



# **FINANCIAL FACTORS AFFECTING ACCESS TO CREDIT AMONG SMALL AND MEDIUM ENTERPRISES IN MACHAKOS TOWN SUB-COUNTY, KENYA**

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## **Abstract**

*Small and medium enterprises (SME's) play a critical role in an economy. The objective of the study was to establish financial factors that affect access to credit among SMEs in Machakos town sub-county. Specifically, the study sort to find out the influence of collateral requirements, the effect of cost of credit on access to credit and the effect of financial information asymmetry among SME's on access to credit in Machakos Town Sub-county, Kenya. It also sort to establish the effect of business risk on access to credit among SMEs in Machakos Town Sub-County. The study was guided by relevant theories i.e. Credit rationing theory, Information asymmetry theory, pecking order theory and trade-off theory. The study employed descriptive study design. Stratified sampling technique was applied. Data was gathered using questionnaires with the help of a research assistant. The questionnaires were administered*

*using the drop and pick method. The data was analysed by use of SPSS. The study found out that cost of credit such as process and insurances fees are key determinant to access to credit among small and medium enterprises in Kenya. The study also found out that business risk affect access to credit thus financial institutions would not want to finance such businesses with high risks. The study found out that it is difficult to avail all financial information required about the businesses in order to access to credit. The study concluded that the cost of credit is a key determinant to access to credit while business risk make Kenya financial institutions shy away from lending to small and medium enterprises in Kenya. The study also concluded that financial information asymmetry between lenders and borrowers of credit affects access to credit by access to credit small and medium enterprises in Kenya.*

*Keywords: Collateral Requirement, Cost of Credit, Financial Information Asymmetry, Business Risks, Access to Credit, SMEs, Kenya*

## **INTRODUCTION**

Small and Medium-size Enterprises (SMEs) are very significant in economic development. According to Floyd and McManus (2005), has found out that there is an absence of many large firms in most developing countries thus implying that the SME sector is the main engine of their growth. SMEs and entrepreneurship are recognized as key sources of innovation, flexibility and dynamism in the advanced industrialized economies, emerging markets and developing economies, and is major net job creators in these economies. Further, Formal SMEs contribute up to 60% of total employment and up to 40% of national income (GDP) in emerging economies (OECD, 2006a; 2006b). The idea that better private sector performance in Africa can reduce poverty remains central in policy discussions. The performance of Sub-Saharan's SMEs sector has generally been quite poor, many people still have strong persuasion that it can act as an engine of growth in the continent, by creating skilled jobs and positive spillover effects and, more generally, by modernizing the economy (Bigsten & Soderbom 2006).

According to Hamilton and Beck (2016), the Republic of Korea's economic development remains the envy of many countries, it transitioned from one of the world's poorest nations in the 1960s, to being the 12th largest economy (in GDP). As of 2012, SMEs accounted for 99.9% of all companies in Korea are SMEs and employed 87.7% of all employees. The sector has been characterized by reliance on bank funding meeting financing needs. The Korean government has for a long time supported SMEs as an engine of growth for its economy. Since 1979, the government has supplied public funds to SMEs by either direct or through credit guarantee

schemes. It also has used moral persuasion, for example, in 2009 in the wake of the global financial crisis banks were requested to roll over loans to viable SMEs.

According to Gunto and Alias (2014) the Malaysian government has given SMES priority and has put in place institutional framework and policy guideline that addresses their developmental needs. The government set up in 2004 a National SME Development Council (SMEDC) chaired by the Prime Minister to ensure policy implementation. The framework of “Fund for Small and Medium-Scale Industries” was established and the project, which aimed to develop SMEs via the provision of financial assistance, continued to have relevance. The Government’s programs and initiatives for SME development has focused on achieving some targets, especially in the areas of developing human capabilities and the necessary enabling infrastructure that allows for the establishment of high performance and high value-added SMEs.

In the Libyan context, SMEs own up to 80% of private sector, while a small corporate owns only 16% and 3% of SMEs are owned by families (Wahab 2014). Libya’s SMEs has generally suffered from some challenges which hinder the sector to flourish. Among these challenges, easy access to credit is been rated the main one. The other factors are social, economic, demographic and political related. According to Abdesamed and Wahab (2014) although more than 96% of enterprises in Libya are SMEs, their contributions to the gross domestic product (GDP) growth are little at only 4%. The difficulty of these enterprises in access credit is considered one of their main problems. Venture capital availability is almost completely absent in the Libyan financial market.

In South Africa, SMEs account for about 91% of the formal business entities, contributing to about 57% of GDP, and provide almost 60% of employment (Kongolo, 2010). To underpin the SMEs importance, the government established a Ministry of Small Business Development in 2014. Evidently, this has in fact helped growth of SME in various parts of the country (Waari 2015). According to Maziku (2012) in South Africa, SMEs face constrain in accessing both debt and equity financing. Practically the problem of accessing credit exist when there is a need for finances from a client with viable investment project that warrantees financing, but there exist impeded to access the funds . This occurs due to the gaps that exist between the suppliers of external financing and the demand for financial resources.

In Kenya, Kithae, Gakure and Munyao (2012) explain that SMEs are very pivotal towards the achievement of the broad goals outlined in vision 2030 and are key drivers towards making Kenya an industrialized country. In Kenya 18% of the GDP and 80% of the workforce population are employed in SMEs, sector according to Kithae (2012). In the Africa and the world all over, SMEs access to finance and costs of finance appears in surveys and analysis as one of

the leading hurdles to realizing growth. 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.

The term micro and small enterprises (MSEs) or micro, small and medium enterprises (MSMEs), is used to refer to SMEs in Kenya. Under the Micro and Small Enterprise Act of 2012, micro enterprises have a maximum annual turnover of KES 500,000 and employ less than 10 people. Small enterprises have between KES 500, 000 and 5 million annual turnover and employ 10-49 people. Medium enterprises are not covered under the act, but have been reported as comprising of enterprises with a turnover of between KES 5 million and 800 million and employing 50-99 employees.

Access to credit refers to the ability of individuals and enterprises to obtain external funding to enable them ease cash flow problems (Pandula, 2013). Credit can either be 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 (Njeri, 2012).SME segment in Kenya has grown remarkably between 2009 and 2013 and that the growth has been driven mainly by domestic banks. The total SME lending portfolio in December 2013 was estimated at KSh332 billion, representing 23.4% of the banks' total loan portfolios (The USD equivalent is USD 3.84 billion, based on the exchange rate on December 31, 2013). However as per Central Bank of Kenya report (2016), Bank lending to micro, small and medium size enterprises (MSMEs) reduced by 5.7% thus threatening Private sector growth.

Access to credit has been a challenge facing SMEs as documented by various scholars. For stances Bowen, (2009) observed that lack of access to credit is a major impediment to the growth and survival of SMEs in the manufacturing sector that are capital intensive. Atieno (2009) observed Shortage of credit or rather lack of it altogether is attributed to a number of factors. Foremost, the nature of credit markets, which are segmented and incomplete. Secondly, on the supply side, most formal financial institutions consider SMEs not creditworthy due to their lack of growth potential and small size of their business activities.

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. In the study by Rahaman (2011) it was observed that an increase of 10% in bank credit to a firm would lead to an increase of 18.14% in firm growth. On the other hand, lack of credit negatively affected profit margins of the business than any other challenges (Khandker 2013). Both in the developing and developed world small firms have been found to have less access to external finance and to be more constrained in their operation and growth (Galindo &

Schiantarelli, 2003). Financial institutions have packaged different credit facilities that are aimed at different forms of business. These products provides wide choices to SMEs and in addition once matched with their business needs there would be improved performance; increased productivity, improved returns on investment, and increased incomes (Njeru, 2012).

According to the County Government of Machakos (2018), there are 380 SMEs in Machakos Town Sub-county. They cut across all sectors of the economy (basic production, manufacturing, and services) and their form of ownership are: 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. A study carried out by Mwongera (2014) in Mavoko Sub-county in Machakos County found that 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.

Machakos Town Sub-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. Mwongera (2014) attributed challenges of access to credit among SMEs to the stringent conditions set by financial institutions on the SMEs before they can access financial support.

According to survey conducted by KBA between April 2017 and June 2017, Bank Credit to the private sector is nearly grinding to a halt, with the most affected being unsecured personal loans. The study indicated that of out of the 3.2 Million SMEs who applied for a loan from banks between the month of May 2017 and June 2017 only 1.1 million had their loans approved. This means over 2 Million applications were rejected representing 34 per cent success rate. Further the survey revealed that loan application and disbursement over the same period dropped from 2.2 million to below 750,000 representing 32 percent decline. Machakos Town Sub-county SMEs' are not an exception to this Scenario of having low success rate for loan applications as indicated in the survey.

### **Problem statement**

Small scales businesses in the Kenyan economy are faced with financial constrain which impact negatively on their development and limit their potential to drive the national economy. Small scale businesses in Machakos town lack audited financial statements and adequate collateral requirement by the banks before credit is given out (Gichuki, 2014).

SMEs play pivotal roles in creating dynamic, market oriented economic growth, employing the growing workforce in developing countries, alleviating poverty and promoting democratization (World Bank 2015). According to Kithae (2012), SMEs sector contributes 18% of the GDP and employs 80% of the workforce in the Kenyan economy. Therefore, improving SMEs' access to finance and finding solutions to unlock sources of capital is crucial to enable this potentially dynamic sector to grow and provide jobs.

The global financial gap in the SMEs sector stands at 56% but more severe in the developing countries. In Kenya the report indicates that credit gap for SMEs who are fully and partly constrained is 38.4% (FSD, 2016). This was emphasized by a survey conducted by KBA between the month of April 2017 and June 2017 which indicated that for any loan application done over the period the success rate was 34%. This points out that there are factors affecting success rate for loan application done by SMEs and they could include but not limited to cost of credit, collateral requirements for credit, information access, and business risk profile.

Several studies have also been done around this area. For instance Njeru and Kinyua (2014), carried out studies touching on credit services and SMEs. Fatoki (2012), 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. Although several studies have been undertaken that greatly focused on financial credit facilities and SMEs, they have not been conclusive.

### **Purpose of the Study**

The study was to investigate financial factors affecting credit access among MSEs in Machakos town Sub-county, Kenya.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### ***Theory of Equilibrium Credit Rationing***

Hodgeman (1960), developed the theory of credit rationing based on default risk. He defined credit rationing as a situation where all or some loan applicants are not awarded all the loan amount they applied for at a prevailing interest rate. In this model, lenders evaluate potential borrowers on the basis of the loan's expected return-expected loss ratio. In addition, it is assumed that there is a maximum repayment that the borrower can credibly promise, which effectively limits how much the lender will offer the borrower regardless of the interest rate. In this case the expected losses become too great relative to the expected return. In addition, the theory is of the view that lenders do not provide all the loans that borrowers wish to obtain

because they cannot distinguish between safe and risky borrowers. It also assumes imperfect credit markets due to information asymmetry, which lenders attempt to solve by imposing interest rate and collateral. Further, it assumes that demand for commercial bank loans exceeds their supply at the prevailing interest rate and that borrowers need to provide equal amount of collateral. He observed that whenever a borrower's demand curve intersects with a vertical portion of the relevant supply curve, the particular borrower will be unable to obtain additional borrowed funds by promising to pay additional interest. Furthermore as the supply curve shifts to the left and upward, the borrower will encounter more stringent restrictions on the supply of funds which he will be unable to overcome by offering to pay more interest. However, Hodgeman observed that another borrower with a good credit rating may continue to borrow as much as he wishes and may not be required to pay much additional interest to meet the qualifications imposed by the lender. The theory is important to this study because financial institutions normally classify MSEs as high risk borrowers thus leading to some obtaining credit while others are rationed or denied.

### ***Imperfect Information Theory***

The concept of asymmetric information was first introduced in George A. Akerlof's 1970. He observed that, 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 him information asymmetry is a common feature of any market interactions for example at the point of making borrowing decision, a borrower knows more than the lender about his creditworthiness. He argued imperfect information can produce adverse selection in the markets such that when a lender or a buyer has imperfect information, a borrower with weak repayment prospects or a seller of low quality products may crowd out everyone else from their side of the market thereby hindering mutually advantageous transactions. This theory further assumes Banks cannot effectively differentiate between high risk and low risk loan applicants. The theory is relevant to the study because that financial institutions strive to overcome this barrier through the use of credit scoring techniques and building strong relationships with all relevant stakeholders in the sector.

### ***Pecking Order Theory***

Myers and Majluf (1984) modified the work of Donaldson (1961) to refine the Pecking order theory. The theory assumes that enterprises follow a financing hierarchy and that source of finance is either internal or external. They observed, priority is given to internal funds over external funds. The theory stipulates that enterprises seek external funding only when internal

resources are depleted. They argued the external funds need to be necessary, safer and without control restrictions for the enterprise. The owners of enterprises prefer debt financing with little or no collateral or covenants. In addition, issue costs are least for internal funds, low for equity and highest for debt. This theory is applicable to Kenyan SMEs because it touches on collateral and that business owners in Kenya usually prefer internal sources of funds over the other sources of finance.

### ***Financial Intermediation Theory***

Gurley and Shaw (1960), Developed the theory of financial intermediation which is based on information asymmetry. They argued that, the existence of financial intermediaries is explained by the existence of the following categories of factors: high cost of transaction, lack of complete information in useful time; and the method of regulation. The theory describes the process where surplus units (savers) give funds, that is, 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) .

The theory emphasizes resource allocation based on perfect markets and thus the transaction costs and asymmetric information are important in understanding financial intermediation. They observed 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. 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.

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 .

### **Empirical Review**

#### ***Collateral requirement in Accessing Credit***

Collateral refers to the extent to which assets are committed by borrowers to a lender as security for debt payment (Gitman, 2003). The assets committed should be used to realize the principal in case of default. SMEs in particular provide security in form of fixed assets (houses, the car, and anything that could actually bring back the principal) in the event of default on loans

(Garrett, 2009). Security for loans must actually be capable of being sold under the normal conditions of the market, at a fair market value and also with reasonable promptness. It is evident that most SMEs are denied and discriminated by the lenders in providing financing. This is because of the high risk associated with them lacking adequate resources to pledge as collateral (Kihimbo, 2012).

Bougheas (2005) contend that collateral is an important prerequisite for SMEs in order to access bank finance. Collateral reduces the riskiness of a loan by giving the financial institution a claim on the tangible asset without diminishing its claim on the outstanding debt. Coco (2000) points out that collateral is the lender's second line of defense. Collateral can solve problems derived from asymmetries in valuation of projects, uncertainty about the quality of projects and the riskiness of borrowers, and problems related to the cost of monitoring or supervising borrowers' behavior.

The comfort provided by collateral allows financial institutions to offer credit on favorable terms to SMEs even if uncertainty and information opaqueness characterize the firm. If the bank cannot determine a borrowers' riskiness, then collateral may serve as a screening device to differentiate between good and bad borrowers and to mitigate the adverse selection problem

The willingness of the entrepreneur to pledge collateral positively influences the quality of credit request as perceived by the bank. The bank screens firms by offering both loan contracts with higher collateral value with lower interest rates and loan contracts with lower collateral with higher interest rates. Although risk factors may not be readily observable, lower risk borrowers will nonetheless pledge more and better collateral value than riskier borrowers because this pledge is less costly for borrowers who have lower likelihoods of losing the pledged collateral. The probability of losing collateral acts as a disciplinary tool for the borrower. Thus, the pledge of collateral leads to a higher level of effort to satisfy loan conditions and meeting loans obligations, reducing a borrower's default probability. Collateral therefore serves as a tool for resolving moral hazard problems (Aghion & Bolton, 2012).

Gangata and Matavire, (2013) in their study on challenges facing SMEs in accessing finance from financial institutions, found out that very few SMEs succeed in accessing funding from financial institutions, the main reason being failure to meet lending requirements, chief among them being provision of collateral security. A study was done on challenges faced by Small & Medium Enterprises (SMEs) in obtaining credit in Ghana. Based on the responses received through the questionnaires circulated, it became evident that SMEs in Ghana like most SMEs in other countries are faced with major challenges in accessing credit. These challenges were revealed by the study to include, the inability of SMEs to provide collateral and other information needed by banks such as audited financial statement coupled with the high cost of

loan in terms of high interest rates making it extremely difficult to access bank loans (Vuvor & Ackah, 2011).

### **Cost of Credit**

The cost of credit accessibility refers to the amount of money the entrepreneurs pay in process of borrowing money from financial institutions. The key indicators of cost in this respect are processing fees, negotiation fees, interest rates, personal insurance, legal fees and travelling expenses that the entrepreneurs meet in the process of acquiring credit (Gichuki 2014). Hallberg, (2002) singled out high risks associated in lending SMEs and fixed costs associated in acquiring sound information about the borrower by financial institutions as the major driving force to the high cost of credit.

High transaction costs do therefore not only increase the cost of borrowing, but can also restrict access to external finance for some borrower groups. While transaction costs are restraining for all borrowers, there are arguments that they are even more constraining for small and micro enterprises. Their diverse characteristics and their relative opaqueness increases assessment and monitoring costs. Unlike other credit categories, such as consumer credit or mortgage lending, SME lending is still considered a high-cost lending product. More specifically, unlike other lending products that can be reduced to simple transactions, SME lending often still depends heavily on relationships between borrowers and lenders (Berger & Udell, 2006).

Financial institutions have often been criticized for having high interest rates charged on loans. But sometimes, there are factors beyond their control. For example, the amount of interest payable on loans depend on interest rates charged, which is driven by the base lending rate of interest set by the Central Bank of Kenya (CBK). The amount of interest rate charged is sometimes, intertwined with the security of the loan, and the use for which it is to be used, or the nature of the business. That is, the more secure loans are charged low interest rates due to, their low risks involved. This leads MSEs to the Micro Finance Institutions (MFIs), who lend unsustainable interests short term loans.

Cost of credit is influenced by a number of factors in a given economy among them the supply and demand forces (for credit), inflation, the government ( T-Bill rates) and the types of loans(certain sectors are considered risky) (Institute for Economic Affairs, 2000). It is a universally accepted principle that interest rates play a major role in the performance of an economy. Higher interest and therefore high cost of credit result in reduced borrowing and hence reduced spending by both households and businesses. Conversely, lower interest rates normally lead to increased spending. This has a net effect on the performance of enterprises

including small and medium enterprises in any given economy (Institute for Economic Affairs, 2000).

A study carried out by Mwangi (2014) on challenges facing entrepreneurs in accessing credit: a case of youth entrepreneurs in Makuyu, Kenya found out that most of youth entrepreneurs faced challenges in accessing credit due high cost of credit evidenced in high loan processing fees, high rate of legal fee, high rate of interest, high cost of credit insurance and high expenses incurred in travelling in the process looking for credit. Another study was done on effects of access to financial credit on the growth of women owned small retail enterprises in Uasin Gishu County: a case of Kapseret Constituency. The study found out that interest rates affected access to credit by women entrepreneurs owning small scale business enterprises in Kapseret Constituency (Cheluget, 2013).

### ***Business Risks***

Total risk (both business and financial risk) may be a dimension across which a financing gap might exist among SMES. A firm's business risk (which focuses on a firm's operations), represents the uncertainty of the firm's return on its assets (Correia, Flynn & Wormald, 2008). Whereas, financial risks occurs when a firm makes use of debt (that is, financial leverage). In such instances, the firm takes on additional responsibility of financing the debt which is paying interest payments on time. The inability of the firm to pay the interest payments or repay the principal will result in a default that might lead to bankruptcy. As the amount of debt used by the firm increases, the chances of it defaulting will also go up due to constraints on its cash flows as a result of the interest payments. SMEs rely more on external financing, thus the financial risk in the SME sector is most likely to be very high.

Gitman (2003) argued that commercial banks tend to impute a high risk to small enterprises and are therefore reluctant to extend credit to them. These firms are, by their very nature, often relatively young and consequently lack a financial history and a track-record of profitable projects. In addition, organization and administrative deficiencies, lower quality management and a lack of appropriate accounting systems may compromise the accessibility and reliability of information from small firms on their repayment capacity.

The difficulties faced by SMEs in accessing credit facilities are attributed to their perceived higher risk profile. Lending institutions regard SMEs as riskier enterprises for a number of reasons which include: uncertain competitive environment; inadequate accounting systems; more unpredictable operating environment in the developing and emerging markets; assets not properly registered; delayed payments for the products and services rendered; less equipped in terms of both human and financial resources to withstand economic resources

(Fatoki, 2012). It has been argued that such interest rates can erode profit generated by borrowers, leaving them with little net gain. There is also concern that high cost of credit can reduce the demand for and access to credit (Dehejia, 2012).

### ***Financial Information Asymmetry***

The access to credit information in local lending environments determines the extent to which small enterprises obtain sufficient external financing to exploit profitable projects. The extent to which the business environment inhibits the optimal provision of credit determines the size of the funding gap that small enterprises might face (Berger, 2004). Access to information is important both from the SMEs perspective and from the perspective of the providers of financial services and products. The SMEs require information with which to identify the potential suppliers of the financial products. It requires this information to evaluate the cost of the financial services and products that are being offered. The financial services providers on the other hand require information with which to evaluate the risk profile of the SMEs applying for finance, and to assess the prospects of the SMEs within the market segment.

One of the problems faced by small firms when attempting to raise finance is information asymmetry in that they cannot prove the quality of their investment projects to the provider of finance. SMEs managers often lack financial sophistication, as they are often product or service specialist, not specialists in the area of finance. Thus, the information asymmetry problem is partly one relating to difficulties in the spheres of communication and credibility. SMEs more often are unable to provide historical data to support their financial performance track record and if they do their usually scanty. Banks on the other hand rely on past financial performance as an indicator for the future profitability of projects (Tucker & Lean, 2003). Additionally, some small business managers tend to be restrictive when it comes to providing external financiers with detailed information about the core of the business, since they believe in one way or the other, information about their business may leak through to competitors (Winborg & Landstrom, 2000).

The risks that banks face when they lack necessary information to distinguish between good and bad borrowers are moral hazards and adverse selection (Jaffee & Russel, 2011); monitoring costs and transaction costs in issuing bank debt, such as costs of application, screening costs and bankruptcy costs (Williamson, 2012). Banks are not interested in granting credit to SMEs because it is particularly difficult to overcome information asymmetries and resulting screening, monitoring, and enforcement problems: clients are poor, have few assets to collateralise, they don't keep records and those who keep the quality of information is unreliable, and give rise to high transaction costs (Binswanger, 1986).

### ***Accessing Credit***

Lack of access to credit is indicated as a key problem for SMEs. Credit constraints operate in variety of ways in Kenya where undeveloped capital market forces entrepreneurs to rely on internal sources of funds or borrowing from friends or relatives which is not enough to enable SMEs undertake their business activities efficiently. Lack of access to long-term credit for small enterprises forces them to rely on high cost short term credit. There are various financial constraints that face small enterprises. They include the high cost of credit, high bank charges and fees (Kamunge, 2014). There is no structured institutional mechanism in Kenya to facilitate the flow of financial resources from the formal sector through micro finance institutions to such enterprises. Generally, such enterprises operate on tight budgets, often financed through owner's own contribution, loans from friends and relatives and some bank credit. They are often unable to procure adequate financial resources for the purchase of machinery, equipment and raw materials as well as for meeting day-to-day expenses (Gichuki, 2014).

Several studies suggests that lack of access to credit prevents low-income household and small firms from financing high return investment projects, having an adverse effect on growth and poverty alleviation (Gichuki , 2014). Kungu (2011) carried out a research on sources of finance available to small scale enterprises in Nairobi. The objectives of the study were to identify which types of credit are easily obtainable by SMEs and to evaluate the credit policies of SMEs. On access to credit, majority of entrepreneurs relied on limited own and family savings for start-up and additional capital. They hardly rely on external sources of finance. Therefore, these enterprises have poor access to credit. Concerning supply of credit; urban-located enterprises were noted to have achieved a higher success rate than the rural ones.

## **RESEARCH METHODS**

### **Research Design**

The study employed descriptive survey research design for it portray an accurate profile of situations (Cooper & Schindler, 2008). This was designed to describe the characteristics of a particular phenomenon in a situation. It was used to obtain information concerning the current status of the industry and to survey what existed with respect to the conditions in a situation. According to Orodho and okombo, (2002) descriptive design is suitable because it is used to obtain information that describes existing phenomena by asking individuals about their perceptions, attitudes, behaviours or values. This design was used since it enabled the researcher collect data across the sampled population using the same instruments at the same time.

This is also stated by Gay (2006) that descriptive study determines and reports the way things are and commonly involve assessing attitudes and opinions towards individuals, organizations and procedures. The descriptive research design enabled the researcher to summarize the findings in a way that will provide information on the financial factors affecting access to credit among SMEs in Machakos Town Sub-County.

### Target Population

According to Mugenda and Mugenda (2008), a population is an entire group of individuals or events or objects having common observable characteristics that conform to a given specification. And for the purpose of this research the targeted population was accessible. The accessible population is the population in research to which the researchers can apply their conclusions (Thorn hill, 2009). This population is a subset of the target population and is also known as the study population. It is from the accessible population that researchers draw their samples. The population of this study was the 380 SMEs operating with the Machakos Town Sub-county. The table 1 indicates population distribution for each sub-group and its respective percent for the entire population.

Table 1 Population Distribution

<b>SMEs</b>	<b>Population</b>	<b>Percent (%)</b>	<b>Cumulative percent</b>
<b>Medical</b>	<b>13</b>	<b>3</b>	<b>3</b>
Agricultural	31	8	11
Metal Works	35	9	20
Electronics	25	7	27
Mechanics	32	8	35
Woodworks	60	16	51
General Supplies	25	7	58
Mini-Stores	41	11	69
Bookshops	16	4	73
Transport	84	22	95
Entertainment	10	3	98
Others	8	2	100
<b>Totals</b>	<b>380</b>	<b>100</b>	

Source: County of Government of Machakos , (2018)

## Sampling Technique

Sampling was done to some elements of populace so that conclusions about the entire populace can be drawn. The ultimate test of a sample design is how well it represents the characteristics of the population it purposes to (Thorn hill, 2009). The population was divided into homogenous sub-groups known as strata; from each stratum a random sample was selected. Stratified random sampling was preferred since every SME had an opportunity of being sampled.

## EMPIRICAL FINDINGS

### Collateral Requirements

The respondents Indicated the extent to which they collateral requirements in accessing credit from financial institutions was affected them. The respondents were to sign 1-5 on each of the statements given where 1-strongly agree, 2-agree, 3-Neutral, 4- Disagree, 5-strongly disagree. The information gathered was as in the table below.

Table 2 Collateral Requirements

	N=60					Mean	Std. Deviation	Variance
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree			
Adequate collateral determines amount and loan term.	85%	15%	0%	0%	0%	1.15	.360	.130
Costs charged on security perfection discourage borrowing.	37%	44%	17%	6%	0%	2.00	.883	.780
Time taken to complete registration of a charge discourages borrowing.	4%	13%	37%	29%	17%	3.37	.991	.982
Stringent credit policies scare potential borrowers.	15%	29%	6%	29%	21%	3.40	1.509	2.278
Nature of available collateral affects amount and loan term given.	75%	17%	8%	0%	0%	1.28	.585	.342
Flexibility of loan repayment affects amounts and loan term.	52%	17%	13%	13%	4%	1.15	.360	.130

The table indicates that more than 85% of the respondents agreed that collateral adequacy and availability determines the amount and loan term given, majority (92%) of them agreed that Costs charged and 74% of respondents agreed flexibility of loan repayment affects the loan amount one gets. However majority (83%) disagreed that time taken to complete registration of a charge on the security and more than 52% agreed Stringent credit policies scare away potential borrowers.

From the above results, means range from 3.40 to 1.15 as measures of central tendency while standard deviation and variance as measures of variability range from .360 to 1.509 and from .130 to 2.278 respectively. This demonstrates that spread of data set is low indicating that the data points are close to the mean hence the information on collateral requirements collected from the sample distribution represents the population.

### **Cost of Credit**

The respondents indicated whether they 1 strongly agree, 2 Agree, 3 not sure/Neutral, 4 Disagree, and 5 Strongly Disagree with the following statements on the effect of cost of credit on loans. The following table tabulates the responses.

Table 3 Cost of Credit

Statement	N=60					Mean	Std. Deviation	Variance
	Strongly Agree 1	Agree Agree 2	Neutral 3	Disagree 4	Strongly Disagree 5			
Processing fees, insurance and legal fees are huge.	87%	13%	0%	0%	0%	1.12	.324	.105
Processing fees, insurance fees and legal fees can be negotiated.	4%	6%	29%	44%	17%	3.65	.860	.740
Secured loans have low interest rate compared to unsecured ones.	10%	13%	44%	21%	12%	3.17	1.076	1.158
A less liquid security attracts high interest rate.	8%	19%	37%	10%	27%	3.05	1.307	1.709
Loan term affects the interest charged on loans.	52%	23%	19%	6%	0%	1.47	.650	.423
Government regulation affects access to loans.	4%	8%	13%	58%	17%	3.55	.852	.726

The table shows that more than 87% of the respondents indicated that the processing fee on the loan is high and majority (61%) indicated that this fees is not negotiable. More than 50% of

the respondents disagreed that unsecured and secured loans had differences on interests attached. Over 73% disagree that less liquid security attracts high interest rates and that loan term affects the interest charged. They however disagreed that government regulations affects access to loans.

From the above results, means range from 1.12 to 3.65 as measures of central tendency while standard deviation and variance as measures of variability range from .324 to 1.307 and from .105 to 1.709 respectively. This demonstrates that spread of data set is low i.e indicating that the data points are close to the mean hence the information on cost of credit collected from the sample distribution represents the population spread.

### **Business Risks**

The researcher sought to know whether the respondents (1 strongly agree, 2 Agree, 3 not sure/Neutral, 4 Disagree, and 5 Strongly Disagree) with the corresponding statements on business risks in relation to accessing loans. The responses were as shown below.

Table 4 Business Risks

Statement	Strongly Agree	Agree Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation	Variance
	1	2	3	4	5			
There is competition from large and relatively similar enterprises.	85%	12%	4%	0%	0%	1.18	.469	.220
Most business expansions are regarded risky.	71%	29%	0%	0%	0%	1.22	.415	.173
Price instability negatively affects profit in most cases.	50%	21%	13%	12%	4%	1.90	1.203	1.447
Emerging technology negatively affects businesses.	25%	38%	27%	8%	2%	2.22	.922	.851
Funds for business expansion in most cases are inadequate.	77%	19%	4%	0%	0%	1.23	.500	.250

The table indicates that 97% of respondents agreed that Small businesses face competition from large and small businesses and also 71% of them strongly agreed expansion of businesses is regarded as risk by financial institutions. Over 50% also indicated that price instability and emerging technology are negatively affecting businesses and finally 77% of

responded agreed funds for business expansion are inadequate and therefore accessing loans for these businesses becomes difficult.

From the above results, means range from 1.22 to 2.22 as measures of central tendency while standard deviation and variance as measures of variability range from .415 to 1.203 and from .173 to 1.447 respectively. This demonstrates that spread of data set is low i.e indicating that the data points are close to the mean hence the information on business risks collected from the sample distribution represents the population.

### **Financial Information Asymmetry**

The researcher wanted to know whether financial information was affecting the access to loans by SME's. the respondents were therefore asked to indicate whether they, 1 strongly agree, 2 Agree, 3 not sure/Neutral, 4 Disagree, and 5 Strongly Disagree on the following statements. The response was then tabulated as below.

Table 5 Financial Information Asymmetry

Statement	Strongly Agree	Agree Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation	Variance
	1	2	3	4	5	M	SD	.V
There is hidden charges on loans.	71%	19%	10%	0%	0%	2.17	1.181	1.395
There are complex application procedures and restrictive rules on specific credit purpose which discourages borrowing.	42%	31%	13%	10%	4%	2.32	1.142	1.305
It is really difficult to comply with credit conditions regarding provision of financial information of the business.	25%	33%	31%	6%	6%	2.00	.864	.746
It is difficult to evaluate cost of credit due to financial information illiteracy/semi-literacy.	29%	48%	19%	2%	2%	2.77	1.047	1.097
Financial information is required in identifying the potential suppliers of credit.	21%	10%	54%	15%	6%	1.03	.181	.033
It is easy to access second and other subsequent loans.	42%	50%	2%	4%	2%	2.37	.920	.846
It is easy to differentiate between risky and safe projects.	27%	25%	44%	2%	2%	1.33	.629	.395

The data shows that over 71% of the respondents agree that financial institutions have hidden charges on loans, there are complex application procedures and restrictive rules on specific credit purpose. Majority (58%) agreed that it is really difficult to meet the conditions of providing financial information regarding businesses. In addition 77% of the respondent agreed it is difficult to evaluate cost of credit due to financial information illiteracy/semi-literacy of the borrowers. Finally over 52% respondents also agree that It easy to access second and other subsequent loans and also its easy differentiate between risky and safe projects.

From the above results, means range from 1.03 to 2.77 as measures of central tendency while standard deviation and variance as measures of variability range from .181 to 1.181 and from .033 to 1.395 respectively. This demonstrates that spread of data set is low i.e indicating that the data points are close to the mean hence the information on financial information asymmetry collected from the sample distribution represents the population.

### ***Accessing Credit***

The respondents expected to indicate either, 1 strongly agree, 2 Agree, 3 not sure/Neutral, 4 Disagree, or 5 Strongly Disagree on the following statements on the access to credit by their businesses.

Table 6 Access to Credit

Statement	Strongly Agree	Agree Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation	Variance
	1	2	3	4	5			
Large enterprises are likely to access credit easily compared to medium and small enterprises.	63%	35%	2%	0%	0%	1.40	.527	.278
Borrowers deemed to be not credit worthy are denied loans completely.	71%	27%	2%	0%	0%	1.33	.510	.260
Lack of awareness on funding opportunities leads to poor credit access by SMEs.	62%	17%	13%	6%	2%	1.73	.936	.877
There is inadequate credit to invest into new business expansion.	40%	17%	25%	8%	10%	2.28	1.277	1.63

From the above results, means range from 1.33 to 2.28 as measures of central tendency while standard deviation and variance as measures of variability range from .510 to 1.277 and from .260 to 1.630 respectively. This demonstrates that spread of data set is low i.e indicating that the data points are close to the mean hence the information on access credit collected from the sample distribution represents the population.

Based on the this data, 89% of the respondents agree that Inadequate or non-existence of collateral has led to poor access of credit, 98% of respondent agreed large enterprises are likely to access credit easily compared to medium and small enterprises and that Borrowers deemed to be not credit worthy are denied loans completely. Majority (79%) also agree that Lack of awareness on funding opportunities leads poor availability of credit to SMEs and over 57% agreed there is inadequate credit to invest into new business expansion.

### Model Summary

In this review, a numerous relapse investigation was done to test the impact among indicator factors. The examination used (SPSS V 21.0) to code, enter and process the estimations of the numerous relapses. The model summary are presented in the table below.

Table 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969 <sup>a</sup>	.938	.934	.247

a. Predictors: (Constant), Financial Information , Collateral Requirement, Cost of Credit, Business Risks

The study findings in the above table gives the summary of the model in which R square (.938) indicate that 93.8% of the variation in the Financial Factors Affecting access to Credit among SMEs in Machakos town Sub-County are due to Financial Information , Collateral Requirement, Cost of Credit, Business Risks, while 6.2% accounts for other variables not in the study. The adjusted R squared (.934) indicate that if population was used rather than a sample then the variation in the Financial Factors Affecting access to Credit among SMEs in Machakos town Sub-County would be 6.6% less. A correlation coefficient R as indicated by .969 shows a strong positive relationship between the variables.

### ANOVA

The study further tested the significance of the model by use of Analysis of Variance (ANOVA) technique. The findings are tabulated in table below. From the ANOVA statistics, the review set up the relapse demonstrate had a significance level(p-value) of 0.000% which means that the

information was perfect for making a conclusion on the populace parameters as the estimation of noteworthiness (p-value) was less than 5%. The calculated value was greater than the critical value ( $208.324 > 2.50$ ) an indication that Financial Information, Collateral Requirement, Cost of Credit and Business Risks have a significant effect on access to credit among SMEs. The significance value was less than 0.05 indicating that the model was significant.

Table 8 Summary of ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.829	4	12.707	208.342	.000 <sup>b</sup>
	Residual	3.355	45	.061		
	Total	54.183	51			

### Coefficients

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	.337	.085		3.965	.000
	Collateral Requirement	-.626	.057	-.906	-11.016	.000
	Cost of Credit	-.102	.090	-.003	-.025	.980
	Business Risks	-.077	.090	-.125	-.858	.395
	Financial Information	.036	.075	-.055	-.486	.629

Critical value=2.50

### Coefficients of Determination

In addition, the study used the coefficient table to determine the study model. The findings in the form of regression model are presented below.

$(Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon)$  becomes:

$$Y = 0.337 + (-0.626X_1) + (-0.102X_2) + (-0.077X_3) + 0.036X_4 + e$$

From the regression model obtained above, a unit increase in collateral requirements would lead to a decrease in access to credit among SMEs by a factor of 0.626; a unit change in cost of credit would inversely affect access to credit by 0.102; a unit increase on business risks would lead to a decrease in access to credit among SMEs by a factor of 0.077 and a unit increase in financial information would lead to an increase in access to credit among SMEs by a factor of 0.036 and vice versa. The analysis was undertaken at 5% significance level. The criteria for

comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and  $\alpha=0.05$ . If the probability value was less than  $\alpha$ , then the predictor variable was significant otherwise it wasn't. All the predictor variables were significant in the model as their probability values were less than  $\alpha=0.05$ .

## CONCLUSION

Financial institutions put emphasis on adequacy, availability and the nature of collateral before advancing credit to SMEs. Therefore, inadequate or non-existence of collateral has led to poor or total denial of credit among SMES. The cost of credit constitutes of transaction cost, processing fees, insurance fees, negotiation fees and interest rate. Since lending to SMEs is deemed risky by financial institutions, this cost is usually high. However the cost depends on the liquidity of the collateral offered and the perceived riskiness of the borrower.

Businesses are faced with various forms of risks and therefore financial institutions use different tools in assessing credit worth of businesses. Some of them are regarded as risky while others are perceived to be safe business ventures. In most instances the risky businesses are denied credit or have limited access to credit whereas the safe businesses have easy access to credit.

There is usually financial information asymmetry between lenders and borrowers of credit. This credit mistrusting and suspicious interaction between lenders and borrowers of money. The SMEs and their businesses are not well understood by financial institutions and vice versa .A lot of time is wasted and unnecessary procedures are undertaken by these parties in trying to understand one another. This situations hampers free flow of credit to SMEs.

## RECOMMENDATIONS

The study recommends that; SME access to credit depends on relationships between Lenders and borrowers, and therefore the financial institutions needs to simplify loan application process to avoid unnecessary expenses. This will encourage more SMEs to apply for loans. Financial institutions should also ensure that loan repayment process is flexible for SMEs. The high cost of credit is one of the greatest hindrance of financial accessibility by SMEs. In light of this study, the government through the ministry of finance should ensure that they set concessional interest rates are adhered to. In addition the government should have credit guarantee scheme. This will ensure that SMEs are not exploited and are able to access loans.

SMEs are usually credit constrained than other segments of the economy because of lack of collateral, cost of credit, business risk and financial information asymmetries. Financial institutions should also consider the processes of loan application and requirements to make

them friendly to this category of businesses. There is need to train the SME's operators on record keeping and also facilitate the information on how and where to access cheap loans other than relying on the main stream financial institutions. The SME operators should also be trained on, basic book keeping, entrepreneur skills, loan investment and servicing. This will impart positively enabling them to operate a viable business and minimize risks. With these measures in place the operators will be able to access more funds to run their businesses.

## FURTHER STUDIES

This research was limited to SME's access to credit focusing on only four factors which the researcher thought they were key for the study. However the same research can be carried on other factors which could be affecting SME's access to credit. In addition other researches can be carried out taking into considerations on the forms of businesses and their credit accessibility.

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