ACCESS TO CREDIT AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN TURBO SUB COUNTY, KENYA

BY

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A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

2017
DECLARATION

This research project report is my own original work and has not been presented to any University for the award of a degree.

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DEDICATION

This research is dedicated to my family, my spouse Geoffrey and children; David and Lenny for their understanding during the long hours of dedication to this noble undertaking.
ACKNOWLEDGEMENT

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ABSTRACT

Access to credit is a prerequisite for growth and prosperity of any firm within the economy. Access to credit improves firms’ performance, facilitate market entry, growth of companies and risk reduction, promotes innovation and entrepreneurial activity. Small and medium enterprises play an important role of economic growth and on a macro level bring about employment within the economy. SMEs particularly the smaller ones have been unable to access credit to lubricate their businesses due to their limited track record, limited acceptable collateral security, and inadequate financial statements and business plans. This has hence attracted the attention of scholars and policy makers. However, the scholars who have done studies on this sector of the economy disagree on the nature of relationship between access to credit and performance of these firms. The purpose of this study was therefore to determine access to credit and performance of small and medium enterprises in Turbo, Sub County, Kenya. This purpose was achieved using the following objectives; to determine the influence of cost of credit and performance of SMEs, to establish the influence of firm characteristics and performance of SMEs, to establish the influence of firm size and performance of SMEs and to assess the influence of collateral security and performance of SMEs in Turbo sub county, Kenya. This was anchored on the bank lending channel theory which is of the view that the representative firm must obtain credit to finance their working capital; labor costs prior to production and sale of output supported by the credit access theory which is of the view that information asymmetry is the main cause of financial market malfunctioning in developing economies. The study used a sample of 340 from a population of 2,901 entrepreneurs using both descriptive and correlational research design. Both closed and open ended questionnaires were administered to the business owners for obtaining the relevant data. The study found a Cronbach’s alpha of 0.906(90.6%) implying that the research instruments were reliable and hence valid for conducting the survey. From the regression results, the study concluded that firm size had a negative but significant influence on access to credit hence performance of SMEs. Small firms had difficulties in accessing credit as compared to their larger counterparts. Collateral security had a positive and significant influence on access to credit hence performance of SMEs. Firms with collateral accessed loans easily as opposed to those with none. Firm characteristics had a negative insignificant influence on access to credit hence performance. Firms with less competent managers, poor credit history and had been in existence for less than two years could not easily access credit. Cost of credit had a positive but insignificant influence on access to credit. SMEs were easily lured to take credit from lenders whose cost of credit was lower and hence improved the performance of their firms. The researcher recommends that financial institutions should work on publicity and other modes of information dissemination. Terms and condition of their loan products and services should be custom tailored to meet the needs of their clientele. The research hopes that the findings of this study will contribute significantly to the existing literature on access to credit and performance of SMEs.
# LIST OF ABBREVIATIONS

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AFDB</td>
<td>African Development Bank</td>
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<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
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<tr>
<td>DGDA</td>
<td>Dalberg Global Development Advisors</td>
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<tr>
<td>FI</td>
<td>Financial Institutions</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>KBA</td>
<td>Kenya Bankers Association</td>
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<tr>
<td>MASLOC</td>
<td>Micro Finance and Small Loans Center</td>
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<tr>
<td>MFI</td>
<td>Micro finance Institutions</td>
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<tr>
<td>NACOSTI</td>
<td>National Commission for Science, Technology and Innovation</td>
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<tr>
<td>ROA</td>
<td>Return on Assets</td>
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<td>SME</td>
<td>Small and Medium Enterprises</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>US</td>
<td>United States</td>
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CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Credit provision requires due consideration as credit risk administration is one of the basic viewpoints and hot issue among the issues looked at financial institutions (FIs). The hazard administration perspective isn't pivotal for supportability, however, development of financial sector related area too (Greuning and Bratonovic, 2003). FIs have hence come up with credit access terms and policies that help minimize these risks. Ahmed (2010), defines credit policy as managerial principles that bring out the decision variables of credit standards, collection techniques and credit terms and conditions by which management in financial institutions have an influence on their operations. These policies are in form of interest charged on loans, collateral provisions requirements, loan amount limits, late payment penalties, insurance fees, collateral insurance fees, legal fees, excise duty and application fees. The policies have a trickledown effect on the final consumer who consumes such services as financial training, business management, savings and loans services among other products. All these have an influence on the overall performance of businesses and economic growth and development of a nation.

Financial institutions perform a key role in economic growth by mobilizing savings for investments through capital flows towards various sectors of the economy (Sufian & Parman, 2009). It is also worth noting that commercial banks globally are dominant as a financial institution providing installment loans compared to any other financial institution (Greuning & Bratanovic, 2003). The role played by banks and non-bank financial institutions in an economy may not be underscored as they are institutions, which provide liquidity for both lender and borrower. Because of this significant role, they have to evaluate the risk, which they face daily while lending. Banks involve continuously in corporate governance to monitor, screen and recovery of loan for better performance of loan (Mohammad, 2014). Performance of FIs influences economic growth positively. Barth, Caprio and Levine (2004) argue that provision of credit services to businesses accelerates growth of the enterprises and eventually the whole economy.
Hence performance is critical for both micro enterprises and commercial banks for achieving their objectives. However, Kinimi (2014) agrees with Suberu, Aremu and Popoola, (2011), that in the Democratic republic of Congo, SMEs are faced with the challenge of accessing credit from financial institutions.

Access to finance is a prerequisite for growth and prosperity of any firm and its economy. It not just encourages market entry, development of organizations and risk lessening, yet in addition advances development and entrepreneurial exercises (Klapper, Leora, Laeven, and Rajan, 2006). Moreover, Beck, Thorsten and Asli (2006) attest that organizations with more prominent access to capital will probably misuse development and speculation openings. At the end of the day, monetary execution in totality will be enhanced by expanding access to capital.

Given the important role played by SMEs to the world economy, countries have adopted reform regimes to address their existence and contribution. SMEs have been completely recognized by those legislatures and advancement specialists as the primary motor of monetary development and a main consideration in advancing private public partnerships. Their advancement is in this way, a fundamental component in the development technique of those economies. They contribute altogether to enhanced expectations for everyday comforts, as well as realize significant local capital development and accomplish elevated amounts of efficiency and capacity, (Zainab, 2011).

Many economies, developed and developing have come to realize the value of small businesses. They are seen to be characterized by dynamism, witty innovations, efficiency, and their small size allows for faster decision-making process, (Akabueze, 2002). Governments all over the world have realized the importance of this category of companies and have formulated comprehensive lending policies to encourage, support and fund the establishment of SME's. For instance, the Kenyan parliament in September 2016 passed the financial bill which introduced the interest rate capping which was pegged to 4 % above the Central Bank rate (which is currently at 10 %) to cushion
borrowers against extortion and also to enhance business performance through accessing cheaper credit (The Star, 2017).

Despite all these efforts, credit access by SMEs still remain a challenge as commercial banks and other financial institutions, are shying away from this sector of business community. According to the Star (2017), commercial banks warned lending to the private sector, especially the SMEs, was likely to slow down further because of high credit risk brought about by the September, 2016 interest capping law. Private sector credit growth fell to 4.3 per cent in December 2016 compared to more than 17 per cent a year earlier largely on rising loan default rates and interest rate cap. As a result, banks continue investing in government securities and assets with higher returns. According to the bankers, only removal of the interest rates cap could release credit flow to the private sector. The 2016 full-year results for most banks have reported shrunken loan books in the period, with personal and SME loans being hardest hit due to their relatively higher risk profile. A large number of prospective borrowers have been denied loans, with banks giving priority to those with the highest credit scores. A continued slowdown in lending to the private sector risks hurting economic growth by curtailing investment and consumption (Business daily africa, 2017). In many Western economies, such as the US and UK, banks also reduced the access to credit (loans and overdrafts) to SMEs in a drive to reduce risk (Williams, 2012).

Many scholars have emphasized the important role played by financial institutions both in Kenya and globally. However, Simeyo, Martin, Nyamao, Patrick and Odondo, (2011) revealed that in Kisii town interest rates influences lending to all sectors of economy. An increase in interest rate increases the cost of borrowing money. A study by Eze and Okoye (2014) established that, reducing interest rates increased performance of businesses in Nigeria which had a positive effect on the country’s economic growth. However, this was a contradiction of Malede (2014) who established that lending interest rate had a positive and statistically insignificant relationship with commercial bank lending to SMEs in Ethiopia. Simeyo et al., (2011) used interest rates as proxy for cost of credit which is not conclusive as there are many other costs associated to credit which
needed to be studied also. This in addition to interest rates include loan processing fees, collateral insurance fees, legal fees, credit life insurance fees and excise duty that make accessing credit a very expensive affair. It was against this background that the current study sought to determine the influence of cost of credit and performance of SMEs in Turbo, Sub County, Kenya using other costs of credit in addition to interest rate.

The salient features of the firm such as age of the firm, credit history, and education levels of firm managers, distance of SMEs from the lender and size of household have become important elements in credit access as they are important in the success of the firm. Madole (2013), aimed to examine the impact of microfinance credit on the performance of SMEs in Tanzania and found out that collateral, age or experience of the SMEs owners, and, credit accessibility influence the access of credit and hence affects performance of firms. Age of the firm had a positive impact on credit access. The results are consistent to those of Essien and Chukwuemeka (2012), Atieno (2001) and Morobe (2015). However, the results contradict those of (Bandyopadhyay, 2007) who found no connection between age of the firm and access to credit and Hyytinen and Pajarinnen (2008), (Harvie, 2011) and (Wanyama, 2011) who found a negative no connection between age of the firm and access to credit.. It is notable that these scholars are in disconsensus in their findings. Due to these inconsistencies in findings the current study established the influence of age of the firm as a firm characteristic and performance of SMEs in Turbo sub county, Kenya.

In most of the developing economies, commercial banks are often unable or reluctant to grant loans to small and medium enterprises. Instead, they prefer lending to well established businesses that have well maintained financial statements and credit histories. According to Punyasavatsut (2011), credit had a negative influence on the financial performance of such firms in Thai. The results conform to those by Shirley and Namusonge (2016), (Aldaba, 2012) and Punyasavatsut (2011) in Kitale, Philippines and Thailand respectively. However, this is not true for India as asserted by (Bandyopadhyay, 2007), that there was no relationship between credit history and access to credit. The
current research sought to fill this inconsistency in findings by narrowing down to Turbo sub county, Kenya.

Entrepreneur related elements take a need position in all credit appraisals by the borrowers in Turkey. The Entrepreneur related elements were instructive foundation, experience and systems. Past research found a feeble positive connection between higher instructive capabilities and business development (Kozan, Oksoy, & Ozsoy, 2006). Although they agree on positive relationship between higher education and credit accessibility, they differ on the level of significant with Longenecker et al. (2006) and Kumar and Francisco (2005), who found a strong positive relationship between education levels and access to credit. It is against this inconsistency in the findings that the current study sought to establish the influence of education levels as a firm characteristics and performance of SMEs in Turbo Sub County, Kenya.

Lending to small firms is cumbersome because of the problems of information asymmetry. The SMEs do not have full disclosure of the relevant financial information. By having a predetermined budget, plan and expectations, the effective and efficient deployment of resources and effort, continuous monitoring and evaluation of the projects are necessary to enable success of the projects (Elijah, 2007). In Westland division of Kenya, firm qualities influenced SMEs' capacity to get to outer fund. The size and age of the firm were distinguished as vital factors under this class. Firm size was a standout amongst the most essential variable in writing identified with access to credit (Kung'u, 2011). The results are consistent with those of Kung'u (2011), Fatoki and Asah (2011) and Essien and Chukwuemeka (2012). However, the results contradicted those by Bigsten et al. (2003), Wanjoji and Mugure (2008) and (Tangoe et al. (2005), who found a negative and significant relationship between firm size and access to credit. owing to these inconsistencies, the current study sought to establish the influence of firm size and performance of SME in Turbo Sub County, Kenya.

A study by Shirley and Namusonge (2016), to establish the factors influencing access to credit among SMEs in Kitale and found out that collateral requirement by financial
institutions significantly influence access to credit facility by SME from Financial institutions. This meant that businesses who lacked collateral could not access credit hence affecting performance negatively. This contradicts Hall and Fang (2004) who found a positive but insignificant relationship between collateral and performance of SMEs in Thailand. It is also evident that all these scholars are discussing collateral availability and performance of SMEs. In reality, it is the value pegged to that collateral and cost associated with that collateral that has an influence on performance, hence the reason why the current research studied collateral values, collateral insurance fees and collateral registration fees. This together with the contradiction by various scholars has been a driving force for the current study to establish the influence of collateral security on the performance of small and medium enterprises in Turbo sub county, Kenya and hope to contribute to the little existing academic body of knowledge on collateral and performance of firms.

In his investigation on the effects of microfinance on micro and small business growth in Nigeria Babajide (2012), found a strong evidence that access to credit did not enhance growth of micro and small enterprises. This contradicted Nyangoma (2012), who established that there was a significant positive association between access to credit and financial performance of SMEs in Uganda, Kinimi (2014), in Democratic republic of Congo and Mosley (2001) in Bolivia. It is clear that the various scholars who have studied this topic are not in consensus about the overall influence of access to credit and performance of SMEs. It was also found from literature review that most of these studies are using return on assets (ROA), increase in number of employees, changes in sales volume as a measure of performance. It would have been prudent to use the overall profitability which is an accumulation of all the other measures to measure performance. The current study therefore looked at filling this gap by establishing the influence of access to credit and performance of small and medium enterprises in Turbo sub county, Kenya using profitability as a measure of performance.
1.2 Statement of the Problem

Globally, SMEs play a pivotal role in economic growth of a country. They are an important sector as they contribute to the national kitty through various taxes (sales) and fees paid (licensing requirements). In their endeavor to improve their performance they become innovative and come up with various methods to increase their productivity. SMEs on a macro level contribute towards creating employment to a citizen of a country. To do this they require capital to lubricate the gears of running the business. Access to finance is therefore necessary to create a suitable economic environment that enables firms to grow and prosper (Klapper et al., 2006).

Owing to the important role played by the SME sector, its performance has attracted many scholars as well as the government. The government has thus intervened in the financial market to try and smoothen the ease of doing business to this sector by introducing lending policies that will enable SMEs access credit with ease. However, financial constraints are still higher in general, and SMEs are particularly constrained by gaps in the financial system such as high costs of credit, high collateral requirements, unfavorable repayment periods, small loan amounts granted, delays in loan processing and lack of experience in business due to low levels of education, age of firm, size of the business and credit history of the borrower. In addition, the scholars have differed on the influence of cost of credit, collateral security, size of firm, firm characteristics on the performance of SMEs with some giving positive relationships while others giving negative results. For instance, Babajide (2012), found a strong evidence that access to credit did not enhance growth of micro and small enterprises in Nigeria. This contradicted Nyangoma (2012) who established that there was a significant positive association between access to credit and financial performance of SMEs in Uganda. Most scholars have also disregarded loan insurance fee, collateral insurance fee, collateral registration fees, loan application fees, legal fees and only focused on interest rate as the factor that influence access to credit by SMEs. This may not have given the true picture of the scenario as these too affect performance. Increased access to finance for SMEs can improve economic conditions in developing countries by fostering innovation, macro-economic resilience, and GDP growth. Despite the policies created to encourage access to
credit, the current situation in relation to SMEs and their finance opportunities remains uncertain. It is against this background that the current study sought to establish access to credit and performance of SMEs in Turbo sub county, Kenya.

1.3 Purpose of the Study

The purpose of this study was to establish the influence of access to credit and performance of SMEs in Turbo sub county, Kenya.

1.4 Objectives of the Study

This study was guided by the following objectives;

i. To determine the influence of cost of credit and performance of SMEs in Turbo sub county, Kenya

ii. To establish the influence of firm characteristics and performance of SMEs in Turbo sub county, Kenya.

iii. To establish the influence of firm size and performance of SMEs in Turbo sub county, Kenya.

iv. To assess the influence of collateral security and performance of SMEs in Turbo sub county, Kenya.

1.5 Research Questions

i. How does cost of credit influence the performance of SMEs in Turbo sub county, Kenya?

ii. How does firm characteristics the influence the performance of SMEs in Turbo sub county, Kenya?

iii. How does firm size influence the performance of SMEs in Turbo sub county, Kenya?

iv. How does collateral security influence the performance of SMEs in Turbo sub county, Kenya?
1.6 Significance of the Study

Overall, although governments have attempted to stimulate the supply of finance for SMEs and interest rates continue at an all-time low, SMEs remain reluctant to take up loans from financial institutions. In addition, financial providers have been reluctant to lend because of increasing financial requirements from regulators (ACCA, 2011). SMEs play an important role of creating employment and creating revenue channels for the country’s fiscal expenditure. To perform these functions they need capital needed to speed their performance. Financial institutions bridge this gap of lack of capital by providing credit among other services to the SMEs businesses. To make the relationship cordial the government has come in to provide a suitable environment for both the firm and the financial institutions to complement each other. However, it has been observed that despite creating various lending policies, SMEs still face an uphill task of accessing credit from the financial institutions. This study sought to establish the influence of access to credit and performance of SMEs in Turbo sub county, Kenya. It is hoped that the findings will be helpful for proper policy formulation by various policy makers; policies that will enhance further economic growth of the country through increased performance of these firms. The study is also expected to contribute to the existing literature on access to credit on performance of SMEs in Turbo sub county, Kenya.

1.7 Basic Assumptions of the Study

This study assumed that access to credit influenced performance of small and medium enterprises in Turbo Sub County. The researcher also assumed that the business managers would give accurate information on the performance of the businesses on the various variables being tested. It is also assumed that the respondents would be friendly and welcoming to enable the researcher collect relevant data. In addition, the researcher assumed that the weather conditions would be favorable to enable the researcher collect the relevant data within the stipulated time for the venture. Lastly, the researcher assumed that the authorities of Uasin Gishu county and Turbo sub county would grant permission to conduct the research to their subjects.
1.8 Limitation of the Study

The study was be limited to Turbo sub county due to lack of finances to conduct the study on a wider region. In addition, the time taken per day to collect the data was restricted due to rainy weather conditions owing to the fact that data was collected during the short rains season. Time taken to be with the owners was also limited since they were attending to their customers and hence had limited time for the researcher. This forced the researchers to drop the questionnaires and collect later in the day affecting the quality of the research. The major limitation was that most SMEs did not share financial undertakings with their managers and in such cases researchers were unable to get such information.

1.9 Delimitation of the Study

This study was done in Turbo Sub County using the small and medium enterprises within the market centers alone. The research was confined to only firms that had accessed credit before from either financial providers. This study was conducted using a sample of 340 from a total population of 2,901 SMEs within the sub county. The study was delimited to Turbo Sub County within Uasin Gishu County mainly because it is highly cosmopolitan sub county compared to the others. The study area has wide range of varying business activities. Descriptive and correlational research designs were strictly applied in this study for ease of making comparisons of the data collected about events and also to establish the relationship between the variables under study. Finally the research employed only the use of Fisher’s formulae of sampling as modified by Mugenda and Mugenda since it gives a more representative statistic of the population.

1.10 Definition of Significant Terms used in the Study

**Access to credit**

Refers to the ease of getting money for either personal use or business use. Access to credit is important to businesses for capital improvement, start up for businesses, for meeting supplier needs and for payroll needs. For small and medium enterprises to be able to access visible credit there is need for information sharing where lenders are more
aware of their borrowers, capacity and ability to repay their loans and in return for them to provide cheaper credit to the SMEs.

**Performance of SMEs**

Means growth in various aspects of SMEs; this may include growth in profits, sales volumes, stock levels and number of employees among other things.

According to the government of Kenya, firms are defined as micro when they have between 1 and 10 employees and a turnover not exceeding kshs 500,000, and they are considered small when they have between 11 and 50 employees and a turnover not exceeding kshs 5 million.

**Collateral Security**

Refers to valuable items such as title deeds to property, motor vehicle log books, share certificates, life policies and so on, which represent assets used as collateral for a loan. Under a secured loan, the lender has the right to sell the security if the loan is not repaid (KBA, 2013)

**Cost of credit**

Refers to the money paid over and above the principle amount borrowed. Refers to the total cost of a loan, including all bank fees and charges, and estimated third party costs such as legal fees, and valuation and stamp duty payable to the Kenya Revenue Authority in the case of loans secured by a physical asset.

**Interest rate**

Fee that a bank will charge to loan you money for a specified period.

**Profitability**

This can be referred to as the return a business person gets from an investment or a business venture.

**Credit history**

It is a record showing the ability and responsibility of the borrower paying his debts.

**Age of the Firm**

Refers to the number of years a business enterprise has been in operation
**Firm Size**  
Refers to how big or small a firm is based on the number of employees, the capital injected in the business and also the asset base of the firm.

**Credit insurance fee**  
Refers to insurance of the credit advanced against death of customer and permanent disability.

**Loan application fee**  
Refers to the fees paid by the customer in order to access credit.

**Collateral registration fee**  
Refers to the fee paid in order to register collateral security so that it is legally co-owned by the borrower and the lender.

**Collateral insurance fee**  
This is a third party fee paid to the insurance firms against damage to the collateral offered to the lender by the borrower to access credit. It is meant to cushion the lender against loss due to hazards like fire, accidents among others.

**Market value**  
The current price of a given commodity or property in the market which is acceptable to all players in the market.

### 1.11 Organization of the Study

This study was organized into five chapters. Chapter one comprises the background of the study, where the researcher introduces the topic highlighting the importance of various key players in performance of the SMEs. In this chapter, the researcher brings out the problem statement clearly showing the gap that necessitated the undertaking of this survey and how the researcher intended to fill the existing gap in literature. To help achieve the purpose of the study, chapter one gives clear specific objectives and the questions thereafter to be answered. This chapter also gives the importance or significant of the research undertaking as well as well as the basic assumptions, limitations and delimitations of the survey.

Chapter two introduces and discusses the empirical research arranged as per the themes of objectives that included cost of credit, firm characteristics, firm size and collateral security guiding the study and the guiding theories applied in the study. The chapter
discusses in detail the concepts of study including access to credit and performance of SMEs on global level, regional level and also locally. The researcher discusses and criticizes various scholars who had in the past undertaken similar research work elsewhere and gives an overall summary of their findings and the gaps therein. This chapter also highlights a schematic representation of the variables both dependent and independent under study in the conceptual framework clearly indicating their direction of dependence.

Chapter three discusses the process through which this research was achieved; methodology that was employed. The research design; descriptive and correlational designs are clearly discussed. It gives the instruments to be used in research and the test for reliability both test-retest method of reliability and also the Cronbach’s Alpha test method of reliability applied. Content validity as a method of testing validity is also discussed in the chapter. In this chapter, the target population of 2,901 SMEs, sample size of 340 SMEs as well as sampling procedure are discussed in detail. The chapter also discusses the ethical consideration such as the various authorities that were sought before, during and after the research process.

Chapter four presents the findings and the interpretation of the research. The chapter discusses in detail the nature of relationship between the dependent variable performance of SMEs and independent variables cost of credit, firm characteristics, firm size and collateral security. The descriptive statistics are also discussed as well as the regression analysis results. The respective levels of significance are also articulated in this chapter including the ordinal measurement scale employed.

Chapter five is a summary of results of the study according to their thematic areas, conclusion of the entire study is also drawn and finally the chapter gives recommendations for the study in terms of policy recommendations and suggestions for further research.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to the study based on themes and sub thematic areas drawn from the objectives. This include: Access to credit and performance of SMEs; cost of credit and performance of SMEs; Firm characteristics and performance SMEs; Firm size and performance of SMEs; Collateral security and performance of SMEs. The theoretical framework is also reviewed under this chapter. The theories reviewed included: Bank lending channel theory; Credit access theory; signaling Theory. In addition, the conceptual framework is presented and the knowledge gap for the study.

2.2 Access to Credit and Performance of Small and Medium Enterprises

The 2008 financial crisis and subsequent widespread economic downturn had a huge impact on the accessibility of finance to SMEs. SMEs in many developing countries before the crisis had been strongly restricted in accessing the capital that they needed to grow and expand. Performance of firms is positively related to access of finances. However, banks do not provide SMEs with adequate capital in many of these countries. In fact, only 20% of African SMEs have a line of credit from a financial institution. The financial crisis has further increased the financing gap for SMEs in developing countries (AfDB, 2012).

The recent global financial crisis created a tough environment for SMEs, with a reduction in demand for goods and services and a contraction in credit by banks and other financial institutions. SMEs by number, dominate the world business stage. It is worthwhile noting that, SMEs tend to be more labour intensive and at a macro level, therefore, provide a substantial contribution to employment (Ayyagari, 2011). However, they are strongly hampered in accessing the capital that they require to grow and expand, with nearly half of SMEs in developing countries rating access to finance as a major impediment. In addition, Suberu, Aremu, and Popoola (2011) stated that a shortage of financing is one of the major barriers to rapid development of the small and medium enterprises. On the other hand, Financial institutions in developing countries are in turn hampered by the lack
In his study, Perkowski (2012) asserts that access to finance is a challenge for businesses in any country and specifically in China. Provision of credit and other services to small and medium enterprises has traditionally been challenging for financial institutions. On the one hand, the challenge may be related to a lack or non-existence of financial history and the inability to provide required collateral among small and medium enterprises. This was in agreement with Madole (2013) who did a similar study in Tanzania and found out that there was a positive and significant effect of access to loan on sales volume, profitability and number of employees of firms. This study focuses on collateral and lack of financial credit history as the major hindrances to credit access. The study did not take into account that access to credit can be influenced by credit history, age and size of the firm, education levels of firm owners and managers, sales turnover among other factors such as the time the lender takes to process the credit facility, or the repayment period. The current study used a wider range of factors determining access to credit to establish access to credit on performance of SMEs, in Turbo sub county, Kenya.

There was a significant positive association between access to credit and financial performance of small and medium enterprises in Uganda (Nyangoma, 2012). It was revealed that favorable credit terms facilitated ease of access to credit by SMEs and therefore improved financial performance in terms of sales volumes and profitability. Limited access to credit could also negatively affect profitability and financial survival if firms operate under poor economic conditions and high interest rates. This was in agreement with a study on the factors affecting performance of small and micro enterprises in Limuru town market of Kiambu County, by Kamunge, Njeru and Tirimba (2014). These studies largely based their decisions on lending interest rate as the determinant that hinders access to credit. However, there are other factors related to access to credit. It is against this background that the current study sought to establish access to credit and performance of SMEs in Turbo sub county Kenya by introducing
other costs of credit such as loan insurance fees, loan application fees, firm characteristics and size of the firm.

Using a sample of 120 micro businesses in Madina, Ghana, Sampong (2011) sought to establish the impact of micro credit on small businesses with evidence from Microfinance and small loans Centre. The study used a causal and descriptive design to establish the relationship between sales performance and access to credit in the SME sector in Ghana. The study revealed that on the effects of credit access on sales, sales tend to increase after capital injection from the centre. The impact of access to credit had statistically significant influence on sales performance. This study focused on sales volume as a measure to performance which is not conclusive. In addition to this, the current study used change in sales volume, change in number of employees and profitability of the firms to measure performance of SMEs in Turbo sub county, Kenya. Profitability is rather conclusive as this is the main objective of SMEs.

A study carried out in Nairobi county by Nyabicha (2015) to establish the effect of commercial bank loans on the performance of micro and small enterprises using descriptive research design and a sample of 50 entrepreneurs, found out that entrepreneurs who utilized their loan entirely for business purposes saw their sales turnover move from low to high. The study concluded that access to finance positively affected the performance of businesses in Nairobi. This study focused on collateral and interest rate as proxy for access to credit. However, it is notable that we have other parameters used to measure access to credit like, age of the firm, cash flows (turnovers), size of the firm, collateral security being used and education levels of the SMEs running those firms. The current study used a wide range of parameters to establish access to credit and performance of SMEs in turbo sub county, Kenya.

Though all the scholars under review agree on the overall findings on access to credit and performance of SMEs they differ on the exact determinants of access to credit. Apart from the indicators studied the current study addressed the issue of total cost of credit, firm characteristic, size of the firm and collateral security in addition to the ones already
discussed by various scholars as determinants for access to credit and hence performance of SMEs in Turbo sub county, Kenya.

2.3 Cost of Credit and Performance of Small and Medium Enterprises

Financing is an important aspect of every business. However, it is important noting that financing should be as efficient as possible. The borrower should be able to sum the cost of all financing by lenders, comparing them and come up with the one that which gives the lowest cost financing option. Banks have often been criticized for having high interest rate charged on loans, however, interests rates are charged are pegged on the base lending rate set by the Central Bank of Kenya. The rate of interest charged on the credit is a key determinant of the cost of credit; but not the only one. The cost credit is the amount the borrower is obligated to pay above the principal sum of the money lent. Cost of credit can be classified as gross and net interest. High interest rates increase the cost of credit. High interest rates on credit may discourage SMEs from borrowing reducing the accessibility of credit among them (Shirley and Namusonge, 2016).

In their study to investigate the effects of interest rate on micro, small and medium enterprises’ access to funds and their financing decision in Wa municipality of Ghana, using descriptive survey and a sample size of 200 enterprises, Bawuah, Sare and Musah (2014) found out that majority of businesses had resorted to the use of equity financing for their operations. This was attributed to several factors of which interest rate (cost of credit) was the leading cause. It emerged that interest rate influences the choice of financing decision of SMEs in Wa municipality. There was a negative and significant relationship between interest charged on loans and performance of micro businesses in Ghana. It is worth noting that Bawuah et al., (2014) used interest rate as an indicator for cost of credit. However, there are other costs of credit apart from interest rates that make access to credit more expensive than thought to be. These include loan insurance fees (credit life insurance), loan application fees, collateral registration fees, legal fees and excise duty among others. The current study sought to fill this gap by studying the cost of credit in totality to include the other costs to credit that make access to credit an expensive affair.
In his study which sought to find out the factors which affect the accessibility of the loans by SMEs in Kisii County, Anyieni (2014) found out that cost of credit was a major determinant of credit accessibility. Low cost of credit eased credit accessibility among the SMEs and vice versa. The study established that there was a significant relationship between the bank competitions and pricing on the accessibility of the loans. This study just like most scholars too used loan interest rate as proxy for cost of credit which in itself is one amongst many elements of cost of credit. It is against this argument that the current study sought to use cost of credit in totality to establish the influence of cost of credit on the performance of SMEs in Turbo sub county, Kenya.

A study carried out by Nyumba, Muganda, Musiega, and Masinde (2015) to establish the effect of loan interest rate on the performance of small and medium size enterprises in Lurambi Sub-County, Kenya using a sample size of 365 SME owners’ found out that there existed a statistically significant positive effect of loan interest rate on the performance of SME’s. This study is in agreement with Babajide (2012) who revealed that in Nigeria, loan interest impact significantly on micro firm growth giving a positive significant relationship between interest rates and performance of these firms. However, it was a contradiction of Bawuah et al., (2014) who found a negative but significant association between interest rate and performance of SMEs in Ghana and Ayopo, (2011) in Nigeria, who found a negative insignificant relationship. In addition to these scholars relying on interest rate as proxy for cost of credit, they do not agree on the influence of interest rate on performance of SMEs. It is against this background that the current study included insurance fee, loan application fee, legal fee and excise duty to determine the influence of cost of credit on performance of SMEs in Turbo sub county, Kenya.

2.4 Firm Characteristics and Performance of Small and Medium Enterprises

The salient features of the firm such as age of the firm, credit history, education levels of firm managers, distance of from the lender and size of household have become important elements in credit access as they are important in the success of the firm. Using panel data, Hyytinen and Pajarinnen (2008), sought to establish the determinants of small
business performance in Finland. They found a negative significant relationship between the age of a firm and access to credit. Firms that had been in operations for less than two years were more likely to be denied credit by financial institutions in Finland than their older counterparts hence affecting their rate of making profits. This in turn had a long term negative effect on the performance of the SME in Finland. In India age of a business did not have a direct bearing on the credit risk levels of a firm. SMEs therefore could perform considerably well regardless of their age. There was no relationship between age of a firm, creditworthiness and hence access to finance in India (Bandyopadhyay, 2007).

Small and medium enterprises access to finance is dependent upon a number of factors, both on the supply (lenders) and demand (borrowers) sides. These include among other firm characteristics the age of the SME, (since start-up and younger enterprises tend to be at a disadvantage relative to older SMEs, because they have no credit track record, less experienced entrepreneurs, and limited collateral; lack of credit history and credit rating). Small business therefore tend to perform poorly due to limited access to credit. Firms less than two years old in operation in East Asian economies rarely access credit. There is significant negative relationship between young firms and access to credit and hence performance (Harvie, 2011).

In Nairobi, SMEs that are newly established found it hard to convince lenders that they had the ability to use the funds borrowed and service the loans without failure. Lack of previous reference, history makes such new SMEs difficult to sell in the market. On the other hand, old well established SMEs found it easier to sell themselves in the market to the potential lenders. This was because there was previous experience that could be referred to. The old SMEs could proof their ability and good will in sound financial management. This indicated a strong negative relationship between the age of the SME and access to loans and hence its long run financial performance (Wanyama, 2011).

In the works of Essien and Chukwuemeka (2012), in the Niger delta region of Nigeria, age of enterprise had a significant positive effect on the probability of informal credit access by small scale agro-based enterprises in the region. For every increase in
enterprise age, the probability of accessing informal credit increases by 0.07 which conformed to the study by Atieno (2001), who reported age as significant determinant of informal credit access. Older firm’s accessing credit was easier than younger firms because they had been released from asymmetric information problems with the lender by improvements in the firms’ public reputation.

In his study in Nairobi County, Morobe (2015), found out that Microfinance loans, age of the SME, and credit accessibility were all significant in financial performance of the SME. Madole (2013), aimed to examine the impact of microfinance credit on the performance of SMEs in Tanzania and found out that collateral, age or experience of the SMEs owners, and, credit accessibility influence the access of credit and hence affects performance of firms. Age of the firm had a positive impact on credit access. The results are consistent to those of Essien and Chukwuemeka (2012), Atieno (2001) and Morobe (2015). However, the results contradict those of (Bandyopadhyay, 2007) who found no relationship between age of the firm and access to credit and Hyytinen and Pajarinnen (2008), (Harvie, 2011) and (Wanyama, 2011) who found a negative relationship between age of the firm and access to credit. It is notable that these scholars are in disconsensus in their findings. Due to these inconsistencies in findings the current study sought to establish the influence of age of the firm as a firm characteristic on performance of SMEs in Turbo sub county, Kenya.

In most of the developing economies, commercial banks are often unable or reluctant to grant loans to small and medium enterprises. Instead, they prefer lending to well establish businesses that have well maintained financial statements and credit histories (Abdesamed & Wahab, 2014). In his study, Perkowski (2012) asserts that access to finance is a challenge for businesses in any country and specifically in China. Provision of credit and other services to small and medium enterprises projects has traditionally been challenging for financial institutions. On the one hand, the challenge may be related to a lack or non-existence of financial history and the inability to provide required collateral among small and medium enterprises.
A study carried out by Mole and Namusonge (2016) established that among the factors that influenced access to credit lending procedures, collateral requirement, credit bureau referencing policies and training offered by finance institutions significantly influence access to credit facility by SME from financial institutions. Credit Bureau referencing Policies contributed 35.7% variability to non-access of credit facilities by financial institutions in Kitale. There was a positive relationship between positive reference and access to loans from banks in Kitale. Firms with positive listing got loans easily as compared to those with a negative listing hence performed better in terms of stock levels, number of employees and sales volume. Small and Medium Enterprises particularly the smaller ones in Philippines have been unable to access funds due to their limited track record, limited acceptable collateral, and inadequate financial statements and business plans. The bank survey showed that the top reasons for turning down financial requests were the firms’ poor credit history, insufficient collateral, and insufficient sales, income or cash flow, unstable business type, and poor business plan (Aldaba, 2012).

Financial institutions in Thailand identified the main obstacles for SME lending as inadequate collateral, lack of business experience, lack of sound business plans, non-performing loan history, and high transaction per loan application (Punyasavatsut, 2011) In addition, Thai banks have traditionally had collateral-based lending practices and lack the know-how to differentiate SMEs’ risk. These exacerbate the financial gaps and hinder access for SMEs. Non-performing loan history had a negative impact on credit accessibility. This had a negative influence on the financial performance of such firms in Thai. The results conform to those by Mole and Namusonge (2016), (Aldaba, 2012) and Punyasavatsut (2011) in Kitale, Philippines and Thailand respectively. However, this is not true for India as asserted by (Bandyopadhyay, 2007), that there was no relationship between credit history and access to credit. The current research sought to fill this inconsistency in findings by narrowing down to Turbo sub county, Kenya.

Education was one of the factors that impact positively on growth of firms (Longenecker, Petty, Moore, and Palich, 2006). They reiterate that majority of those who run SMEs are ordinary lot whose educational background is lacking. Hence they may not be well equipped to carry out managerial routines for their enterprises. Lack of planning,
improper financing and poor management have been identified as the main causes of failure of small enterprises to access credit. Previous research, in particular has explored how the managerial education affects the access to credit. For example, Kumar and Francisco (2005), found a strong positive relationship between education and access to financial services in Brazil. They also found that graduates had the least difficulties raising finance from banks.

Entrepreneur related factors take a priority position in all credit assessments by the borrowers in Turkey. The entrepreneur related factors were educational background, experience and networks. Past research found a weak positive relationship between higher educational qualifications and business growth (Kozan, Oksoy, & Ozsoy, 2006). Although they agree on positive relationship between higher education and credit accessibility, they differ on the level of significant with Longenecker et al. (2006) and Kumar and Francisco (2005), who found a strong positive relationship between education levels and access to credit. It is against this inconsistency in the findings that the current study sought to establish the influence of education levels as a firm characteristics on performance of SMEs in turbo sub county, Kenya.

2.5 Firm Size and Performance of Small and Medium Enterprises

The size of a business may be defined in terms of the numbers of employees, the turnover, or capital invested in the business. Different authors and researchers have defined SMEs variously depending on their respective objectives. Using employees as the basis of definition, the government of Kenya defines an SME as one employing 0-50 persons. A small business is one that is actively managed by its owner(s), highly personalized, largely local in its area of operation and largely dependent on internal sources of capital to finance its growth (Banmback, 1998).

Lending to small firms is cumbersome because of the problems of information asymmetry. The SMEs do not have full disclosure of the relevant financial information. By having a predetermined budget, plan and expectations, the effective and efficient
deployment of resources and effort, continuous monitoring and evaluation of the projects are necessary to enable success of the projects (Elijah, 2007).

Small firms which have more credit constraints than medium and large firms mostly depend on internal fund and social relationship. The bigger SMEs are, the more proportion of bank loan they obtain. Bigger firms receive credit from suppliers and offer more advances from customers, while, smaller firms have less informative about their borrowing history and volume of sale or purchase is quite low. So their source of capital is limited and then they must take full advantage of owned capital or retained earnings.

The formal financing to SMEs is mostly obstructed by the collateral requirement in conventional banking. This can be attributed to the SMEs size and age as well as the owners or manager’s educational background and business experience (Abdesamed & Wahab, 2014). The conclusion made by Woordeckers and Steijvers (2006), was that size of firm and age were more likely to be more important determinants of collateral protection than loan and lender characteristics. Small firms mainly borrow fund in the informal financial market, while larger firms obtain fund in the formal market. Small firms therefore accessed smaller amount of loans and thus the reason for slow growth in sales, stock levels and profitability. In terms of small firms, there exists a negative but insignificant relationship between access to credit and performance of such firms.

In Finland firm size did not have an effect to credit access hence performance of SMEs (Hyytinen and Pajarinnenn, 2008). Small businesses were perceived as low credit worthiness, so banks often require these borrowers to pledge collateral to guarantee their later payment (Phuong, 2012). That meant that there was a negative correlation between the size of the firm and access to credit and hence the performance of the business. Generally, in Vietnam, small businesses meet the most obstacles to credit access rather than medium and large size ones. Large business have more tools to access capital and sufficient collaterals, therefore most of large businesses feel no or minor obstacles in access to finance. Size and age are positively and significantly correlated with access to
credit at 0.05 levels. The bigger firm are more likely to access capital than small firm. (Phuong, 2012).

In Ghana, small business enterprises have traditionally encountered problems when seeking financing from banks to support their fixed capital investments as well as working capital for their operations. Most new small business enterprises are not very attractive for mainstream banks, with their rigid lending regulations. There was a strong negative relationship between small sized firms and access to financial services (Tangoe, Nyarko, and Amah, 2005).

Financial constraints remain a major challenge facing SMEs in Kenya and the rest of the developing countries. Small firms have little access to finance, which hinders their eventual growth. They obtain capital from retained earnings and informal savings which seem unpredictable. They are thought to be highly risky by lenders due to inadequate financial facilities (Wanjohi & Mugure, 2008). A survey which tracked bank borrowing by manufacturing firms in developing African countries found that among firms which wanted a loan, small firms had substantially worse chances of getting one because the lenders were biased towards small firms (Bigsten, Collien, Gunning, and Oduro, 2003).

In their research in the Niger delta region of Nigeria Essien and Chukwuemeka (2012), observed that the size of the enterprise (valued in Naira) was significant and positively related to access to formal credit by small scale agro-based enterprises implying that the probability of accessing formal credit increased with increasing size of enterprise. That is, for every increase in value of asset of small scale agro-based enterprises, there was an insignificant increase in probability of accessing formal credit. This was consistent with Burkart and Ellingsen (2004) who reported that firms with more real assets tends to have greater access to long-term debt.

Using number of employees as a measure of size of enterprise, Fatoki and Asah (2011), determine that SMEs that had more than 50 employees were significantly more likely to be successful in their credit application compared to SMEs that had less than 50
employees in the case of South Africa. In Westland division of Kenya, firm characteristics affected SMEs’ ability to access external finance. The size and age of the firm were identified as important variables under this category. Firm size was one of the most important variable in literature related to access to credit (Kung'u, 2011). The results are consistent with those of Kung'u (2011), Fatoki and Asah (2011) and Essien and Chukwuemeka (2012). However, the results contradicted those by Bigsten et al. (2003), Wanjohi and Mugure (2008) and (Tangoe et al. (2005), who found a negative and significant relationship between firm size and access to credit. Owing to these inconsistencies, the current study sought to establish the influence of firm size on performance of SME projects in Turbo sub county, Kenya.

2.6 Collateral Security and Performance of Small and Medium Enterprises

Research on collaterals can be traced back as Barro’s study in 1976 which focused on pricing issues when collateral value was stochastic. However, the practical significance of collateral is recognized in recent studies on financial contracts in securing repayments, which put collateral as a primarily important factor in determining external financing and investment (Leitner, 2006).

Firms with tangible collateral seem to be doing well in terms of access to credit than those that don’t. There is therefore a positive but insignificant relationship between collateral and performance of SMEs generally. Collaterals are used as a mechanism to reduce equilibrium credit rationing and other problems that arise due to asymmetric information between borrowers and lenders. Besides, increases in a firm’s collateral value relax the credit constraint faced by the firm, enabling the firm to borrow more (Chen, 2001; Hall and Fang, 2004). According to the CBK (2013), collateral is regarded as a secondary source of repayment, and therefore is only used in assessing the amount of loan loss provision required for non-performing loans. Where securities are obtained, they should be perfected in all respects, namely; duly charged, registered and adequately insured.
The greater the amount of collateral possessed by an SME, the lower is likely to be the extent of the financial limitation. In more general terms it can be postulated that the greater the financial depth or development of a financial system, the greater will be the availability of loans to firms, including SMEs, and, therefore, the lower will be the extent of any financial gap. Access to collateral can be postulated to be positively related to firm performance, as with business transparency, preparation of business plans, the skill level of the entrepreneur and credit rating of the business (Harvie, 2015)

Lending decisions of Thai financial institutions are traditionally based on the availability of collateral security, a sound business plan with sufficient cash flow, and personal guarantors for loans. Full collateral, using land and buildings are often required by banks to cover losses in case of default. The effect of collateral security on performance of small firms is negative as it is a major deterrence to access to credit (Punyasavatsut, 2011). Though they agree on the level of significance, Haron, Said, Jayaraman and Ismail, 2013) contradict with Punyasavatsut and Ackah and Vuvor, (2011) in Ghana on the relationship and direction of significance. These results are in complete agreement with Anyieni (2014) who did a similar research in Kisii town and Nyabicha (2015) in Nairobi who found a positive relationship. These studies however, focused on collateral availability alone. However, it is the cost the business incurs in the event of using collateral to secure a loan that affects its performance in the real sense. It would have therefore been prudent to use collateral insurance fee and registration fee to measure the effect. The current study sought to evaluate collateral security and performance of SMEs in Turbo sub county, Kenya.

In his study on the effect of microfinance institutions lending on the growth of Small and Medium Enterprise in Somalia using descriptive design on 60 SMEs Siyad (2013) found out that most of the requirements as collateral for loan application could not be afforded by most SMEs, hence opting for cheaper sources of capital hence the low adoption of the loan services by businesses. Financial institutions loans led to the improvement in performance among the beneficiary SMEs, as well as profitability and the high number of entrepreneurs starting up new ventures. There exists negative relationship between ROA
and collateral of FI lending. This contradicts Nyabicha (2015) and Hall and Fang (2004) who asserts that collateral requirements positively affects the performance of businesses in Nairobi. Apart from the mixed results found by the scholars, the study of collateral security and their influence has received less attention by scholars. Collaterals are increasingly becoming important to financial institutions as a secondary source of repayment and cannot be overlooked as lack of it may deny SMEs the much sophisticated capital required for business growth. The current study therefore assessed the influence of collateral and performance of SMEs in Turbo sub county, Kenya.

2.7 Theoretical Framework

This study was anchored on the bank lending Channel Theory by Bernanke and Blinder as the underpinning theory supported by Credit Access Theory by Stiglitz and Weiss and Signaling Theory as postulated by Emery on the study of access to credit and Performance of Small and Medium Enterprises.

2.7.1 Bank Lending Channel Theory

This theory was put forward by Bernanke and Blinder (1988). They hypothesize an economy that delivers a solitary good using labor as the only input. The model has an equivalent number of specialists (firms, banks, and families). All operators are hazard unbiased and subject to constrained risk. To create, firms need to get bank credit to pay wages to family units before generation happens. Family units have the choice of either keeping their wages as stores at the bank or putting resources into a hazard free government bond. Banks fund credits through stores. As will be obvious, in a balance, the arrival on store offered by banks must be sufficiently high to guarantee that family units keep the greater part of their wages as bank stores. Since the concentrate of the paper is on the procedure of credit expansion, it will extract from general balance assurance of costs. The cost of the great and additionally compensation are consequently taken as given. This viably influences products to request splendidly versatile at the given value level. At last, in moving far from quantitative limitations, the emphasis will be on the effect of money related arrangement on the stream of new credits as opposed to exceptional levels.
The hypothesis is critical in light of the fact that it recognizes that an agent firm should get credit to fund their working capital (work costs) before creation and offer of yield. Each firm is coordinated haphazardly with one bank and however they may switch banks, they should acquire all their financing from a solitary bank. All organizations approach a similar innovation and are liable to a total arbitrary profitability stun that is normal to all organizations. The hypothesis identifies with the present investigation that is concentrating on SMEs getting to credit from FIs so as to help their undertakings and subsequently execution. Note that the presence of restricted risk suggests that organizations just reimburse their obligation if the profitability stun ends up being positive. Work is thought to be provided flexibly at the given wage level and firms pick the amount to utilize so as to expand expected benefits. Since firms work just when expected benefits is non-negative, it suggests that they can simply reimburse their credits if the profitability stun ends up being great.

The major undoing of this theory is that it relies on lending rate as the main component of cost of credit. In reality, there are other costs to credit like loan application fee, loan insurance fee, and collateral security insurance fee, legal fee among others which need to be taken into account to get the total or real cost of credit. It is also not always possible that borrowers will only have a single source of accessing credit. Borrowers tend to have more than one lender just to cushion themselves against lack of credit especially when they really need it. Lastly, the theory assumed that labour is the major cost experienced by firms. This may not be true as the firm may experience other costs like transportation, repairs and maintenance. Owing to the fact that households also depend on the firms for survival it is obvious that the household costs become the firm’s costs indirectly.

2.7.2 Credit Access Theory

The credit theory was postulated by Stiglitz and Weiss (1981). They provided a framework for analyzing financial market inefficiencies. According to this framework, information asymmetry is the main cause of financial market malfunctioning in developing economies. Financial institutions are not only interested in the interest they
receive on loans, but also the risks of such loans. Most Financial institutions therefore screen and monitor borrowers before advancing any credit. Since they manage deposit accounts for these borrowers, financial institutions own highly strategic information on firms’ receipts and expenditures as well as the way that firms develop. Despite having this information, relationships between bankers and firms are not perfect. Banks suffer from informational asymmetries such that evolution of prices (interest rates) cannot clear the credit market.

In reference to Stiglitz and Weiss antagonistic choice and consequently credit apportioning still happens if banks require security. They contend that generally safe borrowers expect a lower rate of profit for normal. Therefore, they are less well off than high-hazard borrowers by and large after a few periods. Okay borrowers are subsequently not ready to give more security. Expanding security necessities may have the same unfriendly choice impact as a higher loan cost. However, Walsh (1998) argues that banks only offer contracts in which they simultaneously adjust interest rates and collateral requirements. He proved that there is always a combination of interest rate and collateral requirements so that credit rationing does not occur.

The advocates of this hypothesis contend that the most fascinating type of credit proportioning is balance apportioning, where the market has completely changed in accordance with the general population whereby banks proportion credit free, accessible data and where interest for advances for a specific market loan cost is more prominent than supply. Stiglitz and Weiss (1981) clarifies that credit proportioning happens if a budgetary organization charge a similar loan cost to all borrowers, since they can't recognize borrowers and screening borrowers impeccably is excessively costly. The two suspicions are extremely streamlining and don't happen in this way in reality. Banks are generally ready to recognize their borrowers up to a specific degree.

2.7.3 Signaling Theory

Signaling Theory by Emery (1991) supports the credit access theory which rests on the transfer and interpretation of information at hand about a business enterprise to the
capital market, and the impounding of the resulting perceptions into the terms on which finance is made available to the enterprise. In other words, flows of funds between an enterprise and the capital market are dependent on the flow of information between them. In the same way, financial institutions will make their lending decisions based on the information given by the SMEs and likewise, SMEs will make their borrowing decisions based on the information they have about the credit facility.

Though this theory may be relevant to most economies, the assumption of credit rationing equilibrium in the market may be true only in the short run. However, in the long run when there is perfect information in the market, there tends to be a shift in borrowing from a single source to multiple sources as long as the firms are able to make profits. In their attempt to make money some financial institutions compromise their terms in order to have an upper hand in the market. They give easy but expensive loans which the borrowers don’t mind as long as they have access to credit when they want it to cater for their business operations.
2.8 Conceptual Framework

This study conceptualizes the relation between the performance of SMEs (dependent variable) and cost of credit, firm characteristics, Firm size and collateral security (independent variable). Government regulation is introduced as an intervening variable as outlined in figure 1.1.

(Self authored)

Figure 1.1: Access to credit and performance of SMEs in Turbo sub county, Kenya
2.9 Summary of the Reviewed Literature

Access to finance is a prerequisite for growth and prosperity of any business within the economy. Access to credit improves firm performance, growth of a firm and helps in risk reduction. Furthermore, firms with greater access to finance are more likely to exploit growth and investment opportunities. In other words, economic performance in totality will be improved by increasing access to capital for investment. Small and medium enterprises play this important role of economic growth and on a macro level to bring about employment within the economy. To help them play this vital role, financial institutions come in to bridge the financial gap that SMEs face by providing working capital necessary for growth and expansion of the enterprises.

After the 2008 financial crisis financial institutions however tightened their policies as regards to availing of credit especially to SMEs. This was to cushion them against losses due to loan default. They have introduced other costs to credit which include interest rate on loan, loan application fee, late payment penalty, legal fee and insurance fee. The credit risk faced by FIs have made them to come up with policies to regulate credit in the economy through introduction of collateral as a requirement for loan access. In their appraisal process FIs are focusing so much on the characteristics of a firm including the number of years the establishment has been in existence, its credit rating and scores and the management expertise that the firm holds before advancing any form of credit. Firm size has also been an area of focus by many credit lenders. The lenders have interests on the number of employees working in any firm, the sales turnovers the enterprise is making per month and the capital invested in the business both owners’ equity and borrowed capital.

The important role played by SMEs cannot go unnoticed and thus has attracted the attention of policy makers and scholars. The government of Kenya in September, 2016 introduced a law to cap interest rates charged by FIs to enhance growth of these firms. Despite all these efforts SMEs still face challenges in accessing credit. The various scholars have also given mixed results on their findings on the factors influencing access to credit and performance of SMEs globally and in Kenya with some giving positive
results that access to credit was affecting performance positively while others gives negative results that access to credit affects performance of SMEs negatively. It is against this background that the current study sought to determine the influence of access to credit and performance of Small and Medium Enterprises in Turbo sub county, Kenya.

The research was guided by a conceptual framework that gave the relationship between the independent variables; cost of credit, firm characteristics, firm size and collateral security and the dependent variable as performance of small and medium enterprises. Government policy that included interest capping, Central Bank Rate and loan provisioning requirements was the intervening variable. The Central Bank interest capping law in September 2016 by the Kenya Government for instance affected the relationship between financial institutions and SMEs where lenders could not advance credit but instead tightened the lending rules to be more stringent. On the other hand SME businesses were denied credit causing their business to have liquidity challenges and therefore affecting their performance. Finally the study was guided by three theories; Bank Lending Theory as postulated by Bernanke and Blinder in 1988 being the main theory that the study is grounded on highlighted that for enterprises to perform well they need to access credit to pay wages. The theory was supported by Credit Access Theory of Stiglitz and Weiss in 1981 which was more focused on the dimension that information asymmetry was the main cause of financial market malfunctioning. That FIs are not only interested on the interest rates earned from the loans they give but also on information screening and monitoring of their borrowers which was not accurate. The last theory that was applied in the study was the Signaling Theory by Emery 1991 which rests on transfer and interpretation of information on enterprises to the capital markets.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Author and year</th>
<th>Title of study</th>
<th>Findings/Relationship</th>
<th>Knowledge gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine the influence of cost of credit and performance of SMEs in Turbo Sub County, Kenya</td>
<td>Interest rate</td>
<td>Bawuah, Sare and Musah 2014 (interest)</td>
<td>The effects of interest rate on micro, small and medium enterprises financing decision in Wa municipality of Ghana</td>
<td>Negative and significant</td>
<td>Mixed results of findings. Some research gave positive outcomes while others gave negative outcomes on the same variable.</td>
</tr>
<tr>
<td></td>
<td>Interest rate</td>
<td>Babajide (2012)</td>
<td>Effect of microfinance on micro and small enterprises growth in Nigeria</td>
<td>Positive and Significant</td>
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<tr>
<td></td>
<td>Interest rate</td>
<td>Nyumba, Muganda, Musiega, and Masinde (2015)</td>
<td>Loan interest rate and performance of small and medium enterprises in Kenya</td>
<td>Positive and significant</td>
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<tr>
<td></td>
<td>Interest rate</td>
<td>Nyangoma (2012)</td>
<td>Credit terms, access to finance and financial performance of SMEs in Kampala</td>
<td>Negative and significant</td>
<td></td>
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<tr>
<td></td>
<td>Interest rate</td>
<td>Ayopo (2011)</td>
<td>Effects of micro financing on micro and small enterprises in south west Nigeria</td>
<td>Negative and insignificant</td>
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<tr>
<td>Age of firm</td>
<td>Bandyopadhyay, (2007)</td>
<td>India Credit Risk Models for Managing Bank's Agricultural Loan Portfolio</td>
<td>No relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanyama, (2011).</td>
<td>A survey of the challenges of financing small and micro enterprises (SMEs) in Nairobi</td>
<td>Negative and Significant</td>
<td></td>
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<tr>
<td>Essien and Chukwuemeka (2012).</td>
<td>An analysis of access to credit markets and the performance of small scale agro-based enterprises in the Niger delta region of Nigeria</td>
<td>Positive and significant</td>
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<tr>
<td>Credit history</td>
<td>Mole and Namusonge (2016)</td>
<td>Factors affecting access to credit by small and medium enterprises: A case of Kitale town</td>
<td>Negative and Significant</td>
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<tr>
<td>Author and Year</td>
<td>Title</td>
<td>Findings</td>
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<tr>
<td>Aldaba, 2012.</td>
<td>Small and medium enterprises' (SMEs) access to finance: Philippines</td>
<td>Negative and Significant</td>
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<tr>
<td>Punyasavatsut (2011)</td>
<td>What determines the access to credit by SMEs? A case study in Vietnam</td>
<td>Negative and Significant</td>
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<tr>
<td>Longenecker, Petty, Moore, and Palich (2006)</td>
<td>Small business management: An entrepreneurial emphasis</td>
<td>Positive and significant</td>
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<tr>
<td>Kumar and Francisco (2005), Kozan, Oksoy, and Ozsoy, (2006)</td>
<td>Enterprise size, financing patterns and credit constraints in Brazil: Analysis of data from the Investment Climate Assessment Survey</td>
<td>Positive and significant</td>
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<tr>
<td>Punyasavatsut, (2011)</td>
<td>SMEs access to finance in Thailand</td>
<td>Negative and Significant</td>
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<tr>
<td><strong>To assess the influence of collateral security and</strong></td>
<td></td>
<td><strong>Mixed results of findings for the study of the same variable.</strong></td>
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<tr>
<td>Study</td>
<td>Title</td>
<td>Findings</td>
<td>References</td>
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<tr>
<td>Anyieni (2014)</td>
<td>SMES access to credit: A case of Kisii county-Kenya</td>
<td>Positive and insignificant</td>
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<tr>
<td>Siyad (2013)</td>
<td>The effect of microfinance institution lending on the growth of small and medium enterprise in Somalia</td>
<td>Negative and insignificant</td>
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</tbody>
</table>

Many studies carried out did not consider collateral insurance fee, collateral registration fees, value of collateral, in their studies but instead concentrated on the presence or absence of collateral security as a requirement of accessing credit.
<table>
<thead>
<tr>
<th>Study</th>
<th>Authors</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>To establish the influence of access to credit on performance of SMEs in Turbo Subcounty, Kenya</td>
<td>AfDB, (2012).</td>
<td>Positive and significant</td>
</tr>
<tr>
<td></td>
<td>Afdb supports access to finance for African SMEs</td>
<td></td>
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<tr>
<td></td>
<td>Though they agree on the overall findings they differ on the exact determinants of access to credit.</td>
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<tr>
<td></td>
<td>Collateral, loan amount</td>
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<tr>
<td></td>
<td>Kamunge, Njeru and Tirimba (2014)</td>
<td>Positive and significant</td>
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<td></td>
<td>Factors affecting the performance of small and micro enterprises in limuru town of Kiambu town Market</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collateral, cash flows</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sampong (2011)</td>
<td>Positive and significant</td>
</tr>
<tr>
<td></td>
<td>The impact of microcredit on small businesses: evidence from microfinance and small loans centre-Ghana</td>
<td></td>
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<tr>
<td></td>
<td>Business records, interest rate</td>
<td>Positive and significant</td>
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<tr>
<td></td>
<td>Nyabicha (2015)</td>
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<tr>
<td>To establish the influence of firm size on performance of SMEs in Turbo Sub County, Kenya</td>
<td>Woordeckers and Steijvers (2006),</td>
<td>Negative and insignificant</td>
</tr>
<tr>
<td></td>
<td>Business collateral and personal commitments in SME lending.</td>
<td></td>
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<tr>
<td></td>
<td>Mixed Results on the Findings of the studies with some scholars registering positive findings while others registering negative findings.</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Study Title</td>
<td>Findings</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Phuong (2012)</td>
<td>What determines the access to credit by SMEs? A case study in Vietnam</td>
<td>Negative</td>
</tr>
<tr>
<td>Tangoe, Nyarko, and Amarch, (2005)</td>
<td>Financial challenges facing urban SMEs under financial sector liberalization in Ghana</td>
<td>Negative and significant</td>
</tr>
<tr>
<td>Essien and Chukwuemeka (2012)</td>
<td>An analysis of access to credit markets and the performance of small scale agro-based enterprises in the Niger delta region of Nigeria</td>
<td>Positive and significant</td>
</tr>
</tbody>
</table>
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter provides a detailed description of how data was obtained, processed, analyzed and interpreted to fulfill the research objectives. It highlights the description of the research design, geographical area of study, target population, sample size, sampling procedure, data collection instruments, validity and reliability of research instruments, data analysis method and ethical considerations in research.

3.2 Research Design
This study employed descriptive as well as correlational research design. According to Kothari (2004), a descriptive study design is suitable for collecting data from individuals to a set of prepared questions. It involves gathering data that describe events and organizes, tabulates, depicts and describes the data collection. This included, mean, variance, percentages and frequency distribution tables. Descriptive research therefore makes summary of the entire report which is easier to understand and analyze. It is easy to present data and easy to interpret as it uses simple formats.

Correlational designs are helpful in identifying the relation of one variable to another, and seeing the frequency of co-occurrence in two or more natural groups. Correlation goes further than descriptive to draw inferences about relationships of given variables. This will be basically through linear regression analysis (Gujarati, 2004).

3.3 Target Population
The target population was 2,901 small and medium enterprises operating within Turbo sub county respondents consisting of both registered and non-registered SMEs businesses. The target population was the SMEs who have accessed credit before or currently servicing loans. Turbo Sub County is one of the administrative units in Uasin-Gishu County bordering Kakamega and Nandi counties. It is located in the North West of Eldoret town. The headquarters of Turbo Sub County is Turbo town. It is located along
Eldoret- Webuye Road and it is about 31 Km from Eldoret town. Turbo Sub County has six wards which include Ngenyilel, Tapsagoi, Kiplombe, Huruma, Kapsaos and Kamagut. The area is widely known for growth of maize, beans and some parts grow wheat. Dairy farming is also widely practiced here.

3.4 Sample Size and Sampling Technique

The sample size was drawn from the entrepreneurs of Turbo Sub County within Uasin Gishu from a registered number of 2901 small and medium enterprises operating their businesses as illustrated in table 3.1.

3.4.1 Sample Size

According to Uasin Gishu County, Directorate of Licensing and Compliance, 2017, Turbo Sub County by end of July, 2017 had 2901 SMEs businesses. It is from this population that the current study drew its sample size using Fisher et al. (1998) formula as modified by Mugenda and Mugenda (2003). The study involved 340 SMEs which were apportioned proportionally as per the target populations from each ward as shown in Table 3.1.

Table 3.1: Target population and sample size

<table>
<thead>
<tr>
<th>Ward</th>
<th>Target Population</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngenyilel</td>
<td>87</td>
<td>20</td>
</tr>
<tr>
<td>Tapsagoi</td>
<td>313</td>
<td>37</td>
</tr>
<tr>
<td>Kiplombe</td>
<td>332</td>
<td>39</td>
</tr>
<tr>
<td>Huruma</td>
<td>1378</td>
<td>151</td>
</tr>
<tr>
<td>Kapsaos</td>
<td>424</td>
<td>50</td>
</tr>
<tr>
<td>Kamagut</td>
<td>367</td>
<td>43</td>
</tr>
<tr>
<td>Totals</td>
<td>2901</td>
<td>340</td>
</tr>
</tbody>
</table>

Source: Uasin Gishu County, Directorate of Licensing and Compliance, 2017

According to Mugenda and Mugenda (2003), from Table 3.1, the sample size was calculated as follows:
\[ n_f = \frac{n}{1 + \frac{n}{N}} \]

Where

\[ n_f = \text{Sample size} \]

\[ n = 384; \text{Predetermined figure by Mugenda and Mugenda (2003)} \]

\[ N = \text{Target population} \]

Hence the sample size in this study was,

\[ n_f = \frac{384}{1 + \frac{384}{2901}} = 340 \]

that was distributed proportionally according to the population of each ward.

**3.4.2 Sampling Technique**

This study used a stratified sampling technique. The sub county was stratified into 6 strata (wards). This research study adopted systematic sampling procedure in which every 3rd member was selected after selecting the first through simple random sampling. The researcher preferred this procedure because it was representative of population and more precise (Kothari, 2004). A sample of 340 SMEs was selected from the target population of 2,901.

**3.5 Research Instruments**

A research data collection instrument is a tool used to gather information in a study. These include; questionnaires, face to face interviews, telephone interviews and observations, amongst others. Mugenda (2003) defines a questionnaire as a list of standard questions that fit a particular research study. Primary data was obtained by use of structured questionnaire containing both open-ended and closed questions. The questionnaire was divided in two sections. The first section contained general information about the business and those operating the business. The second part was specific to access to credit and performance of SMEs in accordance to the objectives of the study.
The questionnaire was administered to the Managers/owners of the sampled SME entrepreneurs. The researcher engaged 6 research assistants in addition to the researcher to interview the respondents.

3.5.1 Pilot Testing of Instruments

Pilot testing means finding out if your survey, key information interview guide or observation form will work in the “real world” by trying it out first on a few people. The purpose is to make sure that everyone in a sample understands the questions in the same way. According to Kothari (2004), a pilot study is a mini-version of a full scale study or trial run done in preparation of the complete study. It can be specific pre-testing of research instruments, including questionnaires or interview schedules.

To establish the reliability of instruments, a pilot study was conducted by administering the questionnaires to 20 SME owners. During the survey, the 20 business owners were identified but only 16 were willing to be interviewed the second time.

3.5.2 Validity of Instruments

In order to ensure that the study instruments constructed measured what they were intended to measure the researcher presented the questionnaire to the supervisors who assisted to establish the extent to which it provided adequate coverage of the topic under study. They checked for relevance and freedom from bias of the questionnaire as well as its reliability. Content validity was employed to ensure that the items included in the research instrument were adequate enough to represent the scope of the study topic covering all the four themes on cost of credit, firm characteristics, firm size and collateral security.

Validity is the most basic rule and demonstrates how much an instrument measures what it should gauge (Kothari, 2004). It can be controlled by utilizing a board of people who might judge how well the measuring instrument meets the gauges, however there is no numerical approach to express it. After the endorsement of supervisors the researcher received the instrument and utilized it for information accumulation.
3.5.3 Reliability of Instruments

The researcher ensured that the research instruments used were stable and consistent by carrying out a test-retest on a sample of 20 respondents. The researcher ensured that the same respondents used for piloting were also interviewed during the actual study and a comparison done to determine the consistency of their answers. Reliability refers to consistency and stability of findings to be replicated (Burns and Burns, 2008). According to Kothari (2004), a measuring instrument is reliable if it provides consistent results. Internal consistency reliability was also measured using the Cronbach’s alpha test with a minimum value of 0.7 (70%). A value equal or greater than 0.7 is desirable as it indicates that the research instruments are reliable and therefore suitable to be used for any other study. The Cronbach alpha test assisted the researcher to establish how consistent participants responded to a set of items.

3.6 Data Collection Procedures

The data collection procedure was organized into three sections; pre-fieldwork study where a piloting study was conducted on a sample of 20 respondents after successful completion of the project proposal. Fieldwork study was carried out upon receiving approval from University of Nairobi, NACOSTI and County Director of Education in County Government of Uasin Gishu through interviews of the 340 respondents sampled. Training of the research assistants was conducted out before the fieldwork study commenced. Data was collected by the researcher and research assistants. Answers were recorded there and then before moving to the next respondent for businesses that were not having lots of activities. This was to ensure clarity of some information to the respondent by the researcher to ensure accuracy of data collected. However, for those that had a large customer turnovers, the questionnaires were dropped and collected later in the day. After the fieldwork the data collected was then coded, entered, analyzed and interpreted by aid of the SPSS package for conclusions and recommendations for further studies based on the four themes.
3.7 Data Analysis Techniques

The study employed both qualitative and quantitative approaches. Correlational design was used for analyzing quantitative data. The study involved identifying the existence of correlation between; cost of credit, firm size, nature of firm, and collateral security using correlation coefficients obtained from the correlation matrix. Analysis of data with regard to correlation was based on the null hypothesis of no correlation in line with the objectives of study (Gujarat, 2004).

Descriptive analysis techniques (mean, percentages and frequency distribution) was also carried out to establish the relationship between the dependent variable (performance of SME) and independent variables (access to credit). The analytical results were arrived at by aid of Statistical Package for Social Scientists (SPSS 21).

The expression took the following linear form as proposed by Babajide (2012):

\[ Y = f(X_1, X_2, X_3, X_4) \]

Where;
- \( Y \)  Performance
- \( X_1 \)  Cost of credit
- \( X_2 \)  Firm Characteristics
- \( X_3 \)  Firm Size
- \( X_4 \)  Collateral Security

The linear relationship from the above function was as follows:

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

Where:
- \( \beta_{1,2,3} \)  Beta coefficients which measure the percentage of responsiveness of the dependent variable to changes in the independent variables.
- \( \varepsilon \)  Error term; the error term is assumed to be independently normally distributed with a zero mean and constant variance, that is, \( \varepsilon \sim N(0, \sigma^2) \). The error term represents other factors that may affect performance but are not captures in the model of this study.
Performance was measured as growth in profitability using monthly averages, sales volume and number of employees.

3.8 Ethical Consideration

Ethical approval for this study was sought from University of Nairobi School of Graduate Studies through a letter granted. Further permission was sought from National Commission Science, Innovation and Technology. Permission was also sought from the County Commissioner, County Director of Education, Uasin Gishu County and Uasin Gishu County Directorate of Licensing and Compliance. The local authorities within Turbo Sub County were also informed of the intention of the researcher carrying out a study within their jurisdiction and for their support to be accorded.

Ethical guiding principles were observed where the researcher ensured that selection of the respondents was fair, consent from all respondents was sought before the interviews commenced and finally all the respondents were assured of their information confidentiality. Finally the researcher explained to all the respondents of the importance of the research findings to their businesses. The information given was to contribute hopefully to the existing body of knowledge on access to credit and for policy making.

3.9 Operationalization of the Variables

The researcher used ordinal scale of measurement in the study. Ordinal measurement was used for measuring the research variables by use of non-parametric statistics which included median, mode, rank order correlation of variables and their corresponding indicators. A measurement scale is used to categorize and quantify variables in the study. The advantage is that by use of ordinal scale of measurement answers obtained will be confined to the study and avoids unnecessary responses and diversity of answers outside the main topic.
Table 3.2: Operationalization of Variables

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Types of variables</th>
<th>Indicators</th>
<th>Measurements Scale</th>
<th>Analysis technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine the influence of cost of credit on the performance of SMEs in Turbo sub county, Kenya.</td>
<td>Independent Cost of credit</td>
<td>Interest rate</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td>Loan appraisal fee</td>
<td>Ordinal</td>
<td></td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td>Credit life fee</td>
<td>Ordinal</td>
<td></td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td>To establish the influence of firm characteristics on the performance of SMEs in Turbo sub county, Kenya</td>
<td>Independent Firm characteristics</td>
<td>Age of business</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td>Credit history</td>
<td>Ordinal</td>
<td></td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td>Management Skills</td>
<td>Ordinal</td>
<td></td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td>To establish the influence of firm size on the performance of SMEs in Turbo sub county, Kenya.</td>
<td>Independent Firm size</td>
<td>Number of employees</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td>Sales turnover</td>
<td>Ordinal</td>
<td></td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td>Capital</td>
<td>Ordinal</td>
<td></td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
</tbody>
</table>
To evaluate the influence of collateral security on the performance of SMEs in Turbo sub county, Kenya.

<table>
<thead>
<tr>
<th>Performance of SMEs</th>
<th>Independent Collateral security</th>
<th>Insurance fee</th>
<th>Ordinal</th>
<th>Descriptive; frequency, percentages, mean, median and standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Registration fee</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Property Value</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Profitability Index</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td>Performance of SMEs</td>
<td>Dependent</td>
<td>Sales Turnover</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expenditure</td>
<td>Ordinal</td>
<td>Descriptive; frequency, percentages, mean, median and standard deviation</td>
</tr>
</tbody>
</table>
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents data analysis, interpretation of results and discussions on influence of access to credit and performance of small and medium enterprises in Turbo Sub County. The main objective of the study was to establish the influence of access to credit and performance of SMEs projects in Turbo Sub County.

4.2 Questionnaire Return Rate

The study focused on selected both registered and nonregistered Small and Medium Enterprises. The target population was 2901 SMEs operating within Turbo sub county respondents which consisted of both registered and non-registered SMEs. The study examined a total of 340 respondents across Turbo Sub County, where 340 questionnaires were issued. Of the 340, 296 questionnaires were returned of which 23 were incomplete. This narrowed down to 273 completed questionnaires indicating a return rate of 80% as summarized in the table 4.1. This was sufficient to give reliable conclusion as asserted by Mugenda and Mugenda (2003) that a return rate of 70% or more is sufficient in conducting research.

Table 4.1: Questionnaire Return Rate

<table>
<thead>
<tr>
<th>Questionnaire issued</th>
<th>Questionnaire returned</th>
<th>Incomplete Questionnaires</th>
<th>Complete Questionnaires</th>
<th>Return rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>340</td>
<td>296</td>
<td>23</td>
<td>273</td>
<td>80%</td>
</tr>
</tbody>
</table>

Primary data was collected through both structured and unstructured questionnaires of SMEs of Turbo Sub County Kenya. Additional information about the respondents is as elucidated below;
4.3 Background Information

Background information of the respondent serves a great purpose in giving a grim light as far as the sample population and the research topic is concerned. The following were the findings of the demographic characteristics of respondents as summarized in Tables 4.2 - 4.12.

Table 4.2: Distribution of Respondents by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>153</td>
<td>56.0</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
<td>44.0</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Out of the 273 respondents issued with questionnaire in the study, 153 were male while the remaining 120 were female. This accounted for 56.0% and 44.0% respectively. This information on gender is crucial as it brings about the role played by women in community in line with the sustainable development goals. Traditionally women have been marginalized and culturally could not operate any business. From the data collected one can conclude that women are equally and significantly contributing to economic growth through operation of various businesses.

Table 4.3: Distribution of Respondents by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>17</td>
<td>6.2</td>
</tr>
<tr>
<td>21-30</td>
<td>100</td>
<td>36.6</td>
</tr>
<tr>
<td>31-40</td>
<td>121</td>
<td>44.3</td>
</tr>
<tr>
<td>41-50</td>
<td>30</td>
<td>11.0</td>
</tr>
<tr>
<td>51-60</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

All respondents were willing to disclose their ages without problems. One’s age is always related to experience and understanding of a given issues of interest. Individuals of
different age groups usually have different opinions of a given topic of study and this provides comprehensive data on the topic from all dimensions. Most of the respondent ages ranged between 31-40 years which comprised of 121 (44.3%), 100 (36.6%) were aged between 21 – 30 years, 30 (11%) aged between 41-50, 17 (6.2%) aged below 20 and 5 (1.8%) were aged between 51-60 years.

Table 4.4: Distribution of Respondents by Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>188</td>
<td>68.9</td>
</tr>
<tr>
<td>Not Married</td>
<td>85</td>
<td>31.1</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

188 (68.9%) of the respondents were married and 85 (31.1%) 209 were not married. In an African setup, marriage is associated with responsibility. It could be understood that 68.9% of the respondents were married implying that they had the responsibility of providing for various needs of their families. Financial institutions tend to trust married people as opposed to singles as they are assumed to be disciplined and responsible hence they easily access credit which in turn leads to high business performance.

Table 4.5: Distribution of Respondents by Number of Dependents

<table>
<thead>
<tr>
<th>Number of Dependents</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>189</td>
<td>69.2</td>
</tr>
<tr>
<td>4-8</td>
<td>82</td>
<td>30.0</td>
</tr>
<tr>
<td>8 – 12</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>&gt; 12</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Majority of the SMEs had between 1 and 4 dependents 189 (69.2%), 82 (30.0%) had dependents between 4 and 8, 1 (0.4%) between 8 and 12 and 1 (0.4%) had above twelve dependents. It is arguable that it is difficult for SMEs to totally exclude their households from the business. Most business people use a portion of their business money to finance
household utility. The more the dependents the more is likely to be withdrawn from the business and hence a more negative effect on performance. Number of dependents therefore has a direct effect on performance of SMEs. SMEs with 1 to 4 dependents were likely to perform better than those with more than 4 dependents.

**Table 4.6: Distribution of Respondents by Level of Education**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Primary</td>
<td>26</td>
<td>9.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>147</td>
<td>53.8</td>
</tr>
<tr>
<td>Certificate</td>
<td>7</td>
<td>2.6</td>
</tr>
<tr>
<td>Diploma</td>
<td>61</td>
<td>22.3</td>
</tr>
<tr>
<td>Degree</td>
<td>31</td>
<td>11.4</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Level of education was operationally defined using six intermediate variables mainly never went to school, primary, secondary, certificate, diploma and degree level. There was no problem in the statement of one’s level of education therefore all respondents disclosed this vital information. Ones level of education provides a good picture of how one understands the topic of study. Furthermore education level can provide a clue on how individuals are willing to contribute to the development of research knowledge on a given area. Majority of the respondents had a secondary level of education. This was ascertained by 147(53.8%) of the respondents. 61(22.3%) had diploma qualification, 31 (11.4%) had a bachelors’ degree, 26(9.5%) had primary level of education and 1 (0.4) never went to school.
Table 4.7: Distribution of Respondents by Type of Course Taken

<table>
<thead>
<tr>
<th>Type of Course</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Arts</td>
<td>17</td>
<td>6.2</td>
</tr>
<tr>
<td>Procurement</td>
<td>11</td>
<td>4.0</td>
</tr>
<tr>
<td>Human Resource</td>
<td>43</td>
<td>15.8</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>BM</td>
<td>18</td>
<td>6.6</td>
</tr>
<tr>
<td>N/A</td>
<td>146</td>
<td>53.5</td>
</tr>
<tr>
<td>Others</td>
<td>34</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Another variable of interest sought to examine the type of course of the SMEs. Type of course is important as it helps explain the respondent’s knowledge on important issues of business in Turbo Sub County; in this case it helps explain SMEs awareness on factors that influence access to credit. Majority of the respondents, 146 (53.5%) had not specialized in any course. 34 (12.5%) had done other courses such as pharmacy, diploma in information technology, community health and social works, electronics engineering, poultry farming, tourism management etc. and 4 (1.5%) had done pharmacy.

Table 4.8: Distribution of Respondents by Business Ownership

<table>
<thead>
<tr>
<th>Business Ownership</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>262</td>
<td>96.0</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The researcher sought to find information on business ownership and 262 (96.0%) of the respondents owned their business and 11 (4.0%) did not own the business. 203 (74.4%) stated that the business they run was their main occupation while 70 (25.6%) had other occupation besides the business they run. Understanding business ownership is very important in understanding issues to do with sources of financing, taxation and other related issues like personal commitment to its success.
Table 4.9: Distribution of Respondents by Nature of Business

<table>
<thead>
<tr>
<th>Nature of Business</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Proprietor</td>
<td>244</td>
<td>89.4</td>
</tr>
<tr>
<td>Partnership</td>
<td>29</td>
<td>10.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Majority of the respondents 89.4% (176) were sole proprietors, 10.6 % (29) were in a partnership type of business. This was necessary as it gives an overview on how business decisions are made. Partnerships have their own disadvantages including possibility of breakdown due to disagreements amongst the partners on the cause of action to take. Most of them must operate a joint account and provide a partnership deed for them to access credit. This in most cases discourages such businesses from accessing credit and in the long run affecting their performance negatively.

Table 4.10: Distribution of Respondents by the Type of Business

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>237</td>
<td>86.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9</td>
<td>3.3</td>
</tr>
<tr>
<td>Wholesale</td>
<td>18</td>
<td>6.6</td>
</tr>
<tr>
<td>Other (s)</td>
<td>9</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Retail was the main type of business 237(86.8%), 18(6.6%) were wholesalers, 9(3.3%) were in manufacturing and 9 (3.3%) had other type of businesses other than retail, wholesale and manufacturing. This category was important as it gives a measure of social welfare. Many retail business means many people are in business as a means of survival; that their households may get their daily utilities. This is the kind of business that cannot be easily separated from their business. Most of them lack financial records and hence cannot give a clear account of their profit and loss accounts. They only approximate. Financial institutions tend to shy away from such and hence cannot get credit easily hence affecting their performance.
Table 4.11: Distribution of Respondents by the Business Experience

<table>
<thead>
<tr>
<th>Business Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>27</td>
<td>9.9</td>
</tr>
<tr>
<td>1-3</td>
<td>93</td>
<td>34.1</td>
</tr>
<tr>
<td>4-6</td>
<td>53</td>
<td>19.4</td>
</tr>
<tr>
<td>7-9</td>
<td>35</td>
<td>12.8</td>
</tr>
<tr>
<td>10-12</td>
<td>20</td>
<td>7.3</td>
</tr>
<tr>
<td>&gt;12</td>
<td>45</td>
<td>16.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Business experience is very important in the success of any business. The study established that 34.1% (93) of the SMEs had between one and three years of experience. 19.4% (53) had between 4 and 6 years business experience. 16.5% (45) had more than 12 years of business experience. 12.8% (35) had between 7-9 years of business experience, 9.9% (27) had less than one year and 7.3% (20) had between 10 and 12 years of business experience. It is a common phenomenon that having been in business for more than one year means that you have at least seen a business cycle of a year and you are in a position to make decisions to access credit based on the period in which you can easily repay the credit. Businesses that have more business experience are likely to access loans faster than their young counterparts.

Table 4.12: Distribution of Respondents by the Number of Employees

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2</td>
<td>51</td>
<td>18.7</td>
</tr>
<tr>
<td>2</td>
<td>61</td>
<td>22.3</td>
</tr>
<tr>
<td>More than 2</td>
<td>138</td>
<td>50.5</td>
</tr>
<tr>
<td>None</td>
<td>23</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Finally the researcher was interested in the number of employees each SMEs had and the findings are 138 (50.5%) had more than two employees. 61(22.3%) had 2 employees,
51 (18.7%) had less than two employees and 23 (8.4%) had no employees. Businesses with more employees are likely to be stable than those with less because they can be in a position to sustain the employee wages. Such businesses are said to be performing well and expanding and hence need more human resources to carry out the business activities. Financial institutions tend to trust such businesses and hence make available to them finances more easily than those with little or no employees other than the owner.

4.4 Descriptive Analysis for the Study Variables

To establish the responses opinion on independent and dependent factors, the responses were tabulated descriptively where measures of central tendency were used to rank them as per the number of positive responses. According to Gujarat (2004), the standard deviation represents the amount of deviation from the mean, (the smaller the standard deviation the more accurate future predictions may be, because there is less variability). The descriptive analysis and ranking is as below;

4.4.1 Cost of Credit and Performance of Small and Medium Enterprises

On analyzing access to credit and performance of SMEs in Turbo Sub County Kenya this study sought to establish the influence of interest rate, loan insurance fee, loan application fee, collateral registration fee, collateral insurance fee and repossession fees as the contributing indicators to the total cost of credit. The results of the study are as presented in table 4.13;

Table 4.13: Cost of Credit and Performance of Small and Medium Enterprises

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>interest rate</td>
<td>1.00</td>
<td>2.00</td>
<td>1.3732</td>
<td>.48482</td>
</tr>
<tr>
<td>loan insurance fee</td>
<td>1.00</td>
<td>2.00</td>
<td>1.9282</td>
<td>.25873</td>
</tr>
<tr>
<td>loan application fee</td>
<td>1.00</td>
<td>2.00</td>
<td>1.7416</td>
<td>.43879</td>
</tr>
<tr>
<td>collateral insurance fee</td>
<td>1.00</td>
<td>2.00</td>
<td>1.9282</td>
<td>.25873</td>
</tr>
<tr>
<td>collateral registration fee</td>
<td>1.00</td>
<td>2.00</td>
<td>1.9282</td>
<td>.25873</td>
</tr>
<tr>
<td>repossession fee</td>
<td>1.00</td>
<td>2.00</td>
<td>1.9282</td>
<td>.25873</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>1.8046</td>
<td></td>
</tr>
</tbody>
</table>
The results findings indicated that Collateral registration fee, loan insurance fee, collateral insurance fee and repossession fee with a mean of 1.9282 and standard deviation of 0.25873 were ranked first. Loan application fees with a mean of 1.7416 and standard deviation of 0.43879 was ranked second. The best (lowest) interest in the market with a mean of 1.3732 and standard deviation of 0.48482 was ranked third. The respondents were asked what factors they considered while trying to access the loan. From these findings it is evident that most SMEs were familiar with collateral registration fees, loan insurance fees and collateral insurance fees which were making the cost of accessing credit to be an expensive affair and also having an influence of how their businesses performed.

4.4.2 Firm Characteristics and Performance of Small and Medium Enterprises

Table 4.14 presents the results of the study findings on access to credit and performance of SMEs as guided by firm characteristics as one of the research variables.

Table 4.14: Firm Characteristics and Performance of Small and Medium Enterprises

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit history not a requirement</td>
<td>1.00</td>
<td>2.00</td>
<td>1.9139</td>
<td>.28122</td>
</tr>
<tr>
<td>Age of business</td>
<td>1.00</td>
<td>2.00</td>
<td>1.9091</td>
<td>.28817</td>
</tr>
<tr>
<td>Over indebtedness</td>
<td>1.00</td>
<td>5.00</td>
<td>3.5921</td>
<td>.90964</td>
</tr>
<tr>
<td>Credit History</td>
<td>1.00</td>
<td>5.00</td>
<td>3.8867</td>
<td>.90370</td>
</tr>
<tr>
<td>CRB status</td>
<td>1.00</td>
<td>5.00</td>
<td>3.8980</td>
<td>.86984</td>
</tr>
<tr>
<td>Managerial competence</td>
<td>1.00</td>
<td>5.00</td>
<td>4.0850</td>
<td>.90681</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>3.2141</td>
<td></td>
</tr>
</tbody>
</table>

From the results analysis managerial competence had a mean of 4.0850 and standard deviation of 0.90681 was ranked first implying that most financial institutions were more interested on the managerial competences of the entrepreneurs running those enterprises.
and also the credit reference bureau status of the borrowers which had a mean of 3.8980
and standard deviation of 0.86984 before advancing credit to these enterprises. Credit
history came in third with a mean of 3.8867 and standard deviation of 0.90370. Over
indebtedness was ranked fourth with a mean of 3.5921 and standard deviation of 0.90964.
The results findings indicate that credit history of a business was not a major requirement
that lenders were focusing on and therefore it came in fifth with a mean of 1.9139 and a
standard deviation of 0.28122. Age of the firm was ranked sixth with a mean of 1.9091
and standard deviation of 0.28817.

### 4.4.3 Firm Size and Performance of Small and Medium Enterprises

Upon analyzing influence of firm size on the performance of SMEs in Turbo Sub County,
Kenya, the study results were as indicated in table 4.15

**Table 4.15: Firm Size and Performance of Small and Medium Enterprises**

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>size of business</td>
<td>1.00</td>
<td>2.00</td>
<td>1.5458</td>
<td>.49881</td>
</tr>
<tr>
<td>own capital</td>
<td>1.00</td>
<td>2.00</td>
<td>1.5788</td>
<td>.49467</td>
</tr>
<tr>
<td>sales turnovers</td>
<td>1.00</td>
<td>3.00</td>
<td>1.5604</td>
<td>.51182</td>
</tr>
<tr>
<td>number of employees</td>
<td>1.00</td>
<td>2.00</td>
<td>1.5018</td>
<td>.50091</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>1.5467</td>
<td></td>
</tr>
</tbody>
</table>

The results indicates that Own capital invested in the business was ranked first with a
mean of 1.5788 and standard deviation of 0.49467 as the most essential requirement for
any financial institution considers before lending. This result clearly shows that before
any lender advanced credit to their client they should be able to understand the capital
ownership structure of that business so that they do not end up funding the business more
than its core capital. Sales turnovers with the mean of 1.5604 and standard deviation of
0.51182 was ranked came in a second most important aspect of any financial institution
considers before giving credit to SMEs. Size of business was ranked third with a mean
1.5458 and standard deviation of 0.49881 while number of employees was ranked last
with the mean of 1.5018 and standard deviation of 0.50091.
4.4.4 Collateral Security and Performance of Small and Medium Enterprises

The researcher sought to establish the influence of collateral security and the performance of SMEs in Turbo Sub County, Kenya. Collateral security was operationalized into a number of indicators so as to get the grim light of how collateral security influences the performance of the SMEs. The results of the findings are shown in Table 4.16

Table 4.16: Collateral Security and Performance of Small and Medium Enterprises

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>they do not take collateral</td>
<td>1.00</td>
<td>2.00</td>
<td>1.0813</td>
<td>.27401</td>
</tr>
<tr>
<td>collateral requirement</td>
<td>1.00</td>
<td>3.00</td>
<td>2.0909</td>
<td>.99825</td>
</tr>
<tr>
<td>favorable collateral insurance terms</td>
<td>1.00</td>
<td>2.00</td>
<td>1.0813</td>
<td>.27401</td>
</tr>
<tr>
<td>collateral requirement</td>
<td>1.00</td>
<td>2.00</td>
<td>1.0813</td>
<td>.27401</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>1.3337</td>
<td></td>
</tr>
</tbody>
</table>

The results indicates that collateral requirement was ranked first with a mean of 2.0909 and standard deviation of 0.99825. The findings indicate clearly that most financial institutions considered presence of collateral security as an important aspect before lending money to SMEs. Firms that provided collateral could easily access credit compared to those that lacked collateral security. From the findings it is also evident that not all firms were stringent on the collateral requirement and that some FIs had favorable collateral security terms which favored the small and medium enterprises within Turbo Sub County and thus the inability to provide collateral, favorable collateral insurance terms and collateral requirement as factors considered before access to the loan were ranked second with a mean of 1.0813 and standard deviation of 0.2701 as indicated in the table above.

4.4.5 Performance of Small and Medium Enterprises

The study sought to examine the response of the respondents on performance of SMEs who had accessed credit. Performance was operationalized into; number of employees, sales volume, profitability. The mean which is a measure of central tendency was used to
identify among the components of performance which was ranked first and last. Results are as shown in table 4.17

**Table 4.17: Performance of Small and Medium Enterprises**

<table>
<thead>
<tr>
<th></th>
<th>n= 273</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of employees</td>
<td>1.00</td>
<td>3.00</td>
<td>1.9952</td>
<td>1.00239</td>
<td></td>
</tr>
<tr>
<td>sales volume</td>
<td>1.00</td>
<td>2.00</td>
<td>1.0813</td>
<td>.27401</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>1.00</td>
<td>2.00</td>
<td>1.0813</td>
<td>.27401</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>1.3859</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the study findings the results indicates that number of employees, sales volume and profitability were the main measures of performance respectively. Firms which had the highest number of employees indicated growth and performance of the enterprise and therefore were able to access credit with ease and improve its performance growth. Number of employees therefore with a mean of 1.9952 and standard deviation of 1.00239 was ranked first. Sales volume and profitability index had a mean of 1.0813 and standard deviation of 0.27401 were ranked second.

**4.5 Correlation analysis of Performance Versus Access to Credit**

Correlation analysis of variable under study was conducted to establish where there was any significant relationship between dependent and independent variables under study. Correlation is a powerful tool to measure presence of a relationship between two or more variables though it may not be able to measure the cause of the relationship. It tries to establish whether there is positive or negative relationship between variable and using statistical correlation coefficient determine the strength of this relationship. This was then tested for significance at 1% (0.01) and 5% (0.05). The result of the analysis is tabulated in table 4.18
Table 4.18: Correlation between Access to Credit and Performance

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
<th>Cost of Credit</th>
<th>Firm characteristics</th>
<th>Firm Size</th>
<th>Collateral Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Pearson</td>
<td>-.554**</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>-.554**</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Cost of Credit</td>
<td>Pearson</td>
<td>.105</td>
<td>.053</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.082</td>
<td>.382</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm characteristics</td>
<td>Pearson</td>
<td>.127*</td>
<td>-.341**</td>
<td>.260**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.035</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>Pearson</td>
<td>-.451**</td>
<td>.446**</td>
<td>.097</td>
<td>.049</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.112</td>
<td>.419</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level.
*. Correlation is significant at the 0.05 level.

The study involved identifying the existence of relationship between; cost of credit, firm size, and firm characteristics and collateral security using correlation coefficients obtained from the correlation matrix. Analysis of data with regard to correlation was based on the null hypothesis of no correlation in line with the objectives of study.

The result findings on the first objective on the influence of cost of credit and performance of SMEs indicates there is a strong negative correlation between cost of credit and performance of SMEs in Turbo Sub County, Kenya \((r = -0.554)\). From the
results in Table 4.18, the study therefore rejects the null hypothesis of no correlation between cost of credit and performance of SMEs in Turbo Sub County, Kenya at 1% and 5% level of significance with the correlation between cost of credit and performance of SMEs being significant at 1% and insignificant at 5% thus $r \neq 0$. This study agrees with findings of Shirley and Namusonge (2016) that high interest rates increase the cost of credit which in turn discourages SMEs from borrowing reducing the accessibility of credit among them. The current study further agrees with the finding of Bawuah et al., (2014) and Anyieni (2014) that there is a negative and significant relationship between interest charged on loans and performance of micro businesses; cost of credit is a major determinant of credit accessibility.

The results findings on the second objective of firm characteristics and performance of SMEs show a weak positive correlation between firm characteristics and performance of SMEs in Turbo Sub County, Kenya ($r = 0.105$). From the results in Table 4.8, the study therefore rejects the null hypothesis of no correlation between firm characteristics and performance of SMEs in Turbo Sub County, Kenya at 1% and 5% level of significance with the correlation between firm characteristics and performance of SMEs being insignificant at 1% and 5% thus $r \neq 0$. This study findings differs with the findings of Hyytinen and Pajarinnen (2008) that found a negative relationship between the age of a firm and access to credit. Firms that have been in operations for less than two years were more likely to be denied credit by financial institutions than their older counterparts hence affecting their rate of making profits. This in turn had a long term negative effect on the performance of the SME entrepreneurs. This study agrees with the findings of Harvie (2011) that there is significant negative relationship between young firms and access to credit and hence performance. On the other hand it disagrees with the findings of Bandyopadhyay (2007) that there is no relationship between ages of a firm, creditworthiness and hence access to finance.

The study findings on the third objective of firm size and performance of SMEs showed that there is a weak positive correlation between firm size and performance of SMEs in Turbo Sub County, Kenya ($r = 0.127$). From the results in Table 4.8, the study therefore
rejects the null hypothesis of no correlation between firm size and performance of SMEs in Turbo Sub County, Kenya at 1% and 5% level of significance with the correlation between firm size and performance of SMEs being significant at 5% and insignificant at 1% thus $r \neq 0$. This was in agreement with Woordeckers and Steijvers (2006) who asserted that size of firm and age are more likely to be more important determinants than collateral protection and lender characteristics. The current study however, disagrees with the findings of both Hyytinen and Pajarinnen (2008) and Phuong (2012) that firm size has no effect to credit access hence performance of SMEs.

Lastly collateral security and performance of SMEs indicated is a weak negative correlation between collateral security and performance of SMEs in Turbo Sub County, Kenya ($r = -0.451$). From the results in Table 4.8, the study therefore rejects the null hypothesis of no correlation between collateral security and performance of SMEs in Turbo Sub County, Kenya at 1% level of significance with the correlation between collateral security and performance of SMEs being significant thus $r \neq 0$. This study is in tandem with the findings of Leitner (2006) that collateral is a primarily important factor in determining external financing and investment. The study further agrees with Chen (2001); Hall and Fang, (2004) that increases in a firm’s collateral value relax the credit constraint faced by the firm, enabling the firm to borrow more. Finally the current study affirms that access to collateral positively improves firm performance, as with business transparency, preparation of business plans, the skill level of the entrepreneur and credit rating of the business.

4.6 Reliability Analysis for the Study Variables

Confirmatory factor analysis was first conducted on the data to check reliability of the research instruments to ensure they were consistent with the study. The study established that the variables were highly consistent with study. The Cronbach coefficients alpha was at 0.906(90.6%) which was above the minimum required value of 0.7(70%). This ascertained that the research tools were reliable and hence further analysis could be done.
Table 4.19: Reliability Analysis of Each Variable

<table>
<thead>
<tr>
<th>Item</th>
<th>Cronbach’s Alpha</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of credit</td>
<td>.946</td>
<td>18</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.902</td>
<td>5</td>
</tr>
<tr>
<td>Firm Characteristic</td>
<td>.885</td>
<td>5</td>
</tr>
<tr>
<td>Collateral Security</td>
<td>.892</td>
<td>2</td>
</tr>
<tr>
<td>Composite</td>
<td>.906</td>
<td>30</td>
</tr>
</tbody>
</table>

4.7 Multiple Regression Analysis

Multiple regression analysis is a powerful technique used for predicting the unknown value of a variable from the known value of two or more variables- also called the predictors. In this case, multiple regression analysis helped to predict performance from cost of credit, firm characteristics, firm size and collateral security.

4.7.1 Model Summary

The results from multiple regression analysis are as displayed in table 4.20

Table 4.20: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R</th>
<th>Std. Error of the Square</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.513(^a)</td>
<td>.263</td>
<td>.248</td>
<td>1.98305</td>
<td>1.598</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), collateral security, firm size, firm characteristics, cost of credit
b. Dependent Variable: PERFOM

From table 4.20, the value of R-square is 0.263 which indicates that the model explains 26.3% of performance from the predictor variables (i.e. collateral security, firm size, firm characteristics and cost of credit). The remaining 73.7% is explained by other factors not determined within this model (error term). The Durbin-Watson's d tests the null hypothesis that the residuals are not linearly auto-correlated. The value of Durbin-Watson (DW) was at 1.598 which indicates no autocorrelation among the variables. According to
Gujarat (2004) a DW of 2 means the error term is not correlated (the limit $2 \pm 0.5$) is acceptable.

### 4.7.2 Analysis of Variance

Analysis of variance was employed to measure the differences in means between performance and its predictor variables. The results are shown in the table 4.21

**Table 4.21: ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>285.926</td>
<td>4</td>
<td>71.482</td>
<td>18.177</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>802.227</td>
<td>204</td>
<td>3.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1088.153</td>
<td>208</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), collateral security, firm size, firm characteristics, cost of credit

b. Dependent Variable: PERFOM

The F-ratio was 18.177 at 4 degree of freedom which is the variable factor. This represented the effect size of the regression model and the model is significant at 99% confidence level (p=0.000) indicating that performance can be predicted from the aforementioned independent variables.
4.7.3: Coefficient Analysis

Coefficient analysis from multiple regression analysis are as shown in table 4.22

Table 4.22: Coefficient Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized</td>
<td>Standardized Coefficients</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-5.435</td>
<td>7.010</td>
<td>-.775</td>
<td>.439</td>
</tr>
<tr>
<td>Cost of credit</td>
<td>.100</td>
<td>.109</td>
<td>.075</td>
<td>.916</td>
</tr>
<tr>
<td>Firm</td>
<td>-.122</td>
<td>.123</td>
<td>-.074</td>
<td>-.993</td>
</tr>
<tr>
<td>Characteristics</td>
<td>Firm size</td>
<td>-.208</td>
<td>-.267</td>
<td>-4.268</td>
</tr>
<tr>
<td></td>
<td>2.826</td>
<td>.785</td>
<td>.310</td>
<td>3.598</td>
</tr>
</tbody>
</table>

The model was found to be statistically significant. Further, the regression model can be outlined as follows;

\[ Y = -5.435 + 0.1X_1 - 0.122X_2 - 0.208X_3 + 2.826X_4 + 0.737 \]

Firm size and collateral security significantly influences access to credit which in turn affects the performance of the SMEs in Turbo Sub County with a p value of .000 each. Cost of credit and firm characteristics does not significantly affect the performance of SMEs in Turbo Sub County. The p values were .360 and .322 respectively.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions and makes recommendations based on the study findings in chapter four. In addition, suggestions for further study in specific area related to the variables under study are made.

5.2 Summary of the Findings

This is the summary of findings on the demographic information of the respondents and descriptive analysis of the study variables. The information on background of the study include; gender, age, marital status, dependents, level of education, type of business, year of business establishment, business experience and number of employees.

5.2.1 Demographic Characteristics of the Respondents

273 respondents were issued with questionnaire in the study, 56% of the respondents were male while 44% were female. 68.9% of the respondents were married while 31.1% were not married. Majority of the SMEs were in a monogamy type of marriage accounting for 64.1%, 6.6% were in a polygamous type of marriage and 29.3% of the respondents did not disclose the type of marriage they were in. 69.2% of the interviewed SMEs had between 1 and 4 dependents, 30.0% had dependents between 4 and 8, 0.4% between 8 and 12 and 0.4% had above twelve dependents.

Majority of the respondents had a secondary level of education. This was ascertained by 53.8% of the respondents. 22.3% had diploma qualification, 11.4% had a bachelors’ degree, 9.5% had primary level of education and 0.4% never went to school. Majority of the respondents, 53.5% had not specialized in any course. 12.5% had done other courses such as pharmacy, diploma in information technology, community health and social works, electronics engineering, poultry farming, tourism management etc. and 1.5% had done pharmacy. Of the respondents interviewed 96. 0% owned their business and 4.0% did not own the business. 74.4% stated that the business they run was their main occupation while 25.6% had other occupation besides the business they run. Most of the
respondents 89.4% were sole proprietors, 10.6% were in a partnership type of business. Retail was the main type of business at 86.8%, 6.6% were wholesalers, 3.3% were in manufacturing and 3.3% had other type of businesses other than retail, wholesale and manufacturing.

34.1% of the SMEs had between one and three years of experience. 19.4% had between 4 and 6 years business experience. 16.5% had more than 12 years of business experience. 12.8% had between 7-9 years of business experience, 9.9% had less than one year and 7.3% had between 10 and 12 years of business experience. Majority of the SMEs had their businesses established after 2011 55.3%, 31.1% were established before 2011 and only 13.6% were established in 2011. 50.5% of the SMEs had more than two employees. 22.3% had 2 employees, 18.7% had less than two employees and 8.4% had no employees.

5.2.2 Cost of Credit and Performance of Small and Medium Enterprises

Collateral registration fee, loan insurance fee, repossession fee, collateral insurance fee were ranked first with a mean of 1.9282. The best (lowest) interest in the market and commissioning fee were ranked second with a mean of 1.9043. Lack of existence of other costs of credit was ranked third with a mean of 1.8565. Loan application fee was ranked fourth with a mean of 1.7416. Late payment fee was ranked fifth with a mean of 1.3923. Interest rate had a mean of 1.3732 and was ranked sixth. The respondents were asked what factors they considered while trying to access the loan and loan interest rate was ranked seventh with a mean of 1.0957. The findings shows that SMEs were keener on collateral registration fees, loan insurance fees and collateral insurance fees as the most important factors while accessing credit. The regression analysis on cost of credit and performance of SMEs found out that \( r = -0.554 \) indicating that there was a strong negative and significant relationship between cost of credit on performance of small and medium enterprises. These findings showed that the higher costs incurred during accessing credit had a negative influence on performance of the SME businesses.
5.2.3 Firm Characteristics and Performance of Small and Medium Enterprises

Managerial competence was ranked first with a mean of 4.0850, CRB status was ranked second with a mean of 3.8980. Credit history came in third with a mean of 3.8867. Over indebtedness was ranked fourth with a mean of 3.5921. Average daily sales were ranked fifth with a mean of 3.4115. Stock bought in a week was ranked sixth with a mean of 2.3971. Credit history being not a requirement came in seventh with a mean of 1.9139 while age of the business firm was ranked eighth with a mean of 1.9091. The findings shows that managerial competence was an important element in measuring a firm’s performance. From the regression findings \( r = 0.105 \) indicating that there was a weak positive and insignificant relationship between firm characteristics and performance of SMEs. Managerial competences, credit history and age of the business had a positive influence on a firm’s performance.

5.2.4 Firm Size and Performance of Small and Medium Enterprises

Own capital injection was ranked first with a mean of 1.5788. Sales turnovers came in second with the mean of 1.5604. Size of business was ranked third with a mean 1.5458. Number of employees was ranked last with the mean of 1.5018. The findings indicate that the capital injected in the business was a very important measure of the size of the firm and the amount of loan a firm could access from a financial institution. The regression findings indicate \( r = 0.127 \) to mean that there was a weak positive and insignificant relationship between firm size and performance of SMEs. The amount of capital injected in the business, the sales turnovers being made and the number of employees working in the firm would positively boost a firm’s chances of accessing credit from financial institutions and hence performance of the firm.

5.2.5 Collateral Security and Performance of Small and Medium Enterprises

Collateral security was operationalized into a number of indicators so as to get the grim light of how collateral security influences the performance of the SMEs. Collateral requirement was ranked first with a mean of 2.0909. The inability to accept collateral, collateral insurance terms and collateral requirement as factors considered before access to the loan were ranked second with a mean of 1.0813. The study found out that presence
of collateral security by a firm increased their chances of receiving credit and improving their performance. The regression findings showed \( r = -0.451 \) implying that there existed a weak negative but significant relationship between collateral security and performance of small and medium enterprises. Firms that lacked collateral security to pledge to financial institutions were significantly affected in accessing credit and hence their performance also affected within Turbo Sub County Kenya.

5.3 Conclusion

From the foregoing findings, the following conclusions were drawn from the study. Collateral registration fee, loan insurance fee, repossession fee, collateral insurance fee influences access to credit. Lowest interest in the market and commissioning fee, lack of existence of other costs of credit, loan application fee, late payment fee and loan interest rate are some of the key proponents of cost of credit and they influence access to credit by SMEs. Over indebtedness, CRB status, managerial competence, credit history and ages of the business are some of the major firm characteristics that influence access to credit. The main sources of financing used by SMEs are banks, micro finances, group financing and the use of Sacco’s although it had not been embraced so much by the SMEs. It was evident that the respondents were given reason(s) for the reduction in amount requested for from the financial institutions. Finally loan amount was the main factor considered while trying to access loan from the financial institutions. Collateral requirement, the inability to accept collateral, collateral insurance terms were the main collateral security issues considered before access to the loan from any financial institutions.

5.4 Recommendations

It is evident that several factors affect access to credit. SMEs faces numerous challenges, which if not redressed will seriously undermine the performance of SMEs businesses.

The rationale behind the emergence of the micro finance sector was to ensure financial inclusivity. From the findings of the study it was evident that the concept of micro financing had not been embraced fully by the SMEs. The researcher recommends that micro finance institutions should work on publicity and other modes of information
dissemination. Terms and condition of their loan products and services should be custom tailored to meet the needs of their clientele. This will in turn increase access to credit by the SMEs. From the findings it was evident that majority of the SMEs did not have enough assets to pledge as security therefore financial institutions should educate SMEs on various forms of collateral that are acceptable by the financial institutions before extending credit to the SMEs. Financial institutions should come up with modalities and other forms of collateral convenient to SMEs other than purely assets that SMES’ can use as collateral as they seek financial assistance.

5.5 Suggestions for Further Studies

From the findings of this study cost of credit, firm size, firm characteristics and collateral security explained 26.3% chance in performance of the SMEs. Logically it means that there are other predictor variables of performance other than the four listed above. The researcher recommends a further research to be carried out on factors that influence access to credit, and performance of small and medium enterprises using other predictor variables other than cost of credit, firm size, firm characteristics and collateral security.
REFERENCES


APPENDICES

Appendix I: Questionnaire

The purpose of this questionnaire was to collect data for purely academic purposes. The study sought to determine access to credit and performance of small and medium enterprises in Turbo Sub County Kenya. All information was treated as confidential.

SECTION A: GENERAL INFORMATION

1. What is your gender?
   Male [ ]  Female [ ]

2. What is your age?
   < 20 [ ]  21-30 [ ]  31-40 [ ]  41-50 [ ]  51-60 [ ]  > 60 [ ]

3. What is your marital status?
   Married [ ]  Not married [ ]
   If married in 2 above, what type of marriage are you in?
   Monogamy [ ]  Polygamy [ ]  Others [ ]

4. How many dependents do you have?
   1-4 [ ]  4-8 [ ]  8-12 [ ]  >12 [ ]

5. What is the level of your education?
   None [ ]  Primary [ ]  Secondary [ ]  Certificate [ ]  Diploma [ ]  Degree [ ]  Masters [ ]
   If 5 above is certificate, diploma, degree or masters, clarify the course
   ...........................................................................................................................

6. Do you own this business?
   Yes [ ]  No [ ]
   a. If yes in 6 above, is this your main occupation?
      Yes [ ]  No [ ]
   b. If No in 6 (a) above, what other occupation do you have and how much income does it earn?
      ...........................................................................................................................
      ...........................................................................................................................
7. Describe the nature of your business
   Sole proprietor [ ] Partnership [ ] Company [ ]

8. What type of business are you engaged in?
   Retail [ ] Manufacturing [ ] Wholesale [ ] Construction [ ]
   Other [ ] Specify …………………………………

9. What is your total number of years of business experience (here and elsewhere)?
   <1 [ ]  1-3 [ ]  4-6 [ ]  7-9 [ ]  10-12 [ ]  >12 [ ]

10. When was this business established? …………………………………

11. How many employees do you have currently? ……………………………

SECTION B: ACCESS TO FINANCE AND PERFORMANCE OF SMEs

1. Where did you get your first capital?
   Savings [ ] Family [ ] Friend [ ] Shylock [ ] Group [ ] Sacco [ ]
   Microfinance [ ] Bank [ ] Other [ ] specify………………………………

2. How much capital have you invested into the business?
   <10,000 [ ]  10,000-30,000 [ ]  31,000-70,000 [ ]  71,000-150,000 [ ]
   151,000-300,000 [ ]  301,000-500,000 [ ]  501,000-1m [ ]  1m-3m [ ]
   >3m [ ]

3. How much stock do you buy in a week?
   <10,000 [ ]  10,000-30,000 [ ]  31,000-70,000 [ ]  71,000-150,000 [ ]
   151,000-300,000 [ ]  301,000-500,000 [ ]  501,000-1m [ ]  1m-3m [ ]
   >5m [ ]

4. What are your average daily sales?
   <1,000 [ ]  1,001-5,000 [ ]  5,001-10,000 [ ]  10,001-20,000 [ ]
   20,001-30,000 [ ]  >30,000 [ ]

5. Out of the daily sales, what is your approximate percentage profits?
   1-10% [ ]  11-20% [ ]  21-30% [ ]  30-40% [ ]  40-60% [ ]  >60% [ ]
6. In view of 2 above, allocate the capital in terms of its source

- Own [  ]
- Family [  ]
- Friend [  ]
- Shylock [  ]
- Group [  ]
- Sacco [  ]
- Microfinance [  ]
- Bank [  ]
- Grant [  ]

7. What is the major source of your borrowed money other than family, friend and grant?

- Shylock [  ]
- Group [  ]
- Sacco [  ]
- Microfinance [  ]
- Bank [  ]

8. In view of 4 above why did you choose the institution over the others?

- They take a short time to process loans. [  ]
- They do not take collateral. [  ]
- They accept any collateral. [  ]
- No guarantors are required. [  ]
- They have favorable collateral insurance terms. [  ]
- They have flexible repayment period. [  ]
- They have the best (lowest) interest in the market. [  ]
- They do not have any other costs to credit. [  ]
- They give the requested loan amounts. [  ]
- They give financial advice to the business. [  ]
- You do not need savings to access a loan. [  ]
- Age of business not a requirement [  ]
- Amount of own capital not important [  ]
- Education requirements not necessary [  ]
- Credit history not a requirement [  ]

9. Are you aware of the following costs paid when accessing a loan?

- Interest rate [  ]
- Loan insurance fee [  ]
- Late payment fee [  ]
- Loan application fee [  ]
- Collateral insurance fee [  ]
- Collateral registration fee [  ]
- Commissioning fee (lawyer) [  ]
- Repossession fee [  ]

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10. Were the costs in 6 above important factors you considered before borrowing?
   Yes [   ] No [   ]

11. Why did you decide to borrow?
   Working capital [   ] Business assets [   ] Diversification [   ] Medical [   ]
   Home development [   ] School fees [   ] Settle debt [   ]
   Others [   ] specify .................................................................

12. How long did it take to process your loan from the time of application?
   1-5 days [   ] 6-10 days [   ] 11-15 days [   ] 15-20 days [   ] 20-30 days [   ] >30 days [   ]

13. Do you think the period taken to access the loan from (9) above affected your business?
   Yes [   ] No [   ]
   If yes, give a brief explanation.
   Improved [   ] worsened [   ] no effect [   ]

14. Please indicate the amount of loan you have borrowed from each of the sources in 4 above from the first one to the most current.

<table>
<thead>
<tr>
<th>Shylock</th>
<th>Group</th>
<th>Sacco</th>
<th>Microfinance</th>
<th>Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Were you given the exact amount of loan you requested for?
   Yes [   ] No [   ]
   a). If No, indicate the amount you requested for and how much was actually given.

<table>
<thead>
<tr>
<th>Count</th>
<th>Amount requested</th>
<th>Amount given</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   b). Were you given any reason for the reduction in amount given?
   Yes [   ] No [   ]
If Yes, indicate the reasons given:

Size of my business [ ] Over indebtedness [ ] Credit history [ ]
Collateral requirements [ ] Age of business [ ] CRB status [ ] Account turnovers [ ]
Lack of business records [ ] Nature of business [ ] Managerial competence [ ]
Own capital injection [ ] Sales turnovers [ ] Number of employees [ ]

16. What factors did you consider while trying to access the loan?

Loan interest rate [ ] Insurance fee [ ] Loan amount [ ] Collateral requirements [ ]
Any other [ ] Specify ………………………………………

17. Describe the effect of the loan borrowed on the performance of your business in terms of:

Number of employees/ wages
Increased [ ] Decreased [ ] No effect [ ]

Stock levels
Increased [ ] Decreased [ ] No effect [ ]

Sales volume
Increased [ ] Decreased [ ] No effect [ ]

Number of branches
Increased [ ] Decreased [ ] No effect [ ]

Profitability
Increased [ ] Decreased [ ] No effect [ ]

Household welfare
Increased [ ] Decreased [ ] No effect [ ]
18. What other services were you offered by your lender?

   Financial training [ ] Savings services [ ] Education scholarships [ ]

   Others [ ] Specify ……………………………

19. What is your overall assessment in accessing a loan in your region?

   Very easy [ ] easy [ ] average [ ] difficult [ ] very difficult [ ]

Thank you for your time.
Appendix II: University of Nairobi Introduction Letter

UNIVERSITY OF NAIROBI
OPEN, DISTANCE AND e-LEARNING
SCHOOL OF OPEN DISTANCE LEARNING
KISUMU CAMPUS

The Secretary
National Council for Science and Technology
P.O Box 30623-00100
NAIROBI, KENYA

25TH August, 2017

Dear Sir/Madam,

RE: AMUKAYA MARGARET SAKWA - REG NO: L50/84901/2016

This is to inform you that Amukaya Margaret Sakwa named above is a student in the University of Nairobi, Open, Distance and e-learning centre, School of Open and Distance learning, Kisumu Campus.

The purpose of this letter is to inform you that Margaret has successfully completed her Masters Course work and Examinations in the programme, has developed Research Proposal and submitted before the School Board of Examiners which she successfully defended and made corrections as required by the School Board of Examiners.

The research title approved by the School Board of Examiners is: “Access to Credit and Performance of Small and Medium Enterprises in Turbo, Uasin Gishu County, Kenya” The Project is part of the pre-requisite of the course and therefore, we would appreciate if the student is issued with a research permit to enable him collect data and write a report. Research project reflect integration of practice and demonstrate writing skills and publishing-ability. It also demonstrates the learners’ readiness to advance knowledge and practice in the world of business.

We hope to receive positive response so that the student can move to the field to collect data as soon as he gets the permit.

Yours Faithfully

[Signature]
Dr. Stephen Okelo, PhD.
COORDINATOR SCDE - KISUMU CAMPUS

CO-ORDINATOR
15 SEP 2017

KISUMU CAMPUS
Appendix III: Research Authorization Letter

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, +254-20-2234479, 2241348, 3310971, 2219420
Fax: +254-20-3182435, 318249
Email: dp@nacost.go.ke
Website: www.nacost.go.ke
When replying please quote

Ref: No NACOSTI/P/17/45847/20084 Date: 27th November, 2017

Margaret Amukaya Sakwa
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Access to credit and performance of Small and Medium Enterprises in Turbo Sub County Kenya,” I am pleased to inform you that you have been authorized to undertake research in Uasin Gishu County for the period ending 20th November, 2018.

You are advised to report to the County Commissioner and the County Director of Education, Uasin Gishu County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA
MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Uasin Gishu County.

The County Director of Education
Uasin Gishu County.
Appendix IV: Research Permit

**THIS IS TO CERTIFY THAT:**

Ms. Margaret Amukaya Sakwa of Nairobi University, 1131-50100 Kakamega, has been permitted to conduct research in Uasin-Gishu County

on the topic: ACCESS TO CREDIT AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN TURBO SUB COUNTY KENYA

for the period ending: 20th November, 2018

Permit No: NACOSTI/P/17/45847/20084
Date Of Issue: 27th November, 2017
Fee Received: Ksh 1000

3rd Kalowa
Director General
National Commission for Science, Technology & Innovation

**CONDITIONS**

1. The Licence is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licencee shall submit a progress report.
4. The Licencee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licencee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 16697
CONDITIONS: see back page
Appendix V: Map of Turbo Sub-County