

**RELATIONSHIP BETWEEN LOAN AMOUNT ACCESSED AND GROWTH OF  
SMALL AND MEDIUM SIZE ENTERPRISES IN NAIROBI CITY COUNTY**

**BY**

**DAVID NJUGUNA GITHUKU**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF  
BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF  
NAIROBI**

**2019**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signature.....

Date.....

Name

D61/9845/2018

This research project has been submitted for examinations with my approval as the university supervisor, School of Business, University of Nairobi.

Signed.....

Date.....

Dr. Okiro Kennedy

## **ACKNOWLEDGEMENT**

I thank Almighty God for enabling me to complete my studies, glory and honor to Him.

This research would not have been accomplished without the invaluable guidance of my supervisor, Dr. Kennedy Okiro, who shaped my research, offered me ample time to walk through my work and make it a reality. Special thanks to Dr. Winnie Nyamute for moderation, expertise and direction and whose support I greatly enjoyed. Heartfelt appreciation to Dr Mirie Mwangi, whose advice inspired my work.

I extend sincere appreciation to the numerous SME's that received me and accepted to be my research respondents. This work would not be complete without your valuable response.

## **DEDICATION**

I dedicate this research to my son and my daughter who inspire my toil under the sun

# TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>LIST OF TABLES</b> .....	<b>vii</b>
<b>LIST OF FIGURES</b> .....	<b>viii</b>
<b>ABBREVIATIONS AND ACRONYMS</b> .....	<b>ix</b>
<b>ABSTRACT</b> .....	<b>x</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study.....	1
1.1.1 Total Loan Amount.....	3
1.1.2 Firm Growth.....	3
1.1.3 Loan Amount and Growth .....	4
1.1.4 SME's in Nairobi County .....	5
1.2 Research Problem.....	6
1.3 Research Objective.....	9
1.4 Value of Study.....	9
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>11</b>
2.1 Introduction .....	11
2.2 Theoretical Foundation .....	11
2.2.1 Resource Based Theory .....	11
2.2.2 Loanable Funds Theory .....	12
2.2.3 Information Asymmetry Theory .....	13
2.3 Determinants of Growth.....	15
2.3.1 Loan Amount .....	15
2.3.2 Leadership .....	16
2.3.3 Level of Expertise .....	17
2.3.4 Effectiveness of the Organization .....	17
2.4 Empirical Studies .....	18
2.5 Conceptual Framework .....	23
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b> .....	<b>24</b>
3.1 Introduction .....	24
3.2 Research Design.....	24
3.3 Target Population .....	24
3.4 Sample.....	25
3.4 Data Collection.....	26
<b>3.5 Diagnostic Tests</b> .....	<b>26</b>

3.6 Data Analysis .....	26
<b>CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION.....</b>	<b>28</b>
4.1 Introduction .....	28
4.2 Diagnostic Test.....	28
4.2.1 Normality Test .....	28
4.2.2 Multicollinearity.....	29
4.2.3 Heteroscedasticity .....	30
4.3 Background Information .....	31
4.3.1 Years of Operation .....	31
4.3.2 Education Level .....	32
4.3.3 Source of Starting Capital .....	33
4.4 Loan Amounts .....	33
4.4.1 Credit Facility to Businesses .....	34
4.4.2 Highest Loan Qualification .....	34
4.5 Collateral .....	35
4.6 Interest Rate.....	37
4.6 Education Level.....	38
4.7 Loan Amount on SME Growth .....	39
4.8 Regression Analysis .....	40
4.9 Discussion of the Findings .....	43
<b>CHAPTER FIVE: SUMMARY, CONCLUSION AND</b>	
<b>RECOMMENDATIONS .....</b>	<b>46</b>
5.1 Introduction .....	46
5.2 Summary of Findings .....	46
5.3 Conclusion.....	48
5.4 Recommendations .....	49
5.5 Limitations of the Study .....	49
5.6 Suggestions for Further Research .....	50
<b>REFERENCES .....</b>	<b>51</b>
<b>APPENDICES.....</b>	<b>55</b>
<b>APPENDIX 1: RESEARCH QUESTIONNAIRE.....</b>	<b>55</b>

## LIST OF TABLES

Table 3.1 Sample Size.....	25
Table 4.1: Shapiro-Wilk.....	29
Table 4.2: Normality test.....	29
Table 4.3: Collateral.....	36
Table 4.4: Education Level.....	39
Table 4.5 Loan Amount.....	40
Table 4.6 Model Summary.....	41
Table 4.7: ANOVA.....	42
Table 4.8 Coefficients.....	42

## LIST OF FIGURES

Figure 2.1: Conceptual Framework.....	23
Figure 4.1: Scatter Plot.....	30
Figure 4.2: Years of Operation.....	31
Figure 4.3: Education Level .....	32
Figure 4.4: Starting Capital .....	33
Figure 4.5. Credit Facilities to Businesses .....	34
Figure 4.6: Highest Loan Qualification.....	35



## **ABBREVIATIONS AND ACRONYMS**

<b>GDP</b>	Gross Domestic Product
<b>IR</b>	Interest Rate
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>SD</b>	Standard Deviation
<b>SMEs</b>	Small and Medium Enterprise
<b>SPSS</b>	Statistical Package for Social Sciences

## ABSTRACT

This investigation aimed at establishing the link between the loan amount accessed and the growth of SME's in Nairobi County. The investigation utilized descriptive research design. The target population 30253 SME's in Nairobi, Kenya which was sampled to 395. The type of data needed for this study was primary data, which was sourced using structured questionnaire. Data collected was analyzed with descriptive statistics and inferential statistics. Mean and standard deviation was employed to present the analysis output. Regression analysis was utilized to ascertain the bearing of level of credit on growth of SME's in Nairobi. The outcomes point out that r square was 0.3607 implying that 36.07% of the variation in the growth of SMEs was accounted for by loan amount, collateral, interest rate and education level. The analytical model was substantial as the P value was 0.00 which was less than the (0.05). This infers that the model fit to predict growth of SMEs based on loan amount, collateral, interest rate and education level is statistically substantial. From the regression model obtained the constant value was established at 5.341. This suggests that the value of growth of SMEs when loan amount, collateral, interest rate and education level are held constant is 5.341. Further the model shows that a unit surge in loan amounts would bring about promotion of SMEs growth by a factor of 0.0504 units. A unit in the collateral requested would bring about a decrease in the growth of SMEs by a factor of -0.417. A unit surge in the interest rate would bring about a decrease in the growth of SMEs by -0.887 units while a unit surge in education level would promote the growth of SMEs by 0.0644. The investigation concluded that most of the SMEs had no credit facilities extended to them with also their highest loan qualification being a small amount. This was because for the SMEs to borrow the needed collateral was lofty for them to attain. This deterred borrowing with some SMEs resulting to financing their businesses from sale of assets and savings. The investigation also concluded that lending institutions did charge a high interest rate. This was a major deterrence for SMEs to take out any form of loans from these institutions due to the huge servicing cost of the loan. The investigation also concluded that education level for the SMEs owners and staff was crucial. This is because for proper borrowing to take place their must be easy flow of information between the lender and borrower. Thus, it was determined SMEs should recruit staff that were able to understand and access information on loan. The investigation suggests that financial lending establishments like banks out to reassess their collateral requirements. This should be done to help make credit provision more accessible to the SMEs. In turn this would eventually stimulate their growth. The investigation similarly proposes that the government to ascertain strategies that will allow MF lending to SMEs. These strategies ought to specifically target policies on interest rate charged by financial institutions. Setting up fair rates would encourage SMEs to borrow and expand their businesses. The study further recommended that SMEs should hire staff with a substantial amount of education level. Equipped with such staff members SMEs will be able to gather the correct information on credit advanced by the various lending institutions. Further, these staff will be able to advice on best financial administration practices.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Any entrepreneur who has started any form of business has a dream of seeing their enterprise expand in its growth. Various measures can make a company grow, such as the introduction of new products, developing new skills, venturing into new markets and partnering with other companies. E. Asiedu et al. (2013) outline four major determinants of firm growth. Among them include; the location of the business enterprise, the management, and structure of the business, personal and behavioral traits of the overall leader, as well as external factors. Coad, Segarra, and Teruel (2016) further identify external factors like social, political and economic conditions of the geographic region within which the business functions. However, Canton et al. (2013), Quartey et al (2017), as well as, Ferrando and Mulier (2013) emphasize credit as determinant of small and medium size enterprises (SMEs) growth. Their work suggests that loan amount causes firm growth not only by granting the financial assistance required in buying inputs, but also providing the necessary capital for financing activities; consequently enabling enterprises to increase their production.

The investigation will be hinged on three paradigms that are significant to the concept of growth of small enterprises. First, Conventional Theory of Financial Deepening established by Shaw (1973) stresses the significance of loan access to the growth and expansions of small business enterprises. The theory views financial deepening as a means of facilitating access to credit facilities that provide much-needed funds by SMEs to expand their operations (Grassa and Gazdar, 2014). Second, the Endogenous Growth Theory that was

first proposed by Robinson (1952) links the growth of the economy to other macroeconomic factors such as the rate of interest as well as inflation. The theory regards financial deepening; in terms of opening access for small business enterprises to credit facilities, as a significant factor for stable growth of the economy (Laeven, Levine, and Michalopoulos, 2015). Third, the Openness Theory of Financial Deepening proposed by Levine and Renelt (1992) regards improved candidness for business expansion as a perception promoting the development of the financial market. This openness cumulatively diversify risks related to financial development and subsequently equip firms with the ability not only to triumph over temporary problems related to cash flow but also overcome adverse shocks (Fischer & Valenzuela, 2013).

Presently in Kenya, SMEs are commonly called the "Juakalis" stand out as a major component of the economy. This sector undoubtedly contributes majorly to the economy of the country as it not only holds numerous employments but also introduces innovations, generates income, as well as motivates competition. Despite the prominent significance of the SMEs in Kenya, the survival of these enterprises is threatened by numerous challenges posed by the rapidly increasing high competitive business environment. According to Ferrando and Mulier (2013), the growth of organizations positively reflects its ability to survive and to create new job opportunities. Similarly, growing firms are believed to increase their demands in other sectors; thus, contributing positively to a region's economic growth. This investigation sought to ascertain the bearing of credit amount accessed to the growth and expansion of SMEs.

### **1.1.1 Total Loan Amount**

Although there is no concrete definition of loan accessed, Asiedu et al. (2013) regard it as the level of lending an establishment is able to get compared to its financial need. Canton et al. (2013) view it as the level of a firm's legibility to a credit facility it requires. Moreover, Ferrando and Mulier (2013) explain it as the ability of a business organization to acquire the loan it requires based on its internal characteristics and its level of return.

According to Ferrando and Mulier (2013), state that loan amount is the total credit facility issued to customer. It is measured in monetary terms and it comprises principle plus interest paid over specified period of time. The loan amount is categorised as long-term credit (LTC) and short-term credit (STC). This appears in the financial statement of microfinance (Abayo & Oloko, 2017).

### **1.1.2 Firm Growth**

Firm growth is the expansion of a business enterprise at a faster rate than other similar organization in the same industry (Gupta, Guha, and Krishnaswami, 2013). Coad, Segarra, and Teruel (2016) regard it as the spreading out of boundaries of the operation of an establishment as well as that of the output that goes to the market. Audretsch, Coad, and Segarra (2014) defined it as the expansion of the products and services offered and might include the provision of new services. In this sense, firm growth becomes the expansion of the collective service provision.

As per Audretsch, Coad, and Segarra (2014), the measures that can be used to measure firm growth include the institutions sales turnover, staff number, number of outlets as well as total assets. Sales revenue can be illustrated in form of total units sold over a particular period or the value of sales in shillings over a particular period (Wang, 2016). With regard to staff, the growth will be looked at as per the number of as per a particular period. Branches are quantified as per the number over a particular region and period. The region usually covers a country. Total assets is quantified in monetary terms, by getting the sum of all the economic resources owned by an organisation (Gupta, Guha, & Krishnaswami, 2013).

### **1.1.3 Loan Amount and Growth**

An organization's accessibility to credit facilities promotes their ability to expand their operations beyond their present states. It is also apparent that the type of loan facilities an organization can access determines the speed at which it can expand. Scholars such as Asiedu et al. (2013) observed subsidized loan facilities to be more effective in promoting the growth of small firms compared to non-subsidized credits. Similarly, Ferrando and Mulier (2013) noted long-term loan facilities were more effective at promoting growth as compared to the short term loan facilities. Similarly, it is noticeable that the amount of credit facility an organization can access determines its ability and rate of growth. Fafchamps and Schündeln (2013) observe that although small enterprises pursue loan facilities, they tend to not qualify due to their inability to meet the required minimums; such as the stated amount of assets and productivity.

The survey undertaken by Kuntchev et al (2013) on the effects of channeling credit to SMEs established that the growth of organizations which had financially constrained was negatively affected. The study revealed a firm with less financial issues to expand faster than those who experienced difficulties in accessing credit facilities. Quartey et al (2017) on the bearing of financial availability to the SMEs growth established financial availability as an important aspect for the growth of business institutions; consequently pushing for the implementation of initiatives to avail more funds to the African local firms. Wang (2016) study on firm growth obstacles in developing countries examined whether increased levels of pro-longed provision of credit facility to small business organization increased their probability of growth. The study compiled data for over two-thousand business organizations across the world and found long-term credit to be more effective in promoting growth compared to short-term loan facilities.

#### **1.1.4 SMEs in Nairobi County**

According to a recent survey Kamunge, Njeru and Tirimba (2014) micro business enterprises, medium and small business enterprises made up about 90 percent of employment prospects in Kenya each year. Similarly, the SMEs sector generated about 60 percent of the gross GDP. According to the report, the new job creation by the SMEs went up by over 5 percent in 2012; consequently, representing a larger growth of the Juakali industry compared to the previous year. Further analysis showed that Nairobi leads the country's growth increase, as it had a 5.4 percent increase.

However, the small business sector in Kenya is highly unsustainable, as it is characterized not only characterized by rampant closures but also contains numerous shrinkages. Although the government has tried to put in place various initiatives to help the small-sized business sector, such businesses still are limited in their ability to sustain themselves for periods longer than three years. As a result of the lack of sustainability, the sector remains the number one cause of high rates of asset and employment losses. However, the sector still stands out as having a lot of potential in increasing the employment opportunities and the overall growth of the economy. Studies such as Musamali and Tarus (2013) and Kisaka and Mwewa (2014) suggests that proper financing of the small-sized enterprises can significantly assist not only the growth of the small and medium-sized business organization but also that of micro-enterprises.

## **1.2 Research Problem**

An increase of financial gap has been noted over the years. Lack of capital has made the SMEs stagnate, as they are unlikely to obtain bank lending contrary to huge companies (Sholevar & Harris, 2019). The significant of small and medium business enterprises cannot be overlooked across the world. Their contribution to social, political as well as economic development of countries is overwhelming. These businesses are particularly important as they can sell their commodities and services at relatively affordable prices, create income to the local people, as well as employ a great percentage of the population which would have otherwise be termed as jobless. Through these studies, it has become apparent that factors such as leadership behaviors and characteristics, external economic factors, and location among various aspects that imping on the growth of the small



business. Similarly, access to loan facilities determines the ability of a small business enterprise to access the much-needed funds for the expansion of its operations.

Similarly, in Kenya, the impact of SMEs should not be overlooked. The sector is the sole source of income to a majority of the population (Njeru, & Tirimba, 2014). The situation has led to increase interest by the government and various relevant parties on ways of enhancing the growth and the success of these enterprises. Since 2000, the government of Kenya has demonstrated efforts to revise the financial system initiating several efforts to deepen the financial market of the country (Musamali and Tarus, 2013). Kisaka and Mwewa (2014) note that despite the effort, the capital market continues to be shallow. Moreover, the country's bonds market is still under matured as it continues to attract government bonds rather than corporate bonds. Consequently, investors continue to depend on banks for credit facility; yet the commercial banks only avail short term loans (Njeru & Tirimba, 2014) financial deepening enhances the role of commercial banks, as it not avails finances to investors, but also attracts resources from outside the country.

Canton et al. (2013) study on the perception credit constraints in financing SMEs that assessed European countries observed financial deepening to have encouraged the establishment of new firms that entirely depended on external funds. Fafchamps and Schündeln (2013) on the financial improvement and the success of small establishments in Morocco found the rate of innovation to accelerate with financial deepening, consequently opening improving the quality of products and services at a higher rate. Carbo- Valverde, Rodriguez- Fernandez, and Udell (2016) study on Trade loans, monetary crisis, and small

establishment's access to funds done in San Francisco confirmed the significance of access to credit facilities. According to the work, the presence of additional subsidized loan facilities leads to a significant increase in returns compared to adding more of non-subsidized credit. The work identified non-subsidized credits as not efficient in alleviating financial restrictions encountered by the SMEs. Moreover, Saporito, Elam, and Brush, (2013) study on the relationship between small firms and credit facilities from commercial banks, as well as the perceptions surrounding the relationships done in the United States, found small sized business enterprises to become less productive after they were regarded as eligible for subsidized credits, although they could still access credit facilities elsewhere.

Despite the significance of the SMEs in Kenya, a study was done by Musamali and Tarus (2013) on firm profile and financial access indicated that more than half of businesses formed within the country are closed three years from their establishment. Gichuki, Njeru, and Tirimba (2014) on restrictions encountered by the SMEs in getting loans in the Kangemi Harambee market observed that failures of small business enterprises lead to subsequent loss of employments that are accompanied by increasing levels of insecurity, as well as the reduction in the economy's growth rate. Kisaka and Mwewa (2014) on the impacts of micro-credit as well as training and savings on the growth of SMEs in Machakos ascertained a strong link between the provision of subsidized credit facilities and the strengthening of economic capital as well as the ultimate growth of the economy. Ochanda (2014) investigation on the impacts of financial deepening on the expansion of the Kenyan SMEs is the only investigation that has concentrated specifically on the link between loan obtainability and firm growth in Kenya. Although the study found a positive link between

loan obtainability and the growth of SMEs, it was conducted in 2014. Therefore, there was a need for more and up-to-date research findings on this relationship to form a strong basis that would compel relevant stakeholders to push for necessary changes that would support positive financial deepening. The study would fill the gaps by providing the much needed empirical findings on this area by answering the question; what was the link between the level of credit and the SME's growth in Nairobi County?

### **1.3 Research Objective**

The investigation aimed to ascertain the link between the loan amount accessed and the growth of SME's in Nairobi County.

### **1.4 Value of Study**

The investigation would to educate entrepreneurs on the importance of loan facilities to the growth and expansion of SMEs. Similarly, the study would help them to distinguish between subsidized and non-subsidized loan facilities; consequently, making them aware of the positive and negative impacts of the two kinds of credits, and supporting the momentum towards the provision of subsidized credits.

The investigation would offer relevant government organisations and interested parties with up-to-date research findings on the importance of providing loan access to upcoming entrepreneurs. Consequently, they would challenge to put up more efficient structures and mechanisms that would allow for both financial deepening and the provision of subsidized credit.

Moreover, the investigation would augment the field of knowledge by providing recent research finding on the relationship between loan and growth. As a result, it would reinforce the already existing theories and practices on this relationship. Similarly, it would function as a resource material for future scholars and researcher who would want to conduct more studies in this area.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This section contained the review of works relevant to this investigation. It further contained the theories that included the Resource Based theory and Loanable Funds that informed the study. Determinants of Growth and a conceptual model were also discussed.

### **2.2 Theoretical Foundation**

The concept of credit accessibility has been explained by a number of theories in the field of finance. From the argument of the proponents of these theories, Loan obtainability has a direct relationship with firm growth. Some of the theories that provide the basis of this study include Resource Based theory and Loanable Funds paradigm.

#### **2.2.1 Resource Based Theory**

As per the paradigm business performance is brought about by the resources available to ascertainment. Advocates of the paradigm postulate that establishments with better resources will possibly outperform those having fewer resources available to them (Acar & Polin, 2015). The fact that organisation can take advantage of their resources to have a better competitive edge.

This paradigm is pertinent to the investigation as it explained how loan issued by MFI's is might lead to growth of a firm. The core business of MFI's is to issue credit and provide deposit facilities. Businesses and firms have in the past relied on the traditional financing mechanism which appeared not to have worked for them. Ahmed (2002) argued that the

reason for over reliance to traditional funding by SMEs resulted from lack of exchange and understanding of existing information that there is between lenders and borrowers. Financial organisations have information about credit worthiness and hedge against potential losses while on the other hand borrowers lack such kind of information.

Resource Based Theory explained that competitive advantage of a firm hinges on internal resources (Kraaijenbrink, Spender & Groen, 2012). According to this theory, SMEs lack of access to finances contributes to their failure since other firms with better resources have competitive advantage. In addition, SMEs without proper resources would fail to satisfy both staff and their customers since they would lack the advantage of better resources.

### **2.2.2 Loanable Funds Theory**

As per this paradigm, the supply of loanable fund comes from a person wants to save funds similarly known as lenders whereas the demand emanates from individuals who need to invest similarly called borrowers. The obtainability of these loanable funds is subject to the interest rate (IR) charged by lenders and if the borrowers is able to afford the funds at the similar IR.

The theory was relevant to the study as it explains why MFI's provide deposit facilities for savers, which in turn they loan out and is repaid with an interest. The interest becomes the interest income which leads to growth of the firm. The surge in IR result in decrease in loanable funds demand when all other aspects are constant. Gynlelberg and Johansson (2007) contend that decrease in small IR impinges positively on supply and demand (S&D)

of credit. There was adverse linear link between IR and borrowing. The LFT is connected accessibility to loans as it is associated with the IR payable.

The Loanable Funds theory has been criticized on several counts with one of the criticisms being that the traditional statement of the theory does not specify the source and demand of the loanable funds (Gupta, 1974). Gupta, 1974 noted that not all the savings are available in the market for borrowing such as invested through assets and some people hoard cash in their houses.

### **2.2.3 Information Asymmetry Theory**

The information asymmetry theory was propounded by Joseph Stiglitz, George Akerlof and Michael Spence in 1970. The theory seeks to identify the challenges derived in the financial markets on issues relating to lending and borrowing of funds. According to Matagu (2018), the theory postulates that whenever two parties are making transactions decisions, the situation that arises is that one party has more information than the other. The theory is relevant to the investigation since it explains how a bank can make profits or losses because of information asymmetry. In this context, the asymmetry in information leads to power imbalance with regards to information between the two parties. Osan and Languitone (2016) posit that in this situation the party likely to get more information are the borrowers rather than lenders in addition they cite that the information concerning risks during borrowing are more likely to reside with borrowers more than lenders. Further these results to moral hazards especially in the event of assumption of the final risk costs and

remains a challenge. This inefficiency as a result of imperfect information causes a hitch in the flow of funds and the transfer from the lenders to those borrowing.

The theory was relevant in the context of the investigation as it applies to situations where SMEs as credit borrowers are of a better advantage since they know more about project risks and the benefits in comparison to the financial establishments they are borrowing from. Huang et al., (2014) notes that as a reaction to most financial establishments prefer to increase their lending rates in a bid to reduce risks from potential credit losses. The moral hazards that arise from borrowing loans is related to pay back loans and the fact that most lending institutions don't have control over what borrowers use the borrowed money for and the period in which they would pay back the money. Loan defaulters make banks and other financial establishments to incur losses through bad debts which take a toll on their business and therefore most banks engage the credit rationing policy which works against most SMEs by exacerbating their financial difficulties (Karimi, 2014).

Critiques of the information asymmetry theory highlight that in real market, most banks can obtain the information they need and have access or control of the actions of borrowers. The ease of prediction of borrowing behavior by banks has created a level playing field and therefore banks have acquired experience in that regard. According to Ross (2018) Information brokerage by third parties has similarly placed financial establishments at an undue advantage since the model supports the exchange of information between two parties whereas the chances are that the information can be obtained by third parties. As a modification to the theory, SMEs require a strong internal governance system while the



financial establishments related to credit borrowing need to enhance their standardization measures by ensuring that they incur low costs when transacting business with the SMEs.

### **2.3 Determinants of Growth**

Firm growth is an increase of links and roles of an organization. It is essential in helping businesses withstand market fluctuations, greater profits, increased power, and efficiencies from economies of scale and increases the survival rate (Plugge et al., 2016). Firm growth determines the sustainability of a company. There are certain factors that an organization ought to pay attention to such as credit level, leadership, level of expertise and staff, as they are critical for organizational growth.

#### **2.3.1 Loan Amount**

Having a higher credit level represents better credit decisions, and creditors can get convinced that one will be able to pay the future debts (Ellingsen et al, 2016). Lenders such as banks use credit scores when giving out a credit card, loans and car dealership to companies.

The credit level of a company is essential as it helps lenders determine how likely one can repay the loan on time. They are similarly known as risk scores as they help in the assessment of the inability to repay the debt. Credit level is essential in the growth of an organization (Abayo & Oloko, 2017). Having good credit determines if one qualifies for a loan which helps one in getting the services that they want. Credit level ought to be a financial goal as it portrays the picture of the organization. Right credit level means better

terms of the loan, which is used to promote the growth of the organization. The factors that influence the credit level include total debt, credit utilization rate, loan payment history, public records and number of credit accounts.

### **2.3.2 Leadership**

Leadership is a variable that aids the organization to sustain a competitive advantage. Appropriate leadership style influences the economic growth of both the staff and organization, thus determining the success of the firm (Moe, 2016). Leadership entails striking a balance between the goals of the organization and the development needs of an organization. It helps in the formulation and implementation of strategies that make the company productive. The professional development of an employee ought to align with the goals of the company so that it may bring about the growth of the organization as well as its success.

Employing the right leadership in an organization determines its growth. It gives self-motivation to the staff, making it possible to retain the performing staff, thus contributing to organizational growth. Staff ought to be treated as assets and involved in the system. Having leadership with a clear vision refers to taking essential decisions concerning the growth of the organization and the staff (Stough, 2019). It encourages the staff to actively support the organizational goals as they have information on the employer plans. It makes them feel valued as an integral part of the firm, which in turn increases their production rate. Proper leadership leads to committed staff which steers organizational growth by improving financial performance, productivity and the happiness of the staff.

### **2.3.3 Level of Expertise**

Knowledge is the most excellent resource that an organization can have. Processing the understanding leads to expert power whereby different individuals know different sectors of the organization. The experts are needed in solving the problems when need arise. They are used as points of reference by other staff who maximize their potential to promote productivity in the organization (Hollenbeck & Jamieson, 2015). Having the expertise power in the organization helps in building the reputation of the company as it gains a competitive advantage over its rivals. The level of expertise determines the decision-making process as they are essential in performing critical tasks in a firm.

The expert power affects the growth of an organization. An expert power portrays the image of the organization. It helps maintain the credibility of the organization as well as supporting the actions of the organization (Bryson, 2018). Having a high expert power gives confidentiality in making decisions in case a crisis occurs or in the daily operations, thus promoting the growth of the organization.

### **2.3.4 Effectiveness of the Organization**

It refers to the effectiveness of an organization to develop and change the assessment. It's determined by human resources tools, scientific tools and the processes of the organization. A good working link in an organization helps in fostering a long-term perspective of the firm (Cameron, 2015). An efficient plan of the organization can be developed by constructing a proper communication system, providing training to the staff and understanding the change initiatives to deliver the best results in the company.

Effectiveness of the organization determines the organization growth. The effectiveness works at making sure that the goals of the organization are met. It has a direct impact on organizational growth, as the factors for promoting effectiveness are the elements that incorporate growth (Olkiewicz, 2018). Efficiency fosters a culture of purposes that develops a positive bearing on the clients and stakeholders. The organization ought to be competent in processes to work towards meeting the goals and curbing the roadblocks.

#### **2.4 Empirical Studies**

An investigation by Hamza and Zulfiqar (2011) on how born global SMEs overcome the challenges that they faced. It is based in Pakistan with the primary objective being finding ways of overcoming problems encountered by SMEs. The information was gathered from international entrepreneurship disciplines with two primary research conducted in Pakistan and the other two in Sweden. It is qualitative research. The investigation found out that both internal and external challenges are faced in business. Despite the problems, global SMEs can overcome them by building competency alliances and networks with international partners. The born global SMEs can overcome the challenges by establishing the level of credit to get funds which are later used in curbing the problems. This investigation provides a conceptual gap since it focused on challenges facing SME's while this investigation is looking at loan amount and firm growth.

An investigation was conducted on OECD (June, 2015b) on how to enhance the significance of SMEs in a digitalized and global economy. It is qualitative and quantitative whereby it uses data presented by OECD Council at ministerial level on that day. SMEs is

claimed to have played a role in national economies around the globe, adding to innovation, value-added and creation of employment. The high levels of tax, inefficient business regimes which limit business dynamism and, access to external finance makes the SMEs lag behind. Both external and internal factors ought to be employed in promoting SME benefits. The internal factors of promoting SME benefits include: building higher credit levels for each organization to access more senior loans. They are later used in investments and innovation, thus improving the growth of the SME. This investigation provides a conceptual gap since it focused on contributions of SME's while this investigation is looking at loan amount and firm growth.

An investigation was conducted by the World Bank in Africa and Asia in 2016 on SMEs finance. It is a qualitative investigation that reviews the SMEs data for the past 15years. The data is analyzed and coded using graphs, tables and diagrams. The investigation states that access to finance is a constraint that has hindered their growth. SMEs seem to depend on friends, family and internal funds for capital to run and launch their enterprises. The financing gap is growing big and can be reduced by encouraging the SMEs to improve their levels of credit as it will allow them to borrow more cash which is later used for innovation and running of the business that promoting the growth of the firm. This investigation provides a conceptual gap since it focused on challenges facing SME's growth while this investigation is looking at loan amount and firm growth.

An investigation was conducted by OECD (2015a), on fostering greater SME participation in a globally integrated economy on 22-23 February in 2018 during the SME Ministerial conference. Its background was based on the conference based in Mexico, which is set as a basis for discussion and reflection. The data is qualitative and quantitative, whereby graphs and charts are used to represent the data. It found out that having stronger anticipation of the SME created an opportunity for scaling up, broadening the skills, accelerating innovation and enhancing productivity. The SMEs accounts for a small exports proportion in the OECD economies (OECD-WB, 2015). The SMEs ought to strive to have a share in the exports in international trade. This investigation provides a conceptual gap since it focused on SME's participation globally while this investigation is looking at loan amount and firm growth.

Nyagah (2013) conducted a investigation in Industrial area, Nairobi County on the financial constraints hindering the growth of SMEs in Kenya. It seeks to determine the economic factors preventing the growth of SMEs in the country. 100 of the 50, 000 licensed SMEs in Kenya was used as the sample size. It is a quantitative research that collected data by the use of questionnaires and later analyzed it using SPSS. The outcomes state that laws and regulation, competition from other SMEs and entrepreneurial influences affects the growth of SME in Kenya. Credit levels are increasingly becoming famous in terms of wealth creation, employment and innovation. Having excellent credit levels can help organizations to curb the factors that hinder the growth of SME. This investigation provides a conceptual gap since it focused on challenges facing SME growth in Kenya while this investigation is looking

at loan amount and firm growth. Contextual growth is present since Nyagah (2013) focused on SME's rather than MFI's.

A research was conducted by Kamunge, Njeru and Tirimba (2014) on factors affecting the performance of small and micro enterprises in Limuru Town Market of Kiambu County, Kenya. It is descriptive research that aims to find the factors affecting the SMEs performance in Limuru. It uses questionnaires to collect data from two hundred and seventy-four sample size. The data was collected, coded and analyzed both qualitatively and quantitatively by the use of SPSS. The investigation found out that the availability of management experience and access to finances affected the business operations in Limuru. There were other factors found to affect businesses in Limuru such as the government policy, access to infrastructure and limited business operations. The business operators ought to be informed on how to increase the level of credit, which would, in turn, promotes the growth of small and micro-enterprises. This investigation provides a conceptual gap since it focused on factors affecting the performance of SME's in Kenya while this investigation is looking at loan amount and firm growth. Contextual growth is present since Kamunge, Njeru and Tirimba (2014) focused on SME's rather than MFI's.

Kisaka and Mwewa (2014) on the impacts of micro-credit as well as training and savings on the growth of SMEs in Machakos found a strong link between the provision of subsidized credit facilities and the strengthening of economic capital as well as the ultimate growth of the economy. The main objective of the research is finding factors that constrain the growth of SMEs. It uses descriptive design with 54 garages as the sample size.

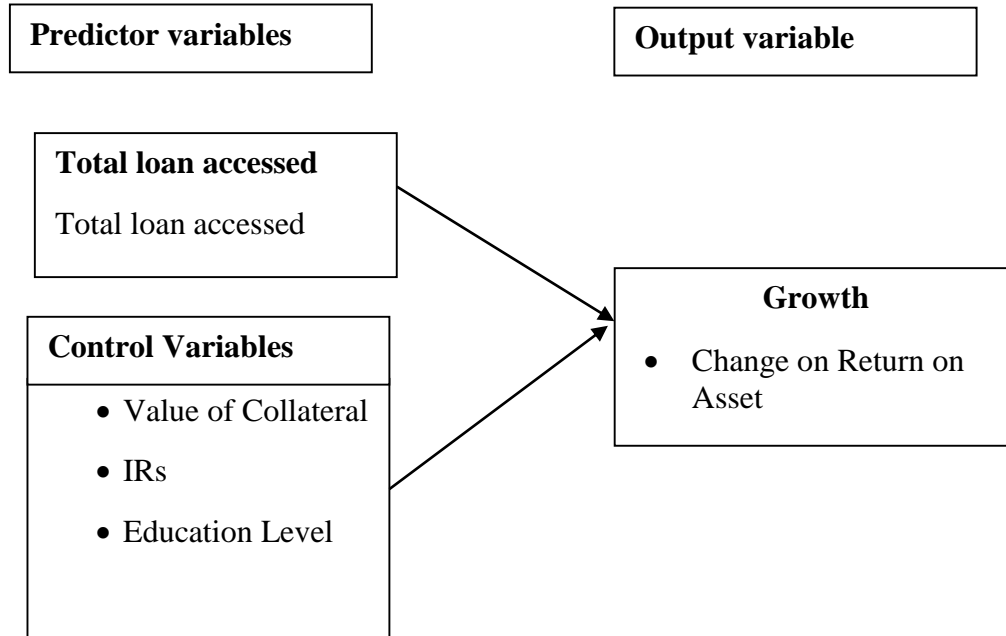
Questionnaires were in collecting the data from the sample size. The data was analyzed using SPSS and Ms Excel. The investigation found out that inadequate technology, utility bills, cost of raw materials, and collateral for loans, insufficient technology and loan transaction costs as factors that slowed down the growth of SMEs. The growth of SMEs can be achieved by increasing the level of credit for the companies, which will allow them to borrow more money used for investment. This investigation provides a conceptual gap since it focused on impact of micro-credit on SME growth in Kenya while this investigation is looking at loan amount and firm growth. Contextual growth is present since Kisaka and Mwewa (2014) focused on SME's rather than MFI's.

Hussein (2017) researched the link between credit accessibility and growth of SMEs. The purpose of the investigation was to find the existing link between the growth of SMEs and credit accessibility in Langata constituency. It is a descriptive design that relied on pecking order theory and flawed information theory. 500 registered SMEs were used as the sample size as the target population. The primary tool for data collection was questionnaires. The research adopted descriptive statistics to analyze the quantitative data. The investigation found out that there is a positive link towards the growth of SMEs. The education level of the manager determined the chances of growing the business. There is a recommendation of policies to be put in place to necessitate credit facilities to the SMEs. This investigation provides a conceptual gap since it focused on link between credit accessibility and growth of SMEs, while this investigation is looking at loan amount and firm growth.



## 2.5 Conceptual Framework

The link between the predictor variable and the output variable was diagrammatically illustrated in Figure 2.1. The predictor variable was represented by loan amount while the output variable is represented by growth.



**Figure 2.1: Conceptual Framework**

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presented the methodology, which was used to carry out the investigation. It further described the type design adopted, source of data, target population, data collection and analysis.

### **3.2 Research Design**

Mugenda and Mugenda (1999) defined research design as the technique used by the researcher in solving the research problem. The research design adopted often enables the researcher to make prior plans on how they are going to solve the problem. The following investigation will adopt descriptive research design. This investigation used descriptive research. Descriptive research as stipulated by Creswell (2013) is used when information is collected to describe persons, organizational settings or phenomenon. It constitutes the blue print for the collection, measurement and analysis of data (Kothari, 2014).

### **3.3 Target Population**

The target population is the total group of individuals or cases from which the sample investigation will be drawn from and to which the researcher generalized his investigation after data analysis. Creswell (2013) defined population investigation as a group of individuals or objects that are selected by the researcher which are related to the investigation topic. The investigation population was all the SME's in Nairobi, Kenya. Nairobi as a county consists of 30253 SME's (Company's Registrar, 2018).

### 3.4 Sample

To determine the sample, the researcher employed Slovin's formula:

$$n = \frac{N}{1 + Ne^2}$$

Where; n=sample size

N= Estimated population i.e.30253

e=Error tolerance. The investigation confidence level was be 95% which gave a margin error of 0.05

The sample size is calculated as follows;

$$n = \frac{30253}{1 + 30253 * 0.05^2}$$

$$n = \frac{30253}{76.6325} \quad n = 395$$

In order to reduce bias in selection process, the investigation adopted systematic sampling approach. Systematically sampling the greater population prior to applying random sampling techniques helped guarantee a sample that precisely reflects the entire population being investigated based on the criteria applied in stratification.

**Table 3.1 Sample Size**

<b>Sub County</b>	<b>Target Population</b>	<b>Proportion (%)</b>	<b>Sample Size</b>
Kasarani	2978	<b>9.8</b>	<b>9.8% *395 = 39</b>
Kamukunji	5277	<b>17.4</b>	<b>17.4%*395 = 69</b>
Makadara	3782	<b>12.5</b>	<b>=49</b>
Embakasi	3892	<b>12.7</b>	<b>50</b>
Njiru	2807	<b>9.3</b>	<b>37</b>
Dagoreti	3805	<b>12.6</b>	<b>50</b>
Langáta	4013	<b>13.3</b>	<b>52</b>
Westlands	3699	<b>12.4</b>	<b>49</b>
<b>Total</b>	<b><u>30253</u></b>	<b>100</b>	<b><u>395</u></b>

### **3.4 Data Collection**

The type of data needed for this investigation was primary data, which was collected by use of structured questionnaire. The questionnaire had two sections. Section A captured the respondent's background. Section B gave information on Loan amount; Section B: Collateral, Section C: IR, Section D: the bearing of level of credit on growth of SME's. Data was gathered from finance officer of each SME or an equivalent.

### **3.5 Diagnostic Tests**

The information collected underwent diagnostic test. This ensured that the outcome is valid. The tests to carry out include normality tests, multicollinearity, and heteroscedasticity. Normality test is directed to test data portrays normal distribution. When data is not normally distributed, it may not show the right association between the variables under investigation. The investigation utilized Shapiro-Wilk test to normality. The test is most proper for example 50 or below. Data distribution is normal as per Shapiro-Wilk test if its value is above the P-Value at 0.05.

### **3.6 Data Analysis**

Data collected was analyzed through descriptive statistics and inferential statistics. Mean and SD was used to present the analysis output. Regression analysis was used to ascertain the bearing of level of credit on growth of SME's in Nairobi.

Multiple regression model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Whereby:  $\beta_0$  the regression intercept;  $\beta_1$ - $\beta_4$  are the regression coefficients;

The following factors were measured by a five point likert scale.

Y was the output variable (Growth measured by change in return on assets)

$X_1$  = Loan amount accessed;

$X_2$  = Collateral;

$X_3$  = IRs;

$X_4$  = Education Level;

$\varepsilon$  = Error term

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS**

### **4.1 Introduction**

This investigation was carried out to analyze the link between loan amount accessed and growth of SMEs in Nairobi County. This part looked at data analysis, interpretation, and presentation by presenting a discussion of the diagnostics tests, descriptive statistics, regression analysis and discussion of the outcomes.

### **4.2 Diagnostic Test**

The information collected underwent diagnostic test. This ensured that the outcome is valid. The tests to carry out include normality tests, multicollinearity, and heteroscedasticity.

#### **4.2.1 Normality Test**

A normality test is adopted to ascertain whether sample data has been determined from a population with normal distribution. For the investigation the Shapiro-Wilk normality test was employed. To check for normality this test compares the variances of data points within a sample to see whether they come from a population with normal distribution. The test is ideal in instances in which the sample size is not too large and the data set is not duplicated.

To examine whether the data from the sample was normally distributed the investigation looked in to the p values of the Shapiro-Wilk test. If the P values of the test is above 0.05 then the data comes from a sample with normal distribution. If the p value is less than 0.05

then the data set does not have a normal distribution. The outcomes of the data are illustrated in table 4.1.

**Table 4.1: Shapiro-Wilk**

	Shapiro-Wilk		
	Statistic	df	Sig.
Loan amount	0.964	275	000
Collateral	0.882	275	000
IRs	0.45	275	000
Education Level	0.967	275	000

**Source: Primary Data, 2019**

From the Table 4.1 it was ascertained that the p values for the data were at 0.00. This value is less than 0.05 which points out that the data set is not have a normal distribution.

#### **4.2.2 Multicollinearity**

The investigation aimed to test multicollinearity via the variance inflation factor (VIF) and Tolerance. In this case the variance inflation factor was used to measure and quantify how much variance is inflated. The outcomes of the analysis are illustrated in table 4.2.

**Table 4.2: Normality test**

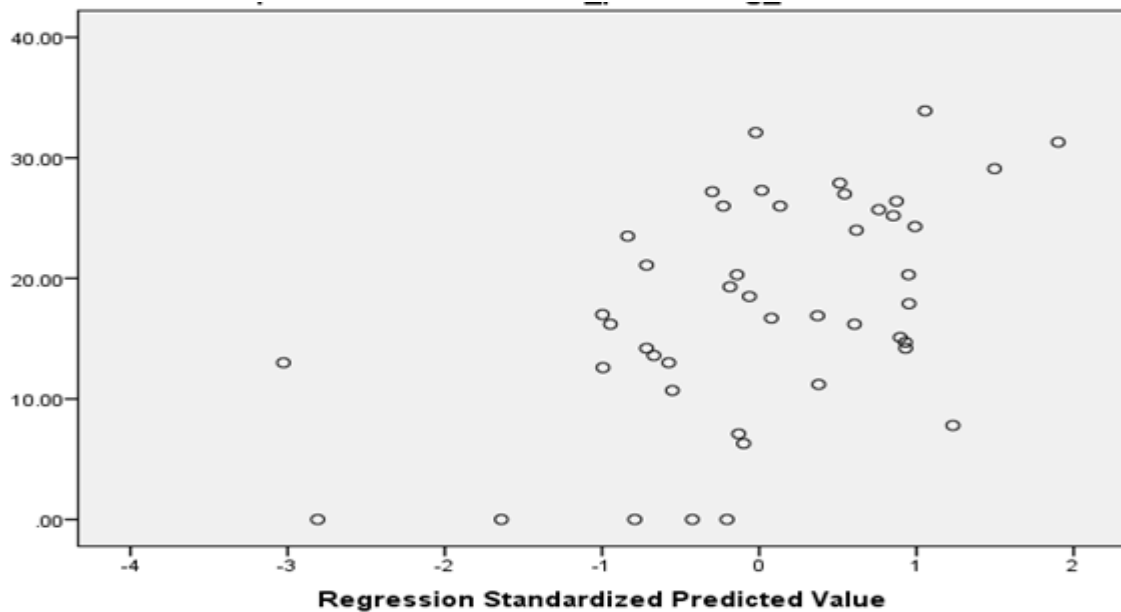
Model	Collinearity Statistics	
	Tolerance	VIF
Collateral	0.913	1.813
IRs	0.606	1.714
Education Level	0.563	1.710

The outcomes of normality test is illustrated in Table 4.2 show that collateral, IRs and education level are moderately correlated since VIF fall between 1 and 5. Tolerance Level <0.10 reflects multicollinearity. As per the tolerance levels, all the independent factors

(collateral, IRs and education level) have no multicollinearity as Tolerance level is above 0.10.

### 4.2.3 Heteroscedasticity

Heteroscedasticity occurs when the standard errors of variable vary widely. Scatter Plot was used to display the data values of the variables. Normal distribution of the variable shows a cone shaped scatter plot, otherwise, data is concentrated on one side of the plot. Dataset distributed on the extreme left or extreme of the scatter plot shows heteroscedasticity.



**Figure 4.1: Scatter Plot**

Results on heteroscedastic test was carried via scatter plot. The scatter plot reveal that the data distribution is heteroscedastic since the data sets are rising towards the right side of the plot.

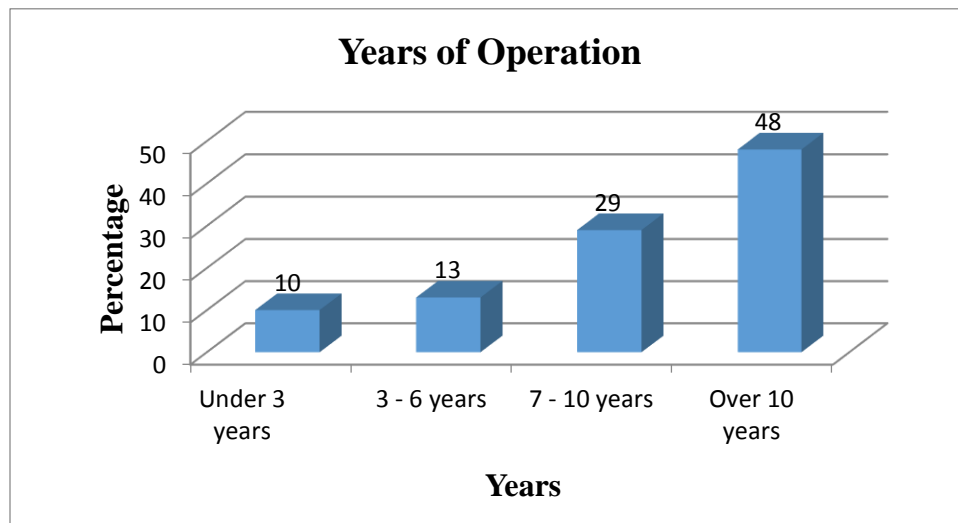


### 4.3 Background Information

The investigation sought various demographical information from the research participants to help them establish the background of the participants. This information was useful for the investigation because it was used to gauge the research participants understanding of the topic and thus validate their credibility of the information provided.

#### 4.3.1 Years of Operation

The investigation aimed to ascertain the number of years that the different SMEs have been operational. Figure 4.2 illustrates the outcomes of the investigation.



**Figure 4.2: Years of Operation**

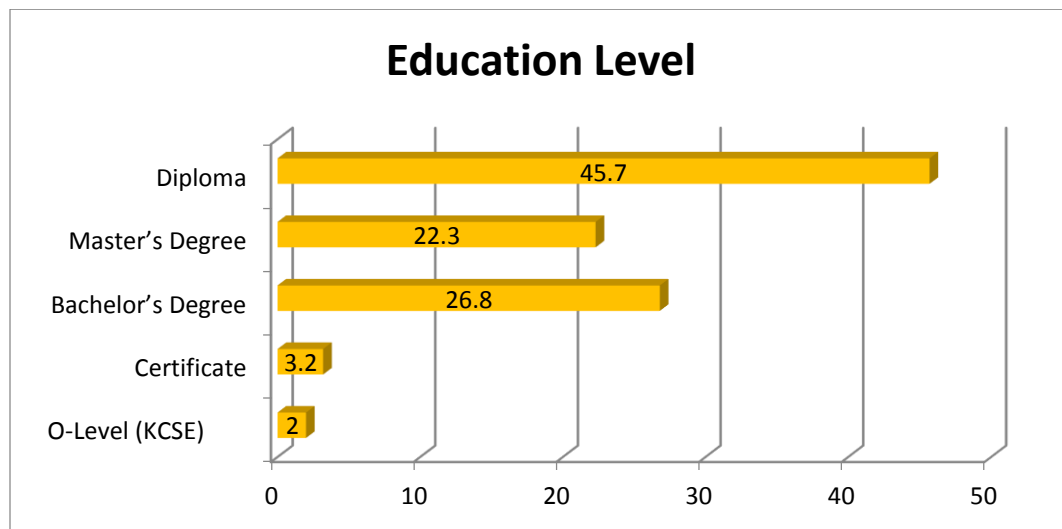
**Source: Primary Data, 2019.**

Figure 4.1 revealed that most of the SMEs had be operational for more than 10 years accounting for 48% of the total SMEs surveyed. 29% of the SMEs had been operational between 7-10 years. 13% of the SMEs had operated for 3 to 6 years while 10% of the SMEs had under three years of the operation.

From these outcomes it was clear that most SMEs had substantially operated for more than 7 years. This is enough time for ant SME to ascertain the link between loan amount accessed and growth of SMEs. Thus, the investigation was pooling information form an experienced lot of SMEs.

### 4.3.2 Education Level

The investigation asked the research participants to state their highest education level attainment. The outcomes from the responses are displayed in figure 4.3.



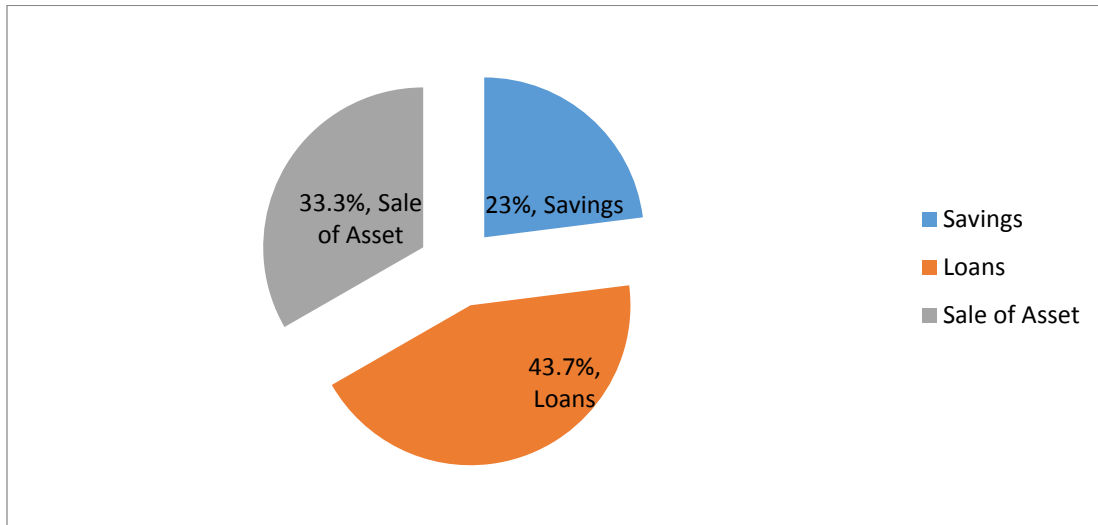
**Figure 4.3: Education Level**

**Source: Primary Data, 2019**

45.7% accounting for the majority number of research participants had a diploma level of education. 26.8% and 22.3% had a bachelor's degree and master's degree as their highest level of education respectively. 3.2% of the research participants had a certificate while only 2% of the research participants had an O-level as their highest educational attainment.

### 4.3.3 Source of Starting Capital

To evaluate the initial source of funding for the businesses, the investigation asked the research participants to indicate whether their starting capital was either form savings, loans or sale of assets. Figure 4.4 presents the outcomes.



**Figure 4.4: Starting Capital**

**Source: Primary Data, 2019.**

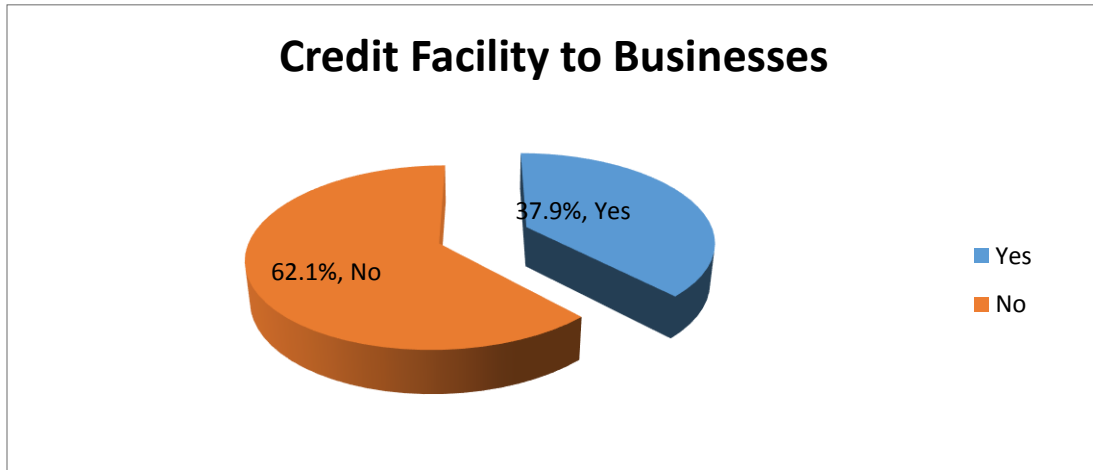
From the figure 4.3 it can be deduced that 43.7% of the research participants started off from loans as their initial source of capital. 33.3% of the research participants' acknowledged that they sold assets to get their initial capital while 23% started off their businesses from their savings.

### 4.4 Loan Amounts

To gain insight on information on loan amounts the investigation sought information of credit facility and highest loan qualification extended to the businesses.

#### 4.4.1 Credit Facility to Businesses

The investigation aimed to find out if research participants got credit facility extended to their businesses. Outcomes of the investigation are illustrated in figure 4.4.



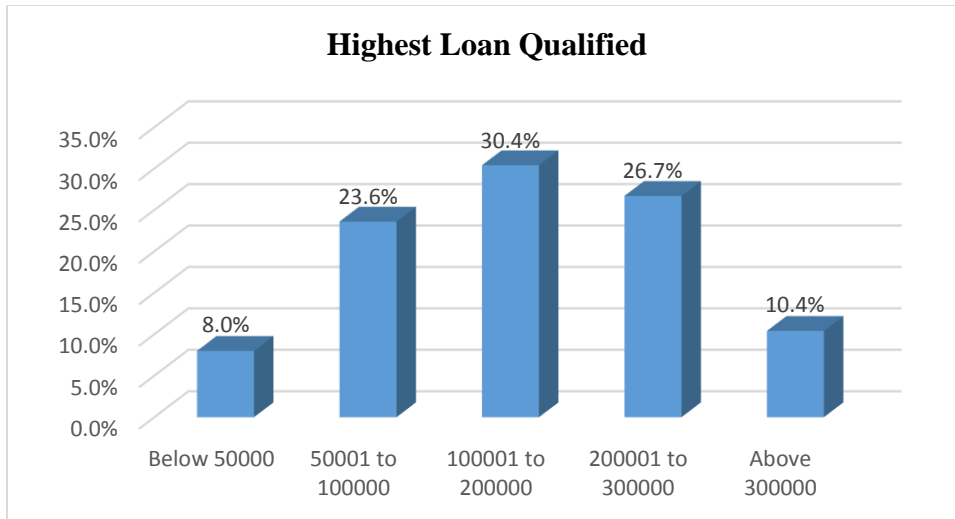
**Figure 4.5. Credit Facilities to Businesses**

**Source: Primary Data, 2019**

62.1% stated that their business had no credit facility extended to them while 37.9% acknowledged that their businesses had credit facilities extended to them.

#### 4.4.2 Highest Loan Qualification

The researcher asked the research participants to state the highest loan amount that their businesses qualified for. The results are resented in figure 4.4.



**Figure 4.6: Highest Loan Qualification**

**Source: Primary Data, 2019.**

A majority of the businesses (30.4%) pointed out that their highest loan qualification was estimated between 100001 and 200000. 26.7% of the businesses qualified for 200001 to 300,000 as their highest amount for a loan for their businesses. The businesses that qualified for a loan amount between 50,001-100,000 accounted for 23.6% of the total research participants' businesses. 10.4% of the businesses qualified for a loan amount above 300,000 while 8.9% had 50000 as their highest loan qualification amount.

#### **4.5 Collateral**

In an effort to determine how collateral affected the growth of SMEs the researcher asked research participants to stipulate their agreement level to specific statements in the questionnaire that related to collateral. To measure the responses the investigation used a Likert scale that was divided into five points where; 1= No Extent, 2 Little Extent, 3=Moderately, Extent, 4= Great Extent, 5= Very Great Extent. From the Likert tables the researcher derived the mean and the SD. The means were used to gauge the average

feelings of the research participants towards each statement. The SD was utilized to measure how far from the mean these feeling were thus enabling the researcher to gauge the consistency and similarity of the research participants opinions. SD less than 1 indicated consistency and similarity of the opinions while those above 1 indicated inconsistency. The data was analyzed and the outcomes were illustrated in figure 4.5.

To measure the responses the investigation used a Likert scale that was divided into five points where; 1= No Extent, 2 Little Extent, 3=Moderately, Extent, 4= Great Extent, 5= Very Great Extent. From the Likert tables the researcher was able to derive the mean and the SD. The means were used to gauge the average feelings of the research participants towards each statement. The SD was utilized to measure how far from the mean these feeling were thus enabling the researcher to gauge the consistency and similarity of the research participants opinions. SD less than 1 indicated consistency and similarity of the opinions while those above 1 indicated inconsistency. The data was analyzed and the outcomes were illustrated in table 4.2.

**Table 4.2: Collateral**

<b>Statement</b>	<b>Mean</b>	<b>SD</b>
Lack of collateral has hindered by ability to acquire credit	4.04	0.85
Financial establishments demand collateral security as condition for issuing credit	3.96	0.11
Asset available is considered while applying for a credit facility	4.45	0.74
Regular cash flow forms part of the collateral	3.58	0.17
Guarantors form part of the collateral	3.78	0.33

**Source: Primary Data, 2019.**

Table 4.2 points out that research participants agreed to a very great extent that asset available is considered while applying for a credit facility with a mean of 4.45 and SD of 0.774. The research participants similarly stated to a great extent that lack of collateral has hindered by ability to acquire credit with a mean of 4.04 and SD of 0.85. Research participants similarly acknowledged to a great extent that financial establishments demand collateral security as condition for issuing credit with a mean of 3.96 and SD of 0.11. The research participants' similarly agreed to a great extent that guarantors form part of the collateral as indicated by the mean of 3.78 and SD of 0.33. The research participants' further agreed to a great extent that regular cash flow forms part of the collateral with a mean of 3.58 and SD of 0.17.

#### **4.6 Interest Rate**

The investigation similarly sought to determine to what extent IR had a bearing on growth of SMEs. To do this assessment the investigation employed the use of a Likert Scale in which the researcher asked the research participants to rate their feelings towards certain statements that related to IR. The Likert scale that was divided into five points where; 1= No Extent, 2 Little Extent, 3=Moderately, Extent, 4= Great Extent, 5= Very Great Extent. The results of the outcomes are illustrated in table 4.3.

**Table 4.3 Interest R**

<b>Statement</b>	<b>Mean</b>	<b>SD</b>
IRs charged by financial establishments are high	4.47	0.52
The IR payable on credit is subject to the given security of the kind of enterprise	3.96	0.71
IRs charged by financial establishments prevents us from taking credit as they are lofty	4.73	0.18
Financial establishments give short term credit with lofty IR that impedes credit access	3.94	0.38
To what extent do you consider interest when applying IR	4.62	0.03

**Source: Primary Data, 2019**

From the table 4.3 there was a clear indication that IRs charged by financial establishments prevents us from taking credit as they are lofty had the greatest mean of 4.73 and SD of 0.18 showing that research participants were in agreement with the statement to a very great extent. Financial establishments give short term credit with lofty IR that impedes credit access had the least mean of 3.94 and SD of 0.38 showing that the research participants were in agreement with the statement to a great extent.

#### **4.6 Education Level**

To ascertain the link between education level and growth of SMEs the investigation similarly utilized a Likert scale to measure the research participants' outlooks towards certain education statements. The Likert scale that was divided into five points where; 1= No Extent, 2 Little Extent, 3=Moderately, Extent, 4= Great Extent, 5= Very Great Extent. The results of the outcomes are illustrated in table 4.4



**Table 4.4: Education Level**

<b>Statement</b>	<b>Mean</b>	<b>SD</b>
My education level impedes me in financial deliberations	3.66	0.27
My level of education enable me have proficiencies key to management of our enterprise	3.49	0.13
Training have enabled my business run efficiently	3.62	0.22
I am literate	3.54	0.92
I can properly organize request for loan and make loan payments when it falls due	3.59	0.19

**Source: Primary Data, 2019.**

From the table it was deduced that the research participants agreed a great extent (3.49 <mean< 3.66) that my education level impedes me in financial deliberations, training have enabled my business run efficiently, I can properly organize request for loan and make loan payments when it falls due, I am literate and my level of education enable me have proficiencies key to management of our enterprise were some of the ways through which education affected the growth of SMEs. It is important to note that all the SD were below the mean and similarly below 1 an indication of consistency and similarities in the rejoinders stated by the research participants.

#### **4.7 Loan Amount on SME Growth**

The investigation further sought to determine how loan amount had bearing on the growth of SMEs. To conduct the investigation, the investigation again employed the use of a Likert scale to gauge the replies of the research participants towards certain statements. The Likert scale that was divided into five points where; 1= No Extent, 2 Little Extent, 3=Moderately, Extent, 4= Great Extent, 5= Very Great Extent. The outcomes are illustrated in table 4.5.

**Table 4.5 Loan Amount**

<b>Statement</b>	<b>Mean</b>	<b>SD</b>
The value of assets has increased	3.75	0.45
Profit has increased	3.99	0.23
Sales revenue has increased overtime	4.02	0.67
The number of staff has increased	4.05	0.82
Increase in number of customers	3.89	0.82

**Source: Primary Data, 2019.**

Through the research participants the investigation established to a great extent that the number of staff has increased with a mean of 4.05 and SD of 0.82. The research participants similarly stated that a great extent that sales revenue has increased overtime with a mean of 4.02 and SD of 0.67. The research participants similarly acknowledged to a great extent that profit has increased with a mean of 3.99 and SD of 0.23. The research participants similarly stated to a great extent that increase in number of customers with a mean of 3.89 and SD of 0.82 while similarly acknowledging to a great extent that the value of assets has increased with a mean of 3.75 and SD of 0.45.

#### **4.8 Regression Analysis**

Regression analysis sorts out which of the predictor variables do have a bearing on the output variable in a mathematical manner. It helps answers the questions: which aspects are key; which can be overlooked, how those aspects relate with one another and how sure are we regarding each of the aspects.

The investigation used regression analysis to understand how amount, collateral loan, IR and education level had a bearing on SMEs growth. The results of the data were illustrated in the model summary, ANOVA table and coefficients table. The model summary provides information of how much change in the output variable is caused by the predictor variables. The ANOVA table assesses the suitability of the model in predicting the output variable while the coefficient table presents by how much each predictor variable has a bearing on the output variable. The analyzed data and the outcomes presented.

**Table 4.6 Model Summary**

Model	R	R Square	Adjusted R Square	Standard Error
1	0.6006	0.3607	-0.0003	0.1687

**Source: Primary Data, 2019**

The model summary table pointed out that r square was 0.3607. This implied that 36.07% of the change in the growth of SMEs can be accounted for by loan amount, collateral, IR and education level. The rest of the change was either because of factors not investigated by the investigation or error.

**Table 4.7: ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	139.166	139.166	208.77	0.000
Residual	246	163.982	0.6666		
Total	250	606.296			

**Source: Primary Data, 2019.**

The Anova table has significance F values of 0.00. This value is less than the p value (0.05). This infers that the model fit to predict growth of SMEs based on loan amount, collateral, IR and education level is statistically significant.

**Table 4.8 Coefficients**

Model	Unstandardized		Standardized		t	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	5.341	0.203			26.365	0.04
Loan Amount	0.0504	0.0204	0.2462		2.4762	0.001
Collateral	-0.417	0.96	0.037		-4.344	0
IR	-0.887	0.056	-0.648		-15.864	0
Level of Education	0.0644	0.00244	0.02488		2.44	0.002

**Source: Primary Data, 2019**

From the coefficients table it was deduced that the model for predicting growth of SMEs can be written as;

$$Y = 5.341 + 0.0504X_1 + -0.417X_2 + -0.887X_3 + 0.0644X_4$$

Whereby;

Y is Growth of SMEs

$X_1$  = Loan amount accessed;

$X_2$  = Collateral;

$X_3$  = IRs;

$X_4$  = Education Level;

From the regression model obtained the constant value was established at 5.341. This suggests that the value of growth of SMEs when loan amount, collateral, IR and education level are held constant is 5.341. Further the model shows that a unit surge in loan amounts would bring about promotion of SMEs growth by a factor of 0.0504 units. A unit in the collateral requested would bring about a decrease in the growth of SMEs by a factor of -0.417. A unit surge in the IR would bring about a decrease in the growth of SMEs by -0.887 units while a unit surge in education level would promote the growth of SMEs by 0.0644.

#### **4.9 Discussion of the Findings**

From the outcomes it was deduced that when it came to collateral research participants agreed to a very great extent that asset available is considered while applying for a credit facility with a mean of 4.45 and SD of 0.774 which was the highest mean. The research participants' further agreed to a great extent that regular cash flow forms part of the collateral with a mean of 3.58 and SD of 0.17 which was the lowest mean.

When IR was assessed there was a clear indication that IRs charged by financial establishments prevents us from taking credit as they are lofty had the greatest mean of 4.73 and SD of 0.18 showing that research participants were in agreement with the statement to a very great extent. Financial establishments give short term credit with lofty IR that impedes credit access had the least mean of 3.94 and SD of 0.38 showing that the research participants were in agreement with the statement to a great extent.

On evaluating the level of education, the investigation found out research participants acknowledged to a great extent that my education level impedes me in financial deliberations which had the greatest mean of 3.66. Research participants similarly were in agreement that my level of education enable me have proficiencies key to management of our enterprise were some of the ways through which education affected the growth of SMEs which had the lowest mean of 3.49.

The model summary table implied that 36.07% of the change in SMEs growth was because of loan amount, collateral, IR and education level. The rest of the change was either because of factors not investigated by the investigation or error. The Anova table has significance F values of 0.00. This value is less than the p value (0.05). This infers that the model fit to predict growth of SMEs based on loan amount, collateral, IR and education level is statistically significant.

Outcomes from the regression analysis deduced that loan amounts had a positive impact on growth of SMEs as shown by the beta value of 0.0504 units. Collateral requested had an adverse bearing on SMEs growth as indicated by the beta value of -0.417. IR had a beta value -0.887 which indicated its adverse bearing on SMEs growth while education level had a positive impact on growth of SMEs as suggested by the beta value of 0.0644.

The outcomes of this investigation concur with those of Rahman, Davanzo & Sutradhar, (2006) which found out that SMEs were more prone to economic and political shocks than

commercial banks. As a result commercial banks ended up requesting more security from the SMEs borrowing than they would normally. This extra layer of security did deter borrowing by SMEs slowing SMEs growth.

The outcomes similarly were in agreement with those of Kashyap, Stein & Wilcox, (2013) who ascertained that for efficient lending to take place there ought to be adequate information flow between the loan provider and the loan borrower. This aspect is mirrored by the level of education investigated by this investigation. Their research concluded that insufficient quality information was the key limitation to SMEs obtaining credit.

The outcomes of this investigation further conformed with an investigation by Ochanda (2014) found that accessibility to financial resources affected performance of a firm measured by profitability. In the investigation he cited that SMEs were charged high IR was among the key aspects that limited most of them from obtaining lending from lending institutions thus slowing their growth.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This part presented the summary of outcomes and conclusion based on the objective of the investigation which was to investigate link between loan amount accessed and growth of SMEs in Nairobi County. The chapter further presented recommendation, limitations of the investigation and suggestions for further investigations.

### **5.2 Summary**

From the normality test it was ascertained that the data had a significant departure from a normal distribution. 48% of the total SMEs surveyed had operated for more than 10 years. 29% of the SMEs had been operational between 7-10 years. 13% of the SMEs had operated for 3 to 6 years while 10% of the SMEs had under three years of the operation.

The education attainment for the research participants were established at various levels 45.7% had a diploma level of education. 26.8% and 22.3% had a bachelor's degree and master's degree as their highest level of education respectively. 3.2% of the research participants had a certificate and 2% of the research participants had an O-level education.

The investigation similarly ascertained that 43.7% of the research participants started off from loans as their initial source of capital. 33.3% of the research participants' acknowledged that they sold assets to get their initial capital while 23% started off their businesses from their savings. Further, it was deduced that 62.1% of the research



participants had no credit facility extended to them while 37.9% acknowledged that their businesses had credit facilities.

30.4% of the businesses had their highest loan qualification between 10001 and 50000. 26.7% of the businesses qualified for an amount between 50001 to 100,000, 23.6% qualified for an amount between 5000-10,000 , 10.4% of the businesses qualified for a loan amount above 100,000 while 8.9% had 5000 as their highest loan qualification.

From the outcomes it was deduced that when it came to collateral research participants agreed to a very great extent that asset available is considered while applying for a credit facility with a mean of 4.45 and SD of 0.774 which was the highest mean. The research participants' further agreed to a great extent that regular cash flow forms part of the collateral with a mean of 3.58 and SD of 0.17 which was the lowest mean.

When IR was assessed there was a clear indication that IRs charged by financial establishments prevents us from taking credit as they are lofty had the greatest mean of 4.73 and SD of 0.18 showing that research participants were in agreement with the statement to a very great extent. Financial establishments give short term credit with lofty IR that impedes credit access had the least mean of 3.94 and SD of 0.38 showing that the research participants were in agreement with the statement to a great extent.

On evaluating the level of education, the investigation found out research participants acknowledged to a great extent that my education level impedes me in financial deliberations which had the greatest mean of 3.66. Research participants similarly were in

agreement that my level of education enable me have proficiencies key to management of our enterprise were some of the ways through which education affected SMEs growth which had the lowest mean of 3.49.

Outcomes from the regression analysis deduced that loan amounts had a positive impact on growth of SMEs as shown by the beta value of 0.0504 units. Collateral requested had a adverse bearing on SMEs growth as indicated by the beta value of -0.417. IR had a beta value -0.887 which indicated its adverse bearing on SMEs growth while education level had a positive impact on growth of SMEs as suggested by the beta value of 0.0644.

### **5.3 Conclusion**

The investigation concluded that most of the SMEs had no credit facilities extended to them with similarly their highest loan qualification being a small amount. This was because of the fact that for the SMEs to borrow the requested collateral was high for them to attain. This deterred borrowing with some SMEs resulting to financing their businesses from sale of assets and savings.

The investigation similarly concluded that lending institutions did charge a high IR. This was a major deterrence for SMEs to take out any form of loans from these institutions due to the lofty cost of servicing the credit.

The investigation similarly concluded that education level for the SMEs owners and staff was crucial. This is because for proper borrowing to take place their must be easy flow of

information between the lender and borrower. Thus, it was determined SMEs ought to recruit staff that were able to understand and access information on credit.

#### **5.4 Recommendations**

The investigation suggests that financial lending establishments like banks ought to reassess their collateral requirements. This ought to be done to help make credit provision more accessible to the SMEs. In turn this would eventually stimulate their growth.

The investigation similarly suggests the government to ascertain strategies that will allow for lending to SMEs. These policies ought to specifically target policies on IR charged by financial establishments. Setting up fair rates would encourage SMEs to borrow and expand their businesses.

The investigation further suggested that SMEs ought to hire staff with a substantial amount of education level. Equipped with such staff members SMEs will be able to gather the correct information on credit advanced by the various lending institutions. Further, these staff will be in a position to advice on best financial management practices.

#### **5.5 Limitations of the Investigation**

The investigation sought out SMEs operating in Nairobi County only. This implies that the outcomes may not be representative of all SMEs operating in various counties across Kenya. A investigation on SMEs across various counties in Kenya could have provided more conclusive results on the link between loan amount accessed and growth of SMEs.

Accessing the research participants since they were located across Nairobi County was another limitation. These dispersed locations of the response SMEs within Nairobi County poised logistics challenge to the researcher.

The investigation similarly faced a limitation in the reluctance of the research participants to give information. The researcher had to administer the questionnaires through interviews as opposed to relying on self-administration of the questionnaires. The investigation similarly did not achieve 100% response from its targeted sample size.

### **5.6 Suggestions for Further Research**

The investigation ascertained that 36.07% of the change in SMEs growth was because of loan amount, collateral, IR and education level. Thus, it is essential for other researchers' to consider other aspects that have an influence in SMEs growth.

This investigation focused on SMEs based in Nairobi County hence the outcomes by this investigation may not be representative of SMEs in Kenya or other counties. Further investigation can be done on SMEs licensed to operate in other counties and confirm the consistency of the results.

## REFERENCES

- Abayo, J. A., & Oloko, M. (2017). Effect of micro-credit on growth of small business enterprises: A case of M-Shwari at Kibuye Market in Kisumu County, Kenya.
- Asiedu, E., Kalonda-Kanyama, I., Ndikumana, L., & Nti-Addae, A. (2013). Access to credit by firms in Sub-Saharan Africa: how relevant is gender? *American Economic Review*, *103*(3), 293-97.
- Audretsch, D. B., Coad, A., & Segarra, A. (2014). Firm growth and innovation. *Small business economics*, *43*(4), 743-749.
- Brown, J. D., & Earle, J. S. (2017). Finance and growth at the firm level: evidence from SBA loans. *The Journal of Finance*, *72*(3), 1039-1080.
- Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement*. John Wiley & Sons.
- Cameron, K. (2015). Organizational effectiveness. *Wiley Encyclopedia of Management*, 1-4.
- Canton, E., Grilo, I., Monteagudo, J., & Van der Zwan, P. (2013). Perceived credit constraints in the European Union. *Small Business Economics*, *41*(3), 701-715.
- Carbo- Valverde, S., Rodriguez- Fernandez, F., & Udell, G. F. (2016). Trade credit, the financial crisis, and SME access to finance. *Journal of Money, Credit and Banking*, *48*(1), 113-143.
- Coad, A., Segarra, A., & Teruel, M. (2016). Innovation and firm growth: Does firm age play a role?. *Research Policy*, *45*(2), 387-400.
- Ellingsen, T., Jacobson, T., & von Schedvin, E. L. (2016). Trade credit: Contract-level evidence contradicts current theories. *Riksbank Research Paper Series*, (139).
- Fafchamps, M., & Schündeln, M. (2013). Local financial development and firm performance: Evidence from Morocco. *Journal of Development Economics*, *103*, 15-28.
- Ferrando, A., & Mulier, K. (2013). Do firms use the trade credit channel to manage growth?. *Journal of Banking & Finance*, *37*(8), 3035-3046.
- Fischer, R., & Valenzuela, P. (2013). Financial openness, market structure and private credit: An empirical investigation. *Economics Letters*, *121*(3), 478-481.

- Gichuki, J. A. W., Njeru, A., & Tirimba, O. I. (2014). Challenges facing micro and small enterprises in accessing credit facilities in Kangemi Harambee market in Nairobi City County, Kenya. *International Journal of Scientific and Research Publications*, 4(12), 1-25.
- Grassa, R., & Gazdar, K. (2014). Financial development and economic growth in GCC countries: A comparative study between Islamic and conventional finance. *International Journal of Social Economics*, 41(6), 493-514.
- Gupta, P. D., Guha, S., & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of innovation and entrepreneurship*, 2(1), 15.
- Hamza, A., & Zulfiqar, S. (2011). Umeå University, Sweden Business Development & Internationalization Supervisor: Zsuzsanna Vincze Spring Semester 2011 Master's Thesis in Business Administration
- Hollenbeck, J. R., & Jamieson, B. B. (2015). Human capital, social capital, and social network analysis: Implications for strategic human resource management. *Academy of Management Perspectives*, 29(3), 370-385.
- Huang, C., When, Y., & Liu, Z. (2014). Analysis on financing difficulties for SMEs due to asymmetric information. *Global Disclosure of Economics and Business*, 3(2), 28-31.
- Kamunge, M. S., Njeru, A., & Tirimba, O. I. (2014). Factors affecting the performance of small and micro enterprises in Limuru Town Market of Kiambu County, Kenya. *International Journal of Scientific and Research Publications*, 4(12), 1-20.
- Karimi, N. E. (2014). *The Effect Of Credit Financing On Profitability Of Small And Medium Sized Enterprises In Nairobi County* (Doctoral dissertation, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI).
- Kisaka, S. E., & Mwewa, N. M. (2014). Effects of micro-credit, micro-savings, and training on the growth of SMEs in Machakos County in Kenya. *Research Journal of Finance and Accounting*, 5(7), 43-49.

- Kuntchev, V., Ramalho, R., Rodríguez-Meza, J., & Yang, J. S. (2013). *What have we learned from the enterprise surveys regarding access to credit by SMEs?*. The World Bank.
- Laeven, L., Levine, R., & Michalopoulos, S. (2015). Financial innovation and endogenous growth. *Journal of Financial Intermediation*, 24(1), 1-24.
- Malhotra, P. (2015). To what extent does the theory of credit rationing explain the phenomenon of microfinance? *Academy of Management Perspectives*, 29(3), 370-385.
- Moe, E. (2016). *Governance, Growth and Global Leadership: The Role of the State in Technological Progress, 1750–2000*. Routledge.
- Musamali, M. M., & Tarus, D. K. (2013). Does the firm profile influence financial access among SMEs in Kenya?. *Asian Economic and Financial Review*, 3(6), 714.
- Nyagah, C. N. (2013). Non-financial constraints hindering growth of SME'S in Kenya: the case of plastic manufacturing companies in industrial area in Nairobi County. *MBA Project*.
- Ochanda, M. M. (2014). Effect of financial deepening on the growth of small and medium-sized enterprises in Kenya: A case of Nairobi County. *International Journal of Social Sciences and Entrepreneurship*, 1(11), 191-208.
- OECD (2015a), Policy Framework for Investment 2015 Edition, OECD Publishing, Paris.
- OECD (2015b), Skills and learning strategies for innovation in SMEs, Working Party on SME and Entrepreneurship, CFE/SME(2014)3/REV1
- Olkiewicz, M. (2018). Quality improvement through foresight methodology as a direction to increase the effectiveness of an organization. *Contemporary Economics*, 12(1), 69-80.
- Osano, H. M., & Languitane, H. (2016). Factors influencing access to finance by SMEs in Mozambique: case of SMEs in Maputo central business district. *Journal of Innovation and Entrepreneurship*, 5(1), 13.
- Plugge, A., Kooijman, C., & Janssen, M. (2016, February). An Examination of the Relationship Between Organizational Culture Determinants and Retained Organizations Growth Stages. In *International Workshop on Global Sourcing of Information Technology and Business Processes* (pp. 77-96). Springer, Cham.

- Quartey, P., Turkson, E., Abor, J. Y., & Iddrisu, A. M. (2017). Financing the growth of SMEs in Africa: What are the constraints to SME financing within ECOWAS?. *Review of development finance*, 7(1), 18-28.
- Ross, S. 2018. The Theory of Asymmetric Information in Economics. *Global Disclosure of Economics and Business*, 3(2), 28-31.
- Saparito, P., Elam, A., & Brush, C. (2013). Bank–firm relationships: do perceptions vary by gender?. *Entrepreneurship theory and practice*, 37(4), 837-858.
- Sholevar, M., & Harris, L. (2019). Mind the Gap A Survey of Literature on Financial Literacy and Financial Behaviour: Is There a Gender Gap?. *Available at SSRN*.
- Stough, R. R. (2019). Leadership, institutions and regional economic development and growth. In *Handbook of Regional Growth and Development Theories*. Edward Elgar Publishing.
- Wang, Y. (2016). What are the biggest obstacles to the growth of SMEs in developing countries?—An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, 16(3), 167-176.



## APPENDIX: RESEARCH QUESTIONNAIRE

This questionnaire sought to ascertain the relationship between loan amount and growth of SME's. The information collected was exclusively for academic purposes and was confidential. Your valued assistance in completing this questionnaire was highly appreciated. Please tick appropriately in the provided spaces.

### SECTION A: BACKGROUND INFORMATION

1. How many years has your business been operational?

Under 3 years            ( )    3 - 6 years            ( )

7 - 10 years            ( )    Over 10 years            ( )

2. Highest academic qualification?

O-Level (KCSE)            ( )    Certificate            ( )

Diploma            ( )    Bachelor's Degree            ( )

Master's Degree            ( )

3. Source of starting capital?

Savings            ( )

Loans            ( )

Sale of Asset            ( )

### SECTION B: LOAN AMOUNTS

4. Has your business received any credit facility?

Yes            ( )

No            ( )

5. Highest loan qualification?

< 50,000            ( )    50,000 – 100,000            ( )

100,001 – 200,000            ( )    200,001 – 300,000            ( )

Above 300,000            ( )

**SECTION C: COLLATERAL**

6. To what extent do you agree with the following statement on collateral? Please rate on a 5 – 1 point scale, where 1= Not at all; 2= Little extent; 3 = Moderate extent; 4= Great extent; 5= Very great extent

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Lack of collateral has hindered by ability to acquire credit					
Financial institutions demand collateral security as condition for issuing credit					
Asset available is considered while applying for a credit facility					
Regular cash flow forms part of the collateral					
Guarantors form part of the collateral					

**SECTION D: INTEREST RATES**

7. To what extent do you agree with the following statement on interest rates? where 1= Not at all 2= Little extent 3= Moderate extent 4= Great extent 5= Very great extent

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Interest rates charged by financial institutions are high					
The interest rate payable on credit is subject to the given security of the kind of enterprise					
Interest rates charged by financial institutions prevents us from taking credit as they are lofty					
Financial institutions give short term credit with lofty interest rate that hinders credit access					
To what extent do you consider interest when applying interest rate					

**SECTION E: EDUCATION LEVEL**

8. To what extent do you agree with the following statement on Education level? Please rate on a 5 – 1 point scale, where 1= Not at all 2= Little extent 3= Moderate extent 4= Great extent 5= Very great extent

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
My education level hinders me in financial deliberations					
My education level equips me with knowledge and skills that are needed to be more effective in managing our business					
Training have enabled my business run effectively					
I am literate					
I can properly organize request for loan and make loan payments when it falls due					

**SECTION F: EFFECT LOAN AMOUNT ON SME GROWTH**

9. To what extent do you agree with the following statements? Please rate on a 5 – 1 point scale, where 1= Not at all; 2= Little extent; 3= Moderate extent; 4= Great extent; 5= Very great extent

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The value of assets has increased					
Profit has increased					
Sales revenue has increased overtime					
The number of staff has increased					
Increase in number of customers					