, 2011).

SMEs still face several limitations to credit access. According to Ogiji & Ejembi (2007), there is still less knowledge on financial management by SME managers and or owners despite the huge importance that this has on sound decision making. Cohen & Klepper, (1996), on the other hand, observed that small firms have smaller asset bases to secure loans to finance their investments as compared to larger firms. Munoz (2010) concludes that banks, in most African countries for example, have not made a great effort to reach out to SMEs due to challenges with the processes and procedures involved in administering loans, the high costs of managing small loans and the high risk of loan defaults. This limited access to finances by SMEs therefore translates to slow growth.

1.1.4 Small and Medium Size Enterprises in Murang’a County

SMEs are an integral part of the Kenyan economy just like for the many other developing countries since 85% of the Kenyan work force is directly employed by the SMEs (Mwewa, 2013). SMEs promote economic diversification and social stability and at the same time play an important role for private sector development. SMEs cut across all sectors of the economy (basic production, manufacturing, and services) and can be in any form of ownership: sole proprietorship, partnerships, or private limited companies. Some are located outdoors with little or no capital while others are more formal and operate in market stalls and shops (Munoz, 2010). In Kenya,
most enterprises are owner-managed or largely controlled and run as a family business and mostly have limited capital base and the technical skills and capacity of those running the business is also limited (Karanja, 2012). Majority of the businesses in Murang’a county fall under the SME category and are spread across the county with a good percentage of them being sole proprietorships and family-owned and run businesses.

A study carried out by Ongolo & Awino (2013) in the counties of Bomet, Kiambu, Homabay and Kwale found out that the major challenges encountered by SMEs across the four counties attribute to limited access to finance despite there being various financial institutions meant to cater for SMEs financing in the country. Murang’a County has got branches of some of the leading banks in Kenya which include Cooperative bank, Kenya Commercial Bank, Equity bank, Barclays Bank and Family Bank. It also has got Micro Finance institutions such as Faulu Kenya and Kenya Women micro finance bank (KWFT), other financial services offering institutions such as Savings and Credit Cooperatives, insurance firms, a branch of the Kenya Industrial Estates among others. Ongolo & Awino (2013) attribute these challenges faced by SMEs to the stringent conditions set by financial institutions on the SMEs before they can access financial support. Andoh & Nunoo (2011) also see the critical need of promoting a favorable operating environment for the development of SMEs in both developed and developing economies because of the huge contributions that the SMEs have in the economy.

1.2 Statement of the Problem
The significance of the contributions that SMEs have on the development of a nation is enormous. SMEs have assisted in regional and local development as they help accelerate industrialization in rural areas by linking them with other sectors in the urban areas (Hansah et al., 2013). The Kenyan government in its vision 2030, places SMEs development as one of the integral means of achieving the vision. This notwithstanding, statistics show that out of five businesses started, three fail within the first two years of startup, (Government of Kenya, 2007). Kithae (2012) argues that although the SMEs create 80% of Kenya’s employment, the subsector contributes only a dismal 18% to the GDP of the country hence there is need to do more towards the support and enhancement of SMEs capacity.
Improving credit access by SMEs is crucial in fostering competition, growth, innovation, and entrepreneurship in Kenya (Kung’u, 2011). Access to credit is important as it ensures flexibility in resource allocation and reduces the impact of cash flow problems (Bigsten, et al., 2000). External financing is mostly limited by the fact that commercial banks are often willing to lend on a short term basis because they receives deposits on demand which therefore cannot be lent out on a long term basis as the need of the SMEs may demand.

Majority of the businesses in Murang’a County can be classified under the SME category based on the sizes of their annual turnovers and average number of employees (Government of Kenya, 2012). The factors identified as hindering SME growth include capital access, cost of capital, collateral requirements for credit, information access, and capital management. Lack of financial literacy especially as to where to obtain and how to utilize financial services reduce entrepreneurs’ ability to borrow. Availability of savings facilities and easy access to credit from financial facilities has been found to accelerate households’ abilities to borrow (Ellis et al, 2010). Access to credit by SMEs’in Murang’a has not received extensive research. Andoh & Nunoo (2011) studied impact of financial literacy on the utilization of services of financial institutions by SMEs where they concluded that financial literacy is crucial for overall financial development. Hasnah et al (2013), Fatoki & Asah (2011) all carried out studies touching on credit access by SMEs where they concluded that lack of collateral among other challenges were limiting SMEs access to credit from financial institutions.

Locally, Njeru (2014) and Kinyua (2014) are among those who have carried out studies touching on credit services and SMEs. Njeri (2012), Mwewa (2013), and Wanjiku are some of the researchers who have carried out studies touching on micro finance services and SME growth and performance. Although several have been undertaken that greatly focused on financial credit facilities and SMEs, they have not been conclusive. The purpose of this study therefore is to establish the factors affecting credit access by SMEs’ in Murang’a County. The study will be restricted to specific factors namely number of lending institutions, interest charged on loans, collateral security and literacy levels. It sought to answer the question; what effects do these factors have on access to credit by SMEs’ in Murang’a County?

1.3 Objectives of the Study

The main objective of this study was to establish factors influencing credit access among SMEs in Murang’a County.
1.4 Value of the Study

This research was motivated by the increasing role of SMEs in the Kenyan economy, and the continuing constraints they face in their activities. SMEs has been identified as one of the development strategies for promoting industrialization, employment generation, catalysing innovation and poverty eradication in Kenya. The findings of the study will be of great importance to small and medium entrepreneurs as it outlines the major factors that influence access to credit by small and medium enterprise operators in Murang’a County. Information in this study will be used to insight which can be used by the County Government of Murang’a, and subsequently other counties when formulating policies on planning. This will also aid them in building an all-inclusive, policy for all traders including SMEs.

Educational institutions and non-governmental organizations will also be able to focus more on the needs of small and medium entrepreneurs, to educate on practical aspects of business and for the NGOs to be able to know areas to offer grants or donations and training the less fortunate. It is hoped that the recommendations and measures will help in counter checking whether the government is still on the truck in realization of the Kenya vision 2030.

To academicians and researchers, the study will be useful as a reference for future researches on factors influencing the access of credit by small and medium entrepreneurs.
CHAPTER TWO
REVIEW OF LITERATURE

2.1 Introduction
The entire chapter reviews the literature related to the key study variables as depicted in the conceptual framework. Prior to empirical the section reviews three theories which show credit access can be influenced by several factors has been evaluated. The chapter also looks into the linkages in addition to establishing the existing relationships amongst these variables. Empirical studies related to the study variables were reviewed in the chapter in order to lay down ground for research.

2.2 Theoretical Review
This section looks at the various theories that relate to access to credit by SMEs which include financial inclusion theory, imperfect information theory and financial inclusion theory.

2.2.1 Financial Inclusion Theory
This theory observes that there is a process of ensuring access to appropriate financial services and products needed by all sections of the society including the vulnerable groups such as weaker sections and low income groups, at an affordable cost, in a fair and transparent manner, by mainstream financial services providers (Chakrabarty, 2011). An inclusive financial sector that provides access to credit for all bankable people and firms, insurance for all insurable people and firms, savings and payment services for everyone (United Nations, 2006). Inclusive finance does not necessarily require that everyone who is eligible use each of the services, but they should be able to choose them if desired.

Kempson et al., (2014) report that financial exclusion is most prevalent amongst people on low incomes. Unemployed people living on social security payments provided by the state are more vulnerable and also low income households from minority communities who may have relatively low levels of interactions with the financial services industry. Evidence from Family Resources Survey 2002-2005 supported Kempson et al., (2004) report that uptake of financial products and services are lowest amongst African-Caribbean, Black, Pakistani and Bangladeshi households in UK. However for some members of these groups religious beliefs play a partial role for this apparent exclusion. World Bank (2008) classified financial access barriers into four main
categories; lack of documentation barriers, physical barriers, lack of appropriate products and services affordability barriers. Branches have been the traditional bank outlet for geographic access therefore geographic distance to the nearest branch relative to the population can provide an indication of lack of physical barriers to access (Beck, dermiguc-Kunt & Martinez, 2007).

2.2.2 Imperfect Information Theory
Information imperfection occurs when one party to a transaction has more and timely information than another party. This imbalance can cause one party to enter into a transaction or make costly decisions. According to Lofgren et al (2002) information asymmetry is a common feature of any market interactions for example the seller of a good often knows more about its quality than the prospective buyer while a borrower knows more than the lender about his creditworthiness. Among the pioneers of this theory was George Akerlof (Lofgren et al, 2002) who demonstrated how imperfect information can produce adverse selection in the markets. He argued that when a lender or a buyer has imperfect information, a borrower with weak repayment prospects or a seller of low quality cars may crowd out everyone else from their side of the market thereby hindering mutually advantageous transactions.

Robinson (2011) observed that this theory assumes that Banks can’t effectively differentiate between high risk and low risk loan applicants. The theory further argues that mainstream financial institutions are unable to compete successfully with informal lenders because such lenders have access to better information about credit applicants than formal institutions have. The theory suggests that it would be difficult for banks to operate profitability in developing countries credit markets and to attain extensive outreach. Based on this theory, it would therefore be difficult for economists, policy makers, bankers, donors, financial analysts, donors and government decision makers to advocate for entrance of commercial banks into micro credit markets.

2.2.3 Financial Intermediation Theory
Financial intermediation describes the process where surplus units (savers) give funds, i.e. through deposits, to intermediaries who include financial institutions such as banks, credit unions, mutual funds and insurance companies) who in return channel out the funds to deficit units (spenders or borrowers) (Saunder & Cornett, 2011). Financial intermediation therefore
refers to the transfer of funds from entities with surplus to entities with deficit through financial intermediaries (Andries, 2009). Financial intermediaries can therefore be described as the financial institutions specialized in buying and selling of financial capital. Gorton and Winton (2003) describe it more; financial intermediaries borrow from surplus entities and lend deficit entities. The borrowing and lending groups are large and this enhances diversification on each side of the balance sheet, and that the claims issued to the borrowers and to the lenders have different state contingent payoffs.

According to Andries (2009), the financial intermediation theory can be traced to the works of Gurley and Shaw and is based on the theory of information asymmetry and the agency theory. Allen & Santomero (1998) intimate that these theories are built on models of resource allocation based on perfect markets and that it is the transaction costs and asymmetric information that are important in understanding financial intermediation. Andries, (2009) states that the theory highlights financial intermediaries functions such as reduction of liquidity, reduction of transaction costs, information provision, and debt renegotiation. Financial intermediaries bring together the depositors and the borrowers matching their transaction needs and providing other services and as a result reduce the transaction costs and eliminate information costs. Financial intermediaries also act as delegated monitors (on behalf of the depositors) and therefore help lower monitoring costs hence eliminating would be agency costs, lower liquidity costs, and lower price risks. Depositors entrust their funds with these intermediaries who in turn invest them through loans and other investment projects, with the depositors able to liquidate (through withdrawals) their savings at any given time (Andries, 2009).

SMEs engagement with the financial institutions can therefore be summarized from the roles played by the financial institutions as financial intermediaries. SMEs can both be depositors and or borrowers and are bound to receive, from the financial institutions, such services including transactions services, provision of liquidity, financial consultancy, analysis and evaluation of assets, issuance of financial assets, loan granting, monitoring services, risk management, insurance services, and other services (Andries, 2009, Diamond and Dybvig, 1986, Allen and Santomero, 1998).

2.3. Determinants of credit access
Credit access is influenced by of several factors. Below are the four major factors that influence credit access among SMEs.
2.3.1. Interest charged
Interest rates as a cost of the loan have a significant effect on a company’s growth plans. They not only affect loan payments, but they also have an impact on an enterprise funding (Ogolla, 2013). High interest rates reduce business earnings which ultimately hinders the business capacity to grow. High interest rates also affect a business cash flow in that one has to set aside more money to repay the loans. This in turn reduces its disposable income hence affecting ability to pay its other creditors.

2.3.2. Collateral security
Collateral refers to an asset that a borrower uses to secure a loan from the lender. A lender gets a fall back in case of default where they can dispose the asset to recover their money. Kung’u (2011) noted that secured loans are seen to have a low risk of default hence they are charged a lower interest. Most SMEs’ do not have tangible assets that they can use to secure their loans hence their borrowing is limited.

2.3.3. Number of financial institutions
The number of financial institutions offering credit in an economy has an impact on the overall growth of an economy. As observed by Schoof (2006) an inadequate number of financial institutions to offering credit services to SME’s would constrain development of the industries. When number of small scale traders is many whilst the financial institutions with the services customized to them are few (demand exceeds supply) the price of the loan will be high therefore not affordable and hence low uptake by SMEs.

2.3.4. Literacy level
Financial literacy refers to the ability of an individual to understand how money works-how it’s earned, managed and invested. It is very important for any business entrepreneur to have knowledge on how to manage the business so that they can oversee its growth Andoh & Nunoo (2011). A literate entrepreneur understands on the best time to make certain investment decisions such as when to borrow and from whom to borrow and at what cost.

2.4 Empirical Review of the Literature
Mwongera (2014) studied the impact of interest charged for access to credit by young women entrepreneur in Athi River, Machakos County. He used regression analysis to analyze the
primary data collected from questionnaires distributed to 214 young women and 18 microfinance institutions in the region. Access to credit was measured by the uptake of loan, number of clients granted loan, microfinance offering credit and effectiveness of credit service. On the other side, interest charged was measured as per the amount borrowed, duration of payment, consideration of business nature and penalty for delay in repayment. The study found a significant positive relationship in the two variable. Further findings found that most of the participants were of the opinion that interest plays greater extent to credit accessibility. The researcher did not try to establish the rate determined by the combination of the interest charged and collateral though it was found to be intertwined.

Using correlation analysis Muratha (2015) examined the factor affecting young entrepreneur case of Family Bank Limited. He collected data from 220 respondents through open-ended and close-ended questionnaires which were distributed by a stratified sampling method based on the segments of classification as per the business type. The researcher adopted descriptive survey research design. It was found that there was an insignificant positive relationship between the two variables-interest rate charged and credit accessibility. His choice of research design was appropriate for the study since the data collected was both structured and semi structured. Use of stratified sampling was also appropriate since the data needed to be representative of all the business segment.

Kalya (2013) studied how supply side factors by commercial banks in Kenya related to lending to SMEs. This study used both secondary and primary data from commercial banks and applied the descriptive research design in 44 commercial banks. Secondary data came from the Central Bank of Kenya on the interest charged between 2004 and 2013 as well as from the questionnaires distributed. Regression and correlation analysis was used to analyze this data. The study found that there existed an inverse significant relationship between the banks lending and interest rate. Gangata and Matavire (2013) studied the challenges facing MSEs with access to finance from financial institution and establish that the main reason why most MSEs are turned down on their request to access funding for the financial institution if failing to meet the set lending requirement, most importantly being the provision of collateral security.
Kira and He (2012) examined the impact of a firms’ characteristics on accessing finance by SMEs in Tanzania. Primary data were collected using 163 questionnaires which were distributed in the coastal zone of Tanzania. Logistic regression and Pearson correlation were used to establish if there was a relationship between variables and to determine whether multicollinearity problems existed among the independent variable. The availability of collateral security coefficient indicated a significant relationship with access to finance.

Mulandi (2013) studied the factor affecting credit access for Biogas sub sector in Kenya. Primary data were collected from 48 firms by random sampling technique and secondary data was also getting from the published report on Biogas industry. Among the determinant of access to credit studied were age, size, capital investment, financial records, information access and risk preference. Capital investment (security) was measured using an amount that respondents were asked to indicate the worthiness. The results of the study showed that all the aforementioned (independent) variables were statistically significantly positively correlated with the level of access to credit.

Kung'u (2011) conducted a survey Westland town, Kenya to examine factor affecting credit access to SMEs. Data was collected using 115 questionnaires. Participants were randomly selected from 6 sectors, namely industrial, technology, electrical, shopping, building and travel. This study found that start up business (those under 3 years) were faced with credit access, setbacks due to lack of collateral and information. However Kung’u did not test the significance or the relationship of these variables. So Kung’u ignored testing hypothesis, in using a purely descriptive approach, though the study would also have tested whether there was a relationship between collateral security and if it was significant or not. This study, therefore will aim to not only know the factors affecting SMEs in accessing credit, but also will establish the relationship and significance.

Karanja, Mwangi, & Nyakarimi (2014) investigated factors that influenced access to credit among women entrepreneur in Isiolo town (Kenya). They conducted a census to the 6 registered financial institutions, 18 management employees and 20 women entrepreneurs where descriptive survey design was adopted. In addition, they used chi square to test the hypothesis and it was
found that there was a significant relationship between the collateral requirement and access to credit services. It was also revealed that out of 3 firms studied, 80% asked for motor vehicles to secure borrower's credit.

As Mensah & Agbekpornu (2015) analyzed the determinants of agribusiness in Kumasi (Ghana) in accessing credit. A sample of 151 respondents was questioned. This study classified theses determinants as under socio-economics, management and firm characteristics. Access to credit dichotomous whether one had access credit or not and therefore a logit model was used to analysis the relationship between these variables. Results indicated that 55% had ever applied for loan before. Though in contrast to previous studies, most financial institutions did not “strictly demand collateral security.” Many institutions focused more on the relationship and nature of transactions in the past in granting credit. Logit model also indicated that for every 1% increase collateral would lead to a probability of 30% increase in access to credit. Finding also revealed a significant relationship between the collateral security and access to credit. The outcomes of this research coincided with Fatoki & Odeyem (2010).

Avortri, Bunyaminu, & Wereko (2013) examined factors that affect SMEs in Accra metropolis, Ghana. Stratified sampling technique was adopted in the administration of questionnaires based on consumables, wares and cosmetics, motorcar spare parts, constructional material and stationaries/ pharmaceuticals. Regression analysis and descriptive statistics were used to establish an interrelationship between the dependent variable and other independent variables. Chi square test was used and revealed that there was a positive linear relationship between the number of financial institutions and ease of access to credit. Further the study pointed that this could be due to competition. However, this study erred in choosing 20 respondents in each stratum while these strata were not of equal size, hence the principle mechanism of stratified sampling was not observed. This could have been resolved by using cluster sampling, where groups or clusters are selected for inclusion rather than individual. In this case sample size is often larger than in the simple random sample to increase the level of accuracy (Kothari, 2007).

As observed by Schoof (2006) an inadequate number of financial institutions offering credit services to SME’s is a constraint to the development of this sector. Mwongera, 2014 observed
that there were many small scale while the financial institutions with the services customized for them are few. Essayed (2005) noted that require off loan in small businesses are different from those of large businesses. There exist very few studies that have tried to find the relationship between the number of lending institutions and access credit and this study therefore is aimed at filing this gap by extending the study of the lending institution in Murang’a County and finding their relationship.

A study was carried to determine access to credit by smallholder farmers in Kenya in the Western region (Bungoma and Siaya counties) and Eastern region (Embu, Meru and Tharaka Nithi) by Kiplimo, Ngenoh, Koech, & Bett (2015). This study used primary and secondary data where 613 smallholders in both regions were randomly sampled according to the total number of households in each division. They used logistic regression model to determine the factors influencing credit access. Access to credit was measured by actual receipt of credit, financial service from any given source. The result indicated that education level (literacy) in years had significant positive effects on access to credit. This concurred with Hussein, (2007). The choice of binary logit model was appropriate since the dependent variable was categorical.

Andoh and Nunoo, (2014) studied whether the financial literacy matter in four districts of the Great Accra Region of Ghana. They randomly administered questionnaires. Primary data was collected from 556 SMEs. Financial literacy was measured by two ways; (1) adding the answer to question covering knowledge on interest rate, inflation savings and insurance, (2) owners characteristics such as level of education, age, sex of the entrepreneur and number of times the entrepreneur had received financial education. The study applied Ordinary Least Square (OLS) revealed that sex of the proprietor, level education, and financial education received were significant in explaining literacy. Utilization of financial services was used to measure credit access. Researcher using 2-stage probit regression found that there is a positive significant relationship that firms whose owners were financially literate were more likely to utilize financial services for example by taking micro credit.

A study was conducted in Gujranwala District, Pakistan by Hussain (2012) to examine factors influencing demand for credit from formal and informal sources. A cross-sectional data from 313
respondents to questionnaire were randomly selected and analyzed by using multiple regression. It was found that the level of education (literacy level) had a positive significant relationship with demand for credit from the banks, which lend at low interest rates while literacy level had an insignificant positive relationship with demand for credit from the arties (informal sources). The study failed in the inclusion of the loan that was only applied and received. Applied loan could be turned down and therefore hinder accessibility to credit. Therefore, it was not sufficient to their inclusion. As Atieno (2001) observed that there was a difference between the amount applied for and amount received from the credit market.

As Pandula (2011) examined the case of emerging economies (Sri Lanka). This researcher tested whether the determinants of access to credit were statistically different among those rationed firms and those not rationed firms using Chi square statistic. Data was collected using questionnaires. Findings revealed that, entrepreneur education and belonging to business association, even merely as a member was associated with access to bank finance. Somewhat surprisingly, all the other determinants identified did not show any association with access to credit.

Muturi & Ogubazghi, (2014) examined effects of age and owners/manager education level of access to loan in the Asmara city (Eritrea). A proportionate systematic sampling was used to collect primary data from 87 respondents. Data was analyzed using descriptive and logit regression model. Findings indicated that the education level of the owner/manager was positive and statistically significant. This agrees with Fatoki & Odeyemi, (2010) who discovered the education level is not important in determining SME’s access to bank loans. Contrary to Zarook, Rahman, & Khanam, (2013) who had observed a significant impact on a bank loan.

Zarook, Rahman and Khanam, (2013) and Slavec & Prodan, (2012) in their study discovered a significant positive correlation with access to bank loans. This study concurred with Ahmed & Hamid, (2011) study where the top manager’s level of education as a measure of the quality of human capital and findings showed that there was a significant positive correlation between education level (literacy level) and the probability of accessing bank finance. There is no standard framework in all this literature review, variable changes from one study to another.

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general focus has been to access to finance rather than to bank loan (credit). Therefore, further investigation needs to conduct to assess factors influencing SMEs to access credit.

2.5 Conceptual Framework
This framework illustrates the linkage between dependent and independent variables in the Study (Mugenda & Mugenda, 2003). In this study, the independent variables are interest rates charged, number of lending institutions, collateral security and literacy levels while the dependent variable will be access to credit among the SMEs.

![Conceptual Framework Diagram]

**Figure 2.1 Conceptual Framework**

*Source: Author*

2.6 Summary of the Literature
Inadequate information and knowledge have been noted to have led to increased turn down when in application of loans (Mira & Ogollah, 2013). This can be seen in respect to terms of interest charged, disclosures require for asset and debts, misuse of credit gotten and general unpreparedness when applying for credit. Cole *et al.*, (2009) in India and Indonesia found that the chief determinant of demand for financial facilities was financial literacy. The more one is educated the high the chances of applying for financial credit.

In most sectors of the Kenyan economy, SMEs operations provides for many households. It is platform that big business emerges and most importantly creates employment (Waliaula, 2012). In most lending institutions, categorically commercial bank, insists on collateral security whenever they are issuing credit and in such situation SMEs entrepreneurs are faced with these
drawbacks (Wanjohi & Mugure, 2008) that later lead to stagnation and lack of the propelling force for growth in many sectors. Finance requirement is a critical part of the business that requires standing as well as growth.

Cost of credit as determined by the interest rate charged by lending institutions has of recent been fluctuating extensively because of economic stagnation. Government has been responding to this by trying to alter its regulations and policies guiding the commercial bank as well as borrowing internally and externally. This in one way has helped boost the growth of the economy and while on the other side it has had an adverse effect on the lending and deposits of the SMEs. Interest rate or the cost of credit has been high and this has kept small business out of the bank where they have preferred to use their internally generated funds. Duration of repaying any loan borrowed has also been shortened due to most firms relying on their own deposits which hit most firms harder by reducing the amount of credit creation. Also, banks had introduced heavy penalties to loan defaulters as results.

Finally, this study has reviewed relationship of the lenders’ institutions and access to credit. As Mwongera (2014) noted in the study of women entrepreneurs, the number of financial institutions determines positively the amount of credit accessible. This has been explained by competing to win the borrowers by innovative credit products being offered in the market to the advantage of the entrepreneurs.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter will present the methodology that was used to carry out the study. This includes the research design, target population, data collection tools and techniques used, data analysis method and presentation. This research methodology aimed at enabling the researcher to obtain the data, process and interpret it.

3.2 Research Design
Kerlinger and Lee (2000) viewed research as a strategic plan which aims at answering the research questions with minimal deviations. In the current study, descriptive research design was used. Mugenda and Mugenda (2009) defined descriptive design as a design which primarily seeks to describe respondent’s characteristics. The design was appropriate for the current study since it sought to examine the factors influencing credit access among SMEs in Murang’a County.

3.3 Population
Population refers to the total collection of elements about which one wish to make some inferences (Cooper & Schindler, 2003). This study targeted small and medium sized enterprises operating businesses like transport services, retail and wholesale trade, manufacturing, hotel and catering services among others, across Murang’a County, with licenses or business permits from the county government. The population of the study targeted at the 1,020 enterprises operating businesses licensed by the Murang’a County.

3.4 Sample
A representative sample of 102 (10%) businesses was selected for collection of relevant data. Mugenda & Mugenda (2003) argued that a sample of between 10-30% of the population, if well selected, is adequate enough for generalization of findings to the whole population. A stratified sampling technique was used to select the 102 SMEs to be involved in the study. This sampling procedure is preferred because ensured a balanced sample on the side of the researcher and therefore enhances the validity of the research findings.
3.5 Data Collection
The study will use secondary and primary data. Primary data was collected using structured questionnaires with both open and closed. Prior to the data collection the researcher personally visited the SMEs and notifies the owners of the intention to carry out the research. A questionnaire is free from interviewer’s biases and can be administered to a large number of respondents (Kothari, 2009).
Secondary data was obtained from any available information maintained by the county Government of Murang’a on SMEs. This included licenses and letters of authority to conduct businesses within the county. Secondary data was obtained from any available financial records maintained by the SMEs. These included bank statements, income and expenditure statements, cash flow statements, and balance sheets for at least the last three financial years.

3.6 Data Analysis
This involved interpreting data collected from respondents once the questionnaires and recordings of the secondary data have been completed and collected from each respondent. With the help of spreadsheets, the results were compiled by use of data editing, data sorting, and data coding to develop relationships. Data collected was analyzed qualitatively and quantitatively to describe and summarize the findings. The research obtained detailed information about the study and established patterns and relationships from the data gathered. The study used frequency tables and graphs to present the data.

The researcher also carried out exploratory factor analysis to extract the factors with more explanatory power in relation to factors affecting credit access among SMEs in Murang’a County. Kothari (2007) argued that exploratory factor analysis (EFA) is a powerful statistical procedure used for hypothetical constructs validation. Moreover, he recommended that it’s customary to interpret factors with loadings of 0.40 as an absolute minimum value. Heir et al., (2010) argued that all factors which exceed a factor loading of 0.33; should be used in the development of the measurement model and if a factor has regression weights less than 0.7 it should be excluded as such to improve the model fitness.
A multivariate regression model will be used to link the independent variables to the dependent variable as follows:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu \]

Where; \( Y \) = Access to Credit
\( X_1 \) = Interest Charged
\( X_2 \) = Demand for collateral security
\( X_3 \) = Number of lending institutions
\( X_4 \) = Entrepreneurial Literacy.

From the model, \( \beta_0 \) is the constant term while the coefficient \( \beta_i = 1 \ldots 4 \) will measure the sensitivity of the dependent variable \( Y \) to unit change in the predictor variables. \( \mu \) represents the error term which captures the unexplained variations in the model.
CHAPTER FOUR

DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of data which was collected through the use of questionnaires. Data was analyzed according to the objectives of study where patterns were analyzed, interpretations made and conclusions drawn. The main objective of the study was examining the factors that influence the credit access among small and medium enterprises in Murang’a County. Specifically, the study sought to examine the role of collateral security required, interest rate charged and number of lending institutions in Murang’a County. Prior to data analysis data was screened to check for missing variables, presence of outliers and data entry errors in the data set. Preliminary examination revealed that five questionnaires had more than 80% of information missing and they were found unsuitable for further analysis thus they were excluded. Those questionnaires which had very few items missing the median of their neighborhood were used to fill using SPSS.

4.2 Response Rate

In a sample of 102, 90 questionnaires were returned correctly filled representing a response rate of 90% as shown in Table 4.1. According to Kothari (2004) a 50% response rate is adequate, 60% good and above 70% rated very good. This response rate was attributed to self-administration of questionnaires with the assistant of research assistant who availed themselves on all times in the specific SMEs in Murang’a County.

Table 4.1 Response Rate

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned</td>
<td>90</td>
<td>88.2</td>
</tr>
<tr>
<td>Non returned</td>
<td>12</td>
<td>11.8</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
</tbody>
</table>
4.3 Background Information

This study sought the demographic information of the respondents. This information included age, marital status, business experience, business ownership, number of employees and amount of start-up capital.

4.3.1 Age of the Respondents

The study also sought to examine the background information of the owners of the SMEs and their business comprised of the age, marital status, business experience, legal business ownership, number of employees and amount of start-up capital. Studying the age of the respondents revealed that majority (44.4%) were aged between 26 and 30 years, followed by 28.9% who had 31-35 years, then 5.6% had 21-25 years while only 1.1% had less than 20 years. This implies that most SMEs are started at the age when majority have completed Kenyan education system.

4.3.2 Marital Status

The study also examined the marital status of the SMEs owners. It was established that the highest numbers (43.3%) of the owners are married, 35.6% are single, and 13.3% have separated with their partners while 7.8% had divorced.

4.3.3 Business Experience

Business management requires some sought of skills and experience for efficient utilization of the resources to give maximum returns. In this connection, the study explored the experience of the owners in handling the enterprises. It was found that most of the respondents (52.2%) had between 11 and 15 years of experience, 21.1% had more than 20 years, 18.9% had between 1 and 5 years while only 2.2% had between 16 and 20 years. This indicates that the respondents had enough experience to respond to the questions on credit access.

4.3.4 Business Ownership

The form of business ownership counts in terms of credit accessibility and therefore, the study to learn the different type of legal business ownership for the SMEs in Murang’á. Majority of the
enterprises (60%) sampled were sole traders followed by 22.2% were private limited company and 17.8% were partnership business as shown in Figure 4.1.

![Figure 4.1 Legal Business Ownership](image)

### 4.3.4 Number of Employees

The number of the employees explains in a way the size of the enterprise this informed the researcher to study how many employees were in each entity. From the study, 61.1% of the enterprise had 11-20 employees, 22.2% had between 20-30 employees and 16.7% had less than 10 employees.

### 4.3.5 Start-up Capital

Researcher sought to learn the amount required as start-up capital by the SMEs. It was found that majority (43.3%) had a capital of between 10001-50000, 26.7% had between 50001-100000, 14.4% had below 10,000, 10% were 100001-150000, while 3.3% had 150001-200000 and only 2.2% had above 250000. This means that on average SMEs would require between 10,000 to 50,000 to kick off.
Table 4.2 Amount of Start-up Capital

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 10,000</td>
<td>13</td>
<td>14.4</td>
</tr>
<tr>
<td>10,001-50,000</td>
<td>39</td>
<td>43.3</td>
</tr>
<tr>
<td>50001-100,000</td>
<td>24</td>
<td>26.7</td>
</tr>
<tr>
<td>100,001-150,000</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>150,001-250,000</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>Above 250,000</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

4.4 Pilot Results

The pilot results for reliability and validity are presented below.

4.4.1 Reliability Analysis

Reliability of a research instrument refers to its ability to produce consistent and stable measurements. Cronbach’s alpha is the most common reliability coefficient and it estimates internal consistency by determining how all items in a test relate to other items and to the total test - internal coherence of data. This reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more reliable is the test. In order to ensure the reliability of the research instrument in this study, the researcher used Cronbach’s Alpha. The findings indicate that all constructs depicted that the value of Cronbach’s Alpha are above the suggested value of 0.7 thus the study was reliable. The reliability of the constructs is shown below in Table 4.3 as follows;

Table 4.3 Reliability Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Reliability Cronbach’s Alpha</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest charged</td>
<td>8</td>
<td>0.719</td>
<td>Accepted</td>
</tr>
<tr>
<td>Collateral security</td>
<td>8</td>
<td>0.697</td>
<td>Accepted</td>
</tr>
<tr>
<td>Number of financial institutions</td>
<td>9</td>
<td>0.692</td>
<td>Accepted</td>
</tr>
<tr>
<td>Literacy level</td>
<td>7</td>
<td>0.684</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
4.4.2 Validity Analysis

The method of principal component analysis (PCA) was used to test for validity of the research instrument. The criteria for factors extraction was based on Heir et al. (2010) which postulates that in study with a sample size of less than 200 factor loadings greater than 0.40 are assumed to be statistically significant for further statistical examination. Since in the current study the sample size was 102, the cut off procedure of 0.40 was used on factor loadings. Moreover, Heir et al argued that the higher the factor loading the better the variable. Regarding the collateral security all factors had loadings greater than 0.40 with the least loading of 0.593 and a maximum of 0.781. Also all attributes of interest rate charged had factor loading greater than 0.40 thus they were considered in subsequent analysis. The attributes of the literacy levels revealed that the lowest factor loading was 0.52 and the maximum was 0.668 thus they were considered for subsequent statistical analysis. Regarding the number of lending institutions the study revealed that the highest loading was 0.852 and the least was 0.528 and since none of them was less than 0.40 all the factors were considered for subsequent analysis.

4.5 Descriptive Statistics

4.5.1 Collateral Security and Access to Credit

Among the factors presumed to have influence on access to credit are collateral. The study sought to find the influence of collateral security on access to credit by SMEs by asking respondents to indicate the extent of their agreement or disagreement on based on 5-point Likert scale on different construct. To begin with, the respondents were asked to rate the extent in which several applications for credit to boost their business was declined due to lack of collateral security. Majority of the respondents (48.9%) indicated their agreement, 44.4% showed neither strongly agreement while the rest were neither agree nor disagreement. Secondly, asked if the financial institutions have changed their consideration of repayment from that of collateral, most of the respondents (64.4%) strongly agreed, 27.8% only agreed while 6.7% took a neutral position. This implies that now financial institutions are now more considerate.

Third, most of the participants (66.7%) opined a strong agreement on whether they have opted for other source of finances that demand no security from their business due to lack of the collateral security, 27.8% also agreed to the same while 7.8% were neutral. Fourth, there was
divided opinion as to whether respondents apply for finance using Chama for ease repayment where they co guarantee each other. Most of the participants, 38.2%, strongly agreed, 28.1% agreed, 23.6% disagreed, 2.2% strongly disagreed while 7.9% were neutral. To add to that, 64.4% strongly agreed with the construct that financial institutions emphasis on the provision of Collateral security as a primary condition in lending, 27.8 % recorded their agreement whilst 5.6% and 2.2% took a neutral stand and disagreement respectively.

Asked whether financial institutions have always adopted a risk averse stance towards small firms, with an accompanying inability to focus on the income generating potential of the venture, when analyzing the likelihood of loan repayment, 64.4% agreed to this, 24.4% disagree while the remainder were lived to neutral stands. Further, asked if requirements posited by financial institutions and other lending institutions keep the small business away, 55.5% of the respondents agreed to it, 32.3% disagreed while the rest took a neutral stand. Finally, the respondents (54%) agreed that financial institutions are reluctant to avail credit to SMEs since they claim that they work informally while it is difficult to provide acceptable confirmation of SMEs earnings. However, 25.8% reported their disagreement on the same whereas a significant proportion (20.2%) chooses to be neutral.

**4.5.2 Interest Rate Charged and Access to Credit**

Based on the second factors deemed to have influence on the credit accessibility a study to probe impact of interest rate charged on the access to credit was conducted. First, respondents were required to indicate the level of agreement on whether financial institution charge prohibitive interests, majority showed their solidarity by agreeing (37.8%) and strongly agreed (34.4%), 12.2% were neither agreeing nor disagreeing while on equal basis 7.8% disagreed and strongly disagreed respectively. Second, the researcher sought to find if the interest rate charged is pegged on the security offered for the loan where on equal proportion (32.2%) agreed and strongly agreed to that statement, 15.6% were neither here nor there, and 16.7% and 3.3% disagreed and strongly disagreed respectively.
4.5.3 Literacy Level and Access to Credit

Literacy level was another factor that was posed to have an impact on the access to credit. Respondent’s responses were rated on five point Likert scales as shown in the summarized Table 4.13. To begin with, the influence on the level of academic qualification on business decision was sought. Majority of the SMEs owner (44.4%) agreed, 21.1% disagreed, 15.6% strongly agreed, 16.7% were undecided while 2.2% represented those who strongly disagreed. Asked whether level of education plays a positive impact on the way to get loan, majority, 37.8% and 30% responded in strong agreement and agreement respectively while only 21.1% disagreed and 11.1% took an indecisive position.

Also, respondents were asked if they failure to interpret the credit information had impact on the borrowings. Surprisingly a total of 58.9% agreed they cannot interpret information given to them, 13.3% were indecisive while 27.7% showed disagreement. In addition, questions on whether financial institutions in the SMEs area have been introducing programs where credit linked to education, health, nutrition and other non-financial services were asked. Most of the respondents (51.1%) agreed, while a significant proportion, 27.8% were neutral and the rest (21.1%) disagreed. Enquiry as to whether financial institutions are focusing on cost effective integration of microfinance to offer enhanced services yielded varied results. The largest proportion, 30%, disagrees to this statement, 26.7% were undecided, 11.1% and 10% were strongly agreed and strongly disagreed respectively.

Further, the owners of the SMEs were requested to rate their response on whether financial institutions offer training for credit awareness that are beneficial to their business. 35.6% answered in disagreement, 30% were neutral, 21.1% were in agreement, 5.6% and 7.8% recorded their strong agreement and strong disagreement. Asked if the training sessions have enabled the owners to effectively run business to a profit one, on equal basis 30% showed disagreement and agreement respectively, 18.9% strongly agreed, 13.3% took a neutral stand, 7.8% strongly disagreed. Lastly, 42.7% ascertained that indeed the training sessions have enabled business related outcomes such as revenue while only 23.6% disagree.
4.5.4 Number of Lending Financial Institutions and Access to Credit

The fourth factor thought to have influence on access to credit was the number of the lending institutions. Respondents were asked to indicate the level of agreement on the following constructs in a five point Likert scale. While most of the respondents, 72.2%, were found to agree with the statement that availability of financial institutions in SMEs area has mobilized savings hence more capital due to the interests accrued, 15.6% disagreed on the same and 12.2% took a neutral stand. Also, the SMEs owners were asked their opinion on whether personal relationship with the financier had enhanced credit availability. Responses given showed that 38.9% and 14.4% were strongly agreeing and agreeing respectively while 20% and 13.3% strongly disagreed and disagreed respectively and the remainder (13.3%) was indecisive.

In addition, asked if the duration of the relationship with the financier determined the access to credit, it was interesting to find that 55.5% agree, 18.9% were neutral while 25.8% were in disagreement. Notably, most of the respondents, 68.5% agreed that access to microfinance has aided in improving credit accessibility which has further derived SMEs growth. However, 16.9% disagreed with this statement while 14.6% took a neutral stand. Even though, 67.4% of the respondents agreed that financial institutions are now attracting interest from donor and agencies that help increase credit service, 15.2% were on the disagreement side while the 17.4% took a neutral stand. An overwhelming majority (78.8%) were in agreement that most entrepreneurs, through financial institutions have realized an effective way to integrate access to financial services although 21.2% thought otherwise.

4.6 Factor Affecting Access to Credit

Exploratory factor analysis (EFA) was carried out with principal component analysis was used as the extraction method while varimax was applied as the rotation method. Results in Table 4.15 revealed that 86.2% of the credit access was influenced by prohibitive interest charged by financial institutions and availability of financial institutions within the areas of enterprise operations thus mobilizing the savings. 71.2% of the SMEs argued that they have realized increased income as results of attending trainings. 70.7% reported that they have developed a working relationship with the financier hence increasing the chances of credit access. 65.3% reported that higher interest rates charged by financial institutions are discouraging them from borrowing. 61.8% reported that they feared loan application due to fear of discrimination by
financial institutions in regard to interest payment. 55.4% reported that the amount of interest charged sometimes interlinked with collateral security or the nature of the business being undertaken.

70.1% reported that they apply loans as “chamas” to ease the repayment and their business acts as collateral security. 65.2% reported that the terms and conditions set by both financial institutions and shylocks have locked them from credit access. 64.3% argued that financial institutions risk averse attitude have discouraged them from accessing credit. 61.5% reported that financial institutions within their areas of operations have offered them trainings which creates credit awareness and consequently improves financial access among them. 58.3% reported that they are constrained by high interest rates charged on short term loans thus constraining their demand for credit.

84.6% reported that the unrealistic actions taken by microfinance institutions due to failure to pay loans are unfavorable especially when trading conditions are bad. Similarly, 84.6% reported that credit access was a challenge since the available information from financial institutions cannot encourage them to borrow. 56.3% reported that emergence of mobile banking have increased credit access amongst themselves.

73% of the respondents reported that recently there are more customized financial institutions services which are geared towards breaching certain credit access gaps. 70.2% reported that access to microfinance had improved credit accessibility to most of the SMES and 60.2% reported that the duration of their relationship with the financier determined whether they can access credit.

4.7 Correlation Analysis
The study sought to determine the direction and strength of the relationship between the different factors affecting access to credit by conducting a correlation analysis. The relationship between access to credit and interest charged was found to be moderate and negative (rho= -0.628) but significant at 1% level of significance. Further, correlation analysis between collateral security and access to credit was again found to be of medium strength and negative (rho= -0.502) at 1% level of significance. Also, the researcher
found out that there exist a weak but positive relationship between measures of credit access and literacy level at 5% level of significance (rho= 0.214). Finally, correlation analysis demonstrated that number of financial institution had the weakest and positive relationship with the measures of access to credit at 5% level of significance (rho= 0.185). Correlation analysis results are shown in Table 4.4.

Table 4.4 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Access to Credit</th>
<th>Interest charged</th>
<th>Collateral security</th>
<th>Literacy levels</th>
<th>Number of financial institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Credit</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest charged</td>
<td>-.628**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collateral security</td>
<td>-.502**</td>
<td>0.114</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy levels</td>
<td>.214*</td>
<td>-0.03</td>
<td>0.001</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Number of financial institutions</td>
<td>0.185*</td>
<td>0.122</td>
<td>0.033</td>
<td>0.144</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.04</td>
<td>0.254</td>
<td>0.755</td>
<td>0.176</td>
<td></td>
</tr>
</tbody>
</table>

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

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

4.8 Regression Analysis

4.8.1 Normality Test

For one to conduct a regression analysis it is advisable to test assumptions for the regression model before regressing the study variables. In this connection, normality test was conducted. As shown in Figure 4.1 the data can be assumed to be normal since most of the data point tends to lie on a straight line.

Figure 4.1 Normality Test
### 4.8.1 Multicollinearity Analysis

The second test for regression assumption is multi-collinearity. This was conducted by use of both tolerance and variance inflation factor. There was no multi-collinearity since the VIFs were less than 10 and none of the tolerance was less than 0.1.

**Table 4.5 Multicollinearity Test**

<table>
<thead>
<tr>
<th></th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Interest charged</td>
<td>0.971</td>
</tr>
<tr>
<td>Collateral security</td>
<td>0.987</td>
</tr>
<tr>
<td>Literacy levels</td>
<td>0.977</td>
</tr>
<tr>
<td>Number of financial institutions</td>
<td>0.963</td>
</tr>
</tbody>
</table>
The model summary results revealed that 86.7% of the variations on credit access among SMEs in Murang’a County can be explained by number of financial institutions, collateral security, literacy levels and the rate of interest charged. The remaining percentage can be explained by other factors that are not in the model.

Table 4.6 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.931a</td>
<td>0.867</td>
<td>0.861</td>
<td>0.365059</td>
<td>1.964</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Number of financial institutions, Collateral security, Literacy levels, Interest charged

b Dependent Variable: Access to Credit

Variance analysis results as shown in Table 4.7 revealed that number of financial institutions, collateral security, literacy levels and interest rate charged all jointly had a significant influence on credit access among SMEs in Murang’a County and at least of the factors had a none zero slope coefficient.

Table 4.7 Variance analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>73.839</td>
<td>4</td>
<td>18.46</td>
<td>138.517</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>11.328</td>
<td>85</td>
<td>0.133</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>85.167</td>
<td>89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Dependent Variable: Access to Credit

b Predictors: (Constant), Number of financial institutions, Collateral security, Literacy levels, Interest charged

Table 4.8 shows the regression coefficient results, where t ratio shows the acceptance region of the null hypothesis. If the T ratio is greater than + or – 1.96 then this implies a significant relationship between dependent and independent variable and then null hypothesis should be rejected. Alternatively, the p value can be used to test the acceptance of the null hypothesis and
where the p value is less than 0.05 then we reject the null hypothesis otherwise we accept it. The B column will be used to show the nature of the relationship and if it has a positive sign then there is a positive relationship if negative then there is a negative relationship.

A multivariate regression model linked the independent variables to the dependent variable as follows;

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu \]

Where; \( Y \) = Access to Credit

\( X_1 = \) Interest Charged

\( X_2 = \) Demand for collateral security

\( X_3 = \) Number of lending institutions

\( X_4 = \) Entrepreneurial Literacy.

The resultant regression model was:

\[ Y = 0.063 -0.579 X_1 -0.568X_2 +0.265X_3 +0.272X_4 \]

From the study there was a negative and significant relationship between interest charged and access to credit among SMEs in Murang’a County (\( \beta = -0.579, t =-18.374, p \text{ value} <0.05 \)). This implies that a unit increase in interest rate decreases the chances of accessing credit by 0.579 units while holding other factors constant.

There was also a negative and significant relationship between collateral security and access to credit among SMEs in Murang’a County (\( \beta = -0.568, t =-14.471, p \text{ value} <0.05 \)). This implies that a unit change in collateral security decreases credit by 0.568 units while holding other factors constant.

On literacy level, there was a positive and significant relationship between literacy levels and credit access among SMEs in Murang’a County (\( \beta = 0.265, t =6.991, p \text{ value} <0.05 \)). This implies that a unit change in number of financial literacy classes’ increases credit access by 0.265 units while holding other factors constant.

Finally, there was a positive and significant relationship between number of lending financial institutions and credit access among SMEs in Murang’a County (\( \beta = 0.272, t =7.346, p \text{ value} <0.05 \)). This implies that a unit increase in number of lending financial institutions increases credit access by 0.272 units while holding other factors constant.
Table 4.8 Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.063</td>
<td>0.04</td>
<td>1.592</td>
</tr>
<tr>
<td></td>
<td>Interest charged</td>
<td>-0.579</td>
<td>0.032</td>
<td>-0.738</td>
</tr>
<tr>
<td></td>
<td>Collateral security</td>
<td>-0.568</td>
<td>0.039</td>
<td>-0.576</td>
</tr>
<tr>
<td></td>
<td>Literacy levels</td>
<td>0.265</td>
<td>0.038</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>Number of financial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>institutions</td>
<td>0.272</td>
<td>0.037</td>
<td>0.296</td>
</tr>
</tbody>
</table>

a Dependent Variable: Access to Credit

4.9 Discussion of the Findings

Zachary (2013) examined the effect of interest rate on demand for credit by SMEs in Nairobi County. The correlation research design was adopted where primary data were collected by administering 50 questionnaires using stratified sampling method. Multiple regression analysis was used to analyze this data and results showed there was a positive, statistically significant relationship between the interest rates and demand for credit from lending institutions.

Further studies were done in Wa Municipality in Ghana (Bawuah, Sare, & Musah, 2014) on the effect of interest rate on MSMEs access to fund. Multiple research method and descriptive survey were employed. Primary data, totaled to 200 enterprises which were selected by convenience and random sampling techniques from 5 areas. Findings showed that the majority did not access credit facility due to the interest charged. Researcher failed to establish whether the relationship was significant, however the study showed that most SMEs are funded by the owners' capital, which is always insufficient to meet the arising business needs.

Gichuki, Njeru & Ondabu (2014) examined challenges affecting SMEs in Kangemi Harambee market in Nairobi County by adopting a descriptive research design. A sample of 241 respondents was selected using stratified sampling since the population was not homogeneous. Credit access was measured in terms of funds availability and securing a loan whilst collateral
was assessed by using the capital investment, ownership of assets such as the title deed, log book and the guarantors that one had. Overall, it was found that collateral requirements influenced credit accessibility to a moderate extent and comparing with other factors affecting credit showed that business risks influences credit access at a great extent. Collateral requirements and cost of credit followed closely to a moderate extent and then availability of information had a small impact. Also, most participants preferred to access their business start up capital from personal savings before considering financial institutions because of strict requirements to have collateral security and high repayment cost especially if one lacks security. The researcher failed to test for the significance and correlation coefficient by adopting a purely descriptive design and therefore there exist a knowledge gap. They should have tested whether there is a relationship between collateral, credit cost, information availability and business risk with credit access. To do this they could have used a multiple regression model.

A study was carried to determine access to credit by smallholder farmers in Kenya in the Western region (Bungoma and Siaya counties) and Eastern region (Embu, Meru and Tharaka Nithi) by (Kiplimo, Ngenoh, Koech, & Bett (2015). This study used both the primary and secondary data where 613 smallholder in both regions were randomly sampled according to the total number of households in each division. The logistic regression model was used to determine the factors influencing credit access. Access to credit was measured by actual receipt of credit, financial service from any given source. The result indicated that education level (literacy) in years was statistically significant with positive effects on access to credit. This concurred with Hussein, (2007). The choice of binary logit model was appropriate since the dependent variable was categorical.

Mwongera (2014) examined the relationship between the number of lending institutions and access to credit in Athi river, Machakos County, Kenya. For women entrepreneur access to credit was measured by the amount borrowed, number of clients granted loan, microfinance offering credit facilities, uptake of loan and effectiveness of credit service. A number of lending institutions were examined by the number of financial institutions, branches of microfinance, customer base, product offered, nature of business, supply versus demand and means of delivery. Researcher adopted descriptive research design and collected primary data by questionnaires. Descriptive, content and multiple regression analysis were used to analyze the data. The results showed that licensing of more financial would encourage more uptake of the loan. Findings also
revealed the need for more lending institutions was the chief determinant of credit accessibility for women entrepreneur. Further, it was established that there is positive relationship between the number of lending institutions and credit accessibility.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this chapter the major findings of the study are summarized, conclusion will be drawn and recommendations as well as suggestions for other studies will be made.

5.1 Summary

The current study was hinged from the realization that there was a research problem that though they are many small and medium enterprises in Murang’a County there performance was inhibited due to limited capital. Empirical literature had revealed that there were several factors affecting the credit access among SMEs country wide but there was limited studies targeting SMEs in Murang’a County. Moreover, most of the studies which had been conducted were limited to use of descriptive analysis and consequently the current study sought to combine both regression and EFA to examine the factors affecting the credit access among SMEs in Murang’a County. The current used simple random sampling to select 102 respondents from 1020 licensed SMEs in Murang’a County. Primary data was sought through the use of closed ended questionnaires in the various attributes showing each factor.

The results of the study revealed that SMEs have provided employment among the youths since most of the owners were below 35 years; secondly most of the SMEs owners were married. The most common form of SMEs was sole proprietorship while partnership was still common and very few were limited companies. Most of the SMEs had exceeded the incubation period since they had been in existent for more than five years.

On overall in Murang’a County SMEs credit access was determined by interest rate charged, number of lending institutions, and collateral security and literacy levels to the tune of 87% while only 13% was explained by other factors which were excluded from the model.

Both regression analysis and correlation analysis revealed that there was a negative and significant relationship between interest rate charged, collateral security and access to credit. Therefore, there is need for lending institutions to evaluate their lending policies so as to encourage more SMEs to take credit as such improve their business performance.

Both literacy levels and number of lending institutions had a positive and significant relationship with access to credit among SMEs in Murang’a County. These calls for development of curriculum which is geared towards increasing financial awareness and consequently trigger
credit uptake which will improve organization performance and ultimately improve growth and development in the region.

5.2 Conclusion

From the findings it can be concluded that there is need to consider the interest rate which are charged to SMEs by lending institutions. This is especially so considering that the interest rate charged by commercial banks is regulated but the SMEs may still be accessing from alternative sources some of which are informal. Although there is an inverse relationship between interest rate and access to credit, there is need to evaluate the pros and cons charging lower interest rate on the economic development as a whole.

Though there is need to provide collateral security prior to lending as such to minimize the level of risk exposure there is need to evaluate credit rate on SMEs individualized cases so as to ensure there is optimal gain to both the lender and borrower. Moreover, financial institutions ought to use alternative lending methods according to borrowers risk level and credit worthiness.

Since literacy levels has a positive influence on credit access there is need for a customized financial literacy classes to be developed among SMEs as such to improve their financial awareness and consequently change their financial behaviour and improve the chances of SMEs accessing credit.

The number of lending institutions ought to be increased in Murang’a County. Through this procedure SMEs will have alternative sourcing of borrowing funds and will ultimately improve their performance. Customized lending institutions should be opened through faith based organizations, non-governmental organization and specific sectors like matatu savings and credit cooperative societies.

5.3 Recommendations

From the findings it can be deduced that the rate of interest charged by different financial providers in Murang’a County ought to be evaluated and harmonized. Since some of the SMEs could depend heavily on informal borrowing they should be discouraged through trainings. The lender should devise measures such as group lending so as to increase the credit access amongst SMEs in Murang’a County.
There is need to seek alternative means of collateral security as such to improve the level of financial deepening among SMEs in Murang’a county. These can be attained by allowing different SMEs to guarantee each other for a loan through these the demand for collateral security will reduce and consequently increase the chances of credit access. Since financial literacy enhances the level of credit access among SMEs there is need to continuously educate SMEs on how to manage finances, prepare books of account, prepare income and expenditure statements and how to prepare budgets. Moreover, the literacy classes should educate SMEs on how to prepare funding proposal and how to market their products and consequently increase the chances of credit access. The number of lending institutions can be increased by formation of SACCOs for different categories of SMEs for example barbers and hairdressers can form their own SACCOs, motor bikes operators can form their own independent SACCOs and even churches can form self-help groups which are geared towards economic empowerment.

5.4 Suggestions of the Study
A comparative study ought to be carried out to examine factors influencing credit access among SMEs in Murang’a County. Secondly, the current study used exploratory factor analysis and regression to evaluate the factors influencing credit access a similar study ought to be undertaken and use structural equations modeling to find out factors affecting credit access among SMEs. There is need to increase the sample size from the current 102 to higher number and evaluate the determinants of credit access. The current research adopted quantitative research methodology there is need to use qualitative research methodology to establish the determinants of credit access among SMEs.

5.5 Limitations of the Study
The study used stratified sampling technique to select a sample of 102 respondents. It would have been appropriate to use a large sample. More so the study ought to have used SMEs from single sub counties since there are possibilities of non-similarity of problems in different areas. The current study used closed ended and open ended questionnaire to collect the data. It would have been appropriate to use both qualitative and quantitative methods of data collection. Since the data collection was conducted when the new interest rate was passed there is need to evaluate the effect of regulated interest rate on SMEs credit access.

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APPENDICIES

Appendix I Letter of Introduction

Catherine Ndung’u,  
P.O. Box........,  
Nairobi.

Date

Name of Respondent..................................................
Company Name and address.........................................

Dear Sir/ Madam,

RE: REQUEST FOR RESEARCH DATA

I am a Master of Business Administration in finance student at The University of Nairobi, undertaking a Research Project on the “Factors Influencing Credit Access among SMEs in Murang’a County” I am carrying out the research as part of the requirements of obtaining the degree. You have been selected to form part of this study and am kindly requesting you to assist in data collection by responding to questions in the attached questionnaire. The information you will provide will only be used for academic purposes only and will be treated with utmost confidence. You are free to request for a soft copy of this questionnaire which can be sent to you via email. Your assistance and cooperation will be highly appreciated.

Yours faithfully,

..........................
Catherine Ndung’u
Appendix II Questionnaire

QUESTIONNAIRE FOR SMALL AND MEDIUM-SIZED ENTERPRISES

Theme: Factors Affecting Access to Credit among Small and Medium-sized Enterprises (SMEs) in Murang’a County.

I am a Master of Business Administration student at The University of Nairobi. I have designed the following questionnaire based on the above topic. I kindly request you answer all the questions to the best of your knowledge. All information collected via this questionnaire is confidential and will only be used for the purpose of this research.

Instructions: Indicate with a tick (✓) or mark (X) in the space(s) provided.

Section A: General Information

1. What is your age group?
   - Less than 20 years [ ]
   - 21-25 years [ ]
   - 26-30 years [ ]
   - 31-35 years [ ]

2. Kindly indicate your marital status?
   - Single [ ]
   - Married [ ]
   - Separated [ ]
   - Divorced [ ]
   - Others (specify)…………………………………………………………………

3. How many years has your business been in operation?
   - 1 – 5 years [ ]
   - 11- 15 years [ ]
   - More than 20 years [ ]
   - 6-10 years [ ]
   - 16 – 20 years [ ]

4. What form of business do you operate?
   - Sole trader [ ]
   - Private limited company [ ]
5. How many employees do you have in your firm?
- None [ ]
- Less than 10 [ ]
- 11-20 [ ]
- 20-30 [ ]
- 30-40 [ ]
- 40-50 [ ]
- Above 50 employees [ ]

6. Estimate how much start-up capital did you invest in Kenya shillings?
- Below 10,000 [ ]
- 50,000 [ ]
- 51,000-100,000 [ ]
- 101,000-150,000 [ ]
- 151,000-200,000 [ ]
- 201,000-250,000 [ ]
- Above 250,000 [ ]

On average, what is the range of the enterprise’s total sales per year? (Tick appropriately)

<table>
<thead>
<tr>
<th>Range of Total Sales</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below KSH 500,000</td>
<td></td>
</tr>
<tr>
<td>Between KSH 500,000 and KSH 2,000,000</td>
<td></td>
</tr>
<tr>
<td>Above KSH 2,000,000 but not more than KSH 5,000,000</td>
<td></td>
</tr>
</tbody>
</table>

7. What is/ are your major source(s) of financing? (Tick where appropriate)
   i) Savings [ ]
   ii) Bank Loan or loans from other financial institutions [ ]
   iii) Borrowings from friends/relatives [ ]

Other sources (please specify) ………………

8. Would you say that the start-up capital was adequate?
   Adequate [ ]
   Not adequate [ ]
Part B: Micro Credit and Small and Medium Entrepreneurs

Have you applied for credit/loan in the past from any financial institution?

Yes [ ] No [ ]

Do the credit services offered the financial institution in any way affect your business performance?

Yes [ ] No [ ]

Rate the credit services offered by this financial institution?

Poor [ ] Average [ ]

Neutral [ ] Effective [ ]

Very effective [ ]

Part C: Assessing access to credit by Small and Medium Entrepreneurs

Section 1: Collateral security

1. indicate your level of agreement with the following aspects of Collateral security and credit accessibility among SMEs by using a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>On several occasions I have applied for a loan to boost my business but declined because I lacked collateral security.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>Financial institutions are focusing more on potential to repay loan rather than on Collateral security in our business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>The requirements that I provide security for my loan has pushed me seek other means to fund my business such as borrowing from relatives and buying on credit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>At times we apply for loans as a group/Chama because we can easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
co-guarantee each other.

e Financial institutions insist on the provision of Collateral security as a primary lending condition.

f when analyzing the likelihood of loan repayment, financial institutions adopt a risk averse stance towards small firms instead of focusing on income generating potential of an entity.

g Requirement posited by financial institutions and 'shylocks' in lending requirements have discouraged me from borrowing since some lending institutions prefer lending to the large scale businesses which seem successful.

h Financial institutions are reluctant to avail credit to us since we work informally while it is difficult for us to provide acceptable confirmation of our earnings

Section 2: Interest Rate Charged

1. Indicate how much you agree with the following statements relating to interest rate charged and its influence on credit availability among small and medium sized enterprises by using a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rates charged by institutions are prohibitive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At times of interest rate charged is on some loans is dependent on the security provided or nature of business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are unrealistic credit processing costs and charges.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial institutions at times resolve to use unrealistic means of recovery for failure to repay a loan especially when trading conditions are unfavorable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interest rates charged by financial institutions discourages us from borrowing because they are high.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I shy from applying for a loan since the financial institutions do not consider my ability to meet the interest rate set.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

51
Failure to repay on time leads to the financial institutions confiscating business assets which affects my day to day running of the business and this discourages me from borrowing.

Financial institutions lend on short term basis with high interest rate and this hinders me from credit.

**Section 3: Literacy Level**

1. What is your level of agreement with the following statements relating to entrepreneurs literacy level and credit access. Use a scale of 1-5, where 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>I don’t know of the legal issues that are needed to address access to credit for my business because conditions of laws and regulations are very complex.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>My education level equips me with the knowledge and skills that are needed to be more effective in managing our business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>My academic qualification helps me in making financial decisions for my business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>Level of education has positive influence on when/how to get loans to improve the business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>I am discouraged from borrowing a loan because the information on availability and charges is not communicated in a language I can interpret.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>Financial institutions in this area have been introducing programs where credit is linked to education, health, nutrition and other non-financial services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Financial institutions have increasingly focused on cost-effectively integrating credit with other types of services thus creating links with us in order to enhance our services.

Financial institutions have adopted to offer training sessions which creates awareness of their products that are of benefit to my business.

Trainings have enabled me run my business effectively and I have realized an increase in sales and profitability.

Training sessions have helped us to define capital and investment, where to buy and sell, how to set prices, investments, credit sales for my business.

I have realized increase in business related outcomes such as revenues, profits due to trainings undergone.

### Section D: Number of Lending Institutions

1. In your opinion indicate your level of agreement with the statements below relating to number of lending institution and its influence credit accessibility among SMEs. Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>The presence of financial institutions in our area has enabled us mobilize savings which has resulted to more capital injection in the businesses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b</td>
<td>I have established a personal relationship with the financier which has enhanced credit availability</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Duration of my relationship with my financier determines whether I can access credit</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>d</td>
<td>Access to financial institution has improved credit accessibility to most of the small and medium entrepreneurs and this has led to business growth.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>Recently there are more focused financial institution services emerging hence attracting the interests of donor agencies including NGOs, credit unions and non-banking financial intermediaries to provide credit services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>Most of entrepreneurs, through financial institutions have realized an effective way to integrate access to financial services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>Increase in demand for credit services has led to financial institutions incorporating mobile money transfer services.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>Many financial institutions have not tailor made products that suits our needs.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Thank You for Your Participation**
### Appendix III Rotated Factor Analysis Matrix

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial institutions charge prohibitive interests on credit</td>
<td>0.862</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The availability of financial institutions in my area has</td>
<td></td>
<td>0.862</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mobilized savings and therefore more capital due to the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interests accrued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have realized increase in business related outcomes such as</td>
<td></td>
<td></td>
<td>0.712</td>
<td></td>
</tr>
<tr>
<td>revenues, profits due to trainings undergone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have established a personal relationship with the financier</td>
<td></td>
<td></td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td>and this has enhances credit availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial institutions charge high interests which have</td>
<td></td>
<td></td>
<td>0.653</td>
<td></td>
</tr>
<tr>
<td>discourages us from borrowing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Am discouraged to apply for loan because financial institutions do not consider whether I am able to meet the interest rate set</td>
<td></td>
<td></td>
<td>0.618</td>
<td></td>
</tr>
<tr>
<td>There is fear of inability to pay a loan which at times leads to the financial institutions possessing ownership of the security provided for the loan.</td>
<td></td>
<td></td>
<td></td>
<td>0.587</td>
</tr>
<tr>
<td>At times, the amount of interest rate depends on the security of the loan or the nature of the business.</td>
<td></td>
<td></td>
<td></td>
<td>0.554</td>
</tr>
<tr>
<td>There are times when we apply for loans as a group “Chama” for ease repayment so that we can co-guarantee one another.</td>
<td></td>
<td></td>
<td></td>
<td>0.701</td>
</tr>
<tr>
<td>Financial institutions and 'shylocks' have rigorous lending</td>
<td></td>
<td></td>
<td></td>
<td>0.652</td>
</tr>
<tr>
<td>requirements which have discouraged me from borrowing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When analyzing ability to repay, financial institutions adopt a risk averse stance towards small firms, and in many instances fail to focus on the income generating potential of the venture.</td>
<td></td>
<td></td>
<td></td>
<td>0.643</td>
</tr>
<tr>
<td>Training sessions offered by financial institutions in my area</td>
<td></td>
<td></td>
<td></td>
<td>0.615</td>
</tr>
<tr>
<td>have created awareness of their services and products that are of benefit to my business.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lending institutions fail to disclose information on availability of loans, and the rate of interests charged in a way that I can interpret</td>
<td></td>
<td></td>
<td></td>
<td>0.61</td>
</tr>
<tr>
<td>Financial institutions lend on short term basis and charge a high interest which makes interest rate a constraining factor in accessibility to credit among the SME’s</td>
<td></td>
<td></td>
<td></td>
<td>0.583</td>
</tr>
<tr>
<td>Education background has positive influence on when/how to get loans to improve the business</td>
<td></td>
<td></td>
<td></td>
<td>0.562</td>
</tr>
<tr>
<td>I have occasionally applied for loan to boost my business and have been declined because I lack of Collateral security</td>
<td></td>
<td></td>
<td></td>
<td>0.553</td>
</tr>
<tr>
<td>Financial institutions consider collateral security rather than ability to repay loan when advancing the loan</td>
<td></td>
<td></td>
<td></td>
<td>0.525</td>
</tr>
<tr>
<td>Financial institutions have increasingly focused on cost-effectively integrating microfinance with other types of services thus creating links with us in order to enhance our services</td>
<td></td>
<td></td>
<td></td>
<td>0.502</td>
</tr>
</tbody>
</table>
Financial institutions have at times taken unrealistic action for failure to repay the loan especially when trading conditions are unfavorable.

<table>
<thead>
<tr>
<th>Accessing loans has remained a major challenge for us because many financial institutions do not cater for our needs</th>
<th>0.846</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is an increase in demand for credit facilities which has led to adoption of mobile telephone money transfer services in financial institutions</td>
<td>0.563</td>
</tr>
<tr>
<td>Recently there are more focused financial institution services emerging hence attracting the interests of donor agencies including NGOs, credit unions and non-banking financial intermediaries to provide credit services</td>
<td>0.73</td>
</tr>
<tr>
<td>Increase of financial institutions has improved credit accessibility to most of the small and medium entrepreneurs therefore promoting business growth</td>
<td>0.702</td>
</tr>
<tr>
<td>The length of time I have banked with a financial institution determines whether I can access credit.</td>
<td>0.602</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 6 iterations.