

**STRATEGIC DECISION FACTORS INFLUENCING
ACCESS TO CREDIT BY WOMEN OWNED SMALL
AND MEDIUM ENTERPRISES IN NAIROBI COUNTY
KENYA**

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**Strategic Decision Factors Influencing Access to Credit by Women
Owned Small and Medium Enterprises in Nairobi County, Kenya**

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University of Agriculture and Technology**

2021

DECLARATION

This Thesis is my original work and has not been presented for a degree in any other University

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DEDICATION

This research study is dedicated to my close family, particularly my wife Stellah and my sons Royford and Brian, for their patience, understanding, encouragement, and support during the study period.

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LIST OF ABBREVIATIONS AND ACRONYMS

AMFI	Association of Micro Finance Institutions
ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
FI	Financial Institution
GDP	Gross Domestic Product
GOK	Government of Kenya
IFC	International Finance Corporation
ILO	International Labour Organization
KES	Kenya Shillings
KIE	Kenya Industrial Estates Limited
KNBS	Kenya National Bureau of Statistics
KYEOP	Kenya Youth Employment and Opportunities Project
MFI s	Micro Finance Institutions
MPSYGA	Ministry of Public Service Youth and Gender Affairs
MSME	Micro, Small and Medium Enterprise
NGAAF	National Government Affirmative Action Fund
OECD	Organization for Economic Co-operation and Development
SACCO	Savings and Credit Cooperative
SPSS	Statistical Package for Social Sciences
SME	Small and Medium Enterprise
USAID	United States of America International Development
WEF	Women Enterprise Fund

OPERATIONAL DEFINITION OF TERMS

- Access to Credit** The terms ‘access to credit’ refers to the opportunity that enterprises or individuals have right of entry to financial services, including deposit, payment, credit, insurance, and other risk management services. Those enterprises or individuals who involuntarily have none or merely limited access to financial services are referred to as the under banked or unbanked respectively (Claessens& Rojas-Suarez, 2016).
- Affirmative Action Funds** A term that refers to Funds set aside by the government to finance business projects managed by those perceived to be disadvantaged in a society (Baeck, Collins & Zhang, 2014).
- Characteristics** A term that refers to “pertaining to, constituting, or indicating the character or peculiar quality of a person; typical; distinctive (Gao, &Hafsi, 2015).
- Collateral** Something pledged as security for repayment of a loan, to be forfeited in the event of a default. It is a fallback or indemnity (Duarte, Gama &Esperança, 2017).
- Financial Inclusion** Refers to access to and use of financial services by a large share of household and enterprise population in a society (Musyimi, 2012).
- Medium Enterprise** A firm that has 50 to 100 employees or has asset value ranging from KES 100 million to KES 360million(Matavire & Brown, 2013).
- Micro Enterprise** A business operating on a very small scale, especially one with a sole proprietor and fewer than 10 employees (David & Baron, 2013)

- Networking** Socioeconomic activity by which business people meet to form business relationships and to recognize, create, or act upon business opportunities, share information and seek potential partners for ventures (Mitchell, Schlegelmilch&Mone, 2016).
- Small Enterprise** An enterprise that has employed between 10 and 50 staff (Sommer & Lutz, 2015)
- Strategic Decision Making** The ability of small and medium enterprises' designated personnel or owner to make decisions on how to obtain and use credit facilities that are affordable, usable, and meet their financial needs (Musamali&Tarus, 2013).
- Strategic Planning** A framework that helps a firm measure and evaluate its progress by directing and controlling its business activities (Awino, 2013). Strategic planning concerns how an organization makes sense of where it is going, and the path it will adopt to get there (Wolf & Floyd, 2017).
- Strategic Risk Management** is a process for identifying, assessing and managing risks and uncertainties, affected by internal and external events or scenarios, that could inhibit an organization's ability to achieve its strategy and strategic objectives with the ultimate goal of creating and protecting shareholder and stakeholder value (Mark, Frigo&Richard, 2015).
- Strategic Networking** is the ability to marshal information, support, and resources from one sector of a network to achieve results in another (Ibarra & Hunter, 2015).

ABSTRACT

The purpose of this study was to evaluate the strategic decision factors influencing access to credit by Women Owned Small and Medium Enterprises in Nairobi County, Kenya. The specific objectives were to evaluate individual and joint effect of characteristics of business owners, networking, collateral and risk management. The moderating influence of legal and regulatory factors on the relationship between strategic decision factors and access to credit by the women owned SMEs was investigated. The research was anchored on four theories that support each variable investigated namely; human capital theory, theory of social capital, resource-based view and new institutional theory. The study was based on the positivist research philosophy, while the research adopted a cross-sectional descriptive research design. The questionnaire formed the main data collection instrument and the same was piloted on 37 firms that did not participate in the final research. The population of the study was 6,145 registered women owned SMEs that operated in Nairobi City County in the year 2018. These firms formed both the unit of analysis as well as the population since only one respondent the owner, was targeted. Sloven's formula was adopted to arrive at a sample of 375 but to take care of non-responsive firms, a total of 420 questionnaires were distributed. Out of the distributed questionnaires, 370 were successfully filled and collected. The data was tested for normality and on all the measures employed, namely; autocorrelation, multicollinearity and homogeneity, suggest that the data used for analysis was normal. In analyzing the data, the qualitative data was categorized into five themes capturing the four objectives and the moderating factor. The findings reveal that owner characteristics, as proxied by entrepreneurial skills and the owner experience, positively and significantly influenced the capacity of the owner to access credit. The nature of the collateral was equally found to influence access to credit by the women owned SMEs. The information sharing construct was however found not to determine accessibility of credit by the owners. Further, the findings reveal that the ability of women owned SMEs to avail collateral was not enough to guarantee access to credit but rather the type of asset, with immovable assets being the main determining factor. Finally, the results revealed that risk management, which is measured by previous history in loan repayment and the existence of good governance in the firm, had a negative influence on access to credit by women owned SMEs. In terms of the moderating influence of the legal and regulatory environment in the SME sector, the results revealed that an enabling regulatory and legal environment improved accessibility of credit and this implies that tailor made initiatives by the government, such as affirmative action enhanced the ability of the women owned SMEs to access credit. From the findings, it is concluded that one of the ways in which women owned SMEs can improve their credit access is by coming up with strategic decisions that are intentionally aimed at improving the owner and business characteristic, increase collateral base and also develop a network that can become a source of information. The study recommends that the women owned business firms should focus in building internal staff capacity in managing SMEs. All these steps are aimed at reducing the information assymetry. At the same time, the reserach recommends that the governmnet establishes affirmative action finance institution that would use group guarantee financing for more women owned SMEs to access finances for their businesses.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The study's aim was to examine at the strategic decision factors that influence women-owned small and medium enterprises' access to credit in Nairobi County, Kenya. This chapter examined issues that influence women-owned enterprises' access to credit from a global, regional, and local perspective. Women-owned enterprises are a significant component in determining the living conditions of many households in developing nations, according to empirical studies. This chapter elaborates on the issue statement, lists the study objective, and investigates the research hypotheses. In addition, the significance of the study, scope and limitation of the study are discussed in the chapter.

Women-owned small and medium enterprises (SMEs) are regarded as one of the engines for accomplishing a nation's economic growth objectives due to their presence in both rural and urban areas. On a national level, women own 25 to 33 percent of SMEs in Africa, with some countries exceeding 60 percent (Kiraka, Kobia&Katwalo, 2015). Because of their pervasiveness, these businesses not only serve as a critical engine for national economic growth, but they also assist households in maintaining financial stability. Despite their potential as a source of employment, wealth and innovation incubators, women owned SMEs encounter many challenges that have not been addressed adequately and which have resulted in the dismal performance of these enterprises (Boateng &Poku, 2019). Such problems include poor infrastructure, a lack of supportive legal and regulatory framework, impeding social-cultural environment and limited access to key resources (such as credit). The unavailability of sufficient financing for women-owned businesses has been seen as a major barrier to their expansion. In comparison to women-owned firms in affluent countries, similar initiatives in Africa encounter financial obstacles to the point where over half of these businesses in Sub-Sahara Africa fail to make it into their second year (Kamunyu&Theuri, 2017).The challenge of women owned businesses in accessing

credit was affirmed by Advani (2017) who while investigating a comparison of male versus female owned business in respect to access to credit found that the women owned enterprises are disadvantaged. This has curtailed growth in individual businesses despite the number of women owned businesses increasing in the last three decades.

The number of women engaged in self-employment has increased in recent years and this is attributed to a significant number of them seeking to complement their domestic engagement as well as utilizing the free hours resulting from a flexible work system in the formal jobs (Rhodes (2013). Despite the growth of women-owned businesses over the period, an assessment of them reveals that most of them are under-capitalized and as such are unable to expand their operations beyond their initial location. The majority of these businesses finance their operations using funds from the personal savings, informal groupings and sourcing of funds from the family members, and less from the conventional financing institutions (Treichel, & Scott, 2016). The undercapitalization and the resultant operations below the desired levels limit the business to enjoy economies of scale and thus result in a suboptimal performance. The reasons that explain the undercapitalization of the women owned businesses is explained by both the demand and supply factors; with the former originating from the business while the supply factors are those from the lender position. Understanding of the demand-side factors that affect credit access to the women owned businesses is therefore a crucial step in addressing factors that hinder growth of these businesses.

One of the impediments to women owned business units not being able to access the requisite finances is their inability to be structured in a way that can offer confidence to the lenders on their loan re-payment ability (Carter, Mwaura, Monder, Trehan & Jones, 2015). This means that from the demand side of credit access, they need to deliberately make operational decisions in such a way that lenders will be motivated to extend credit facility to them. It is this deliberate strategic decision that enables SMEs to make judgments that are critical to their operational sustainability from the lenders perspective since it is through screening and validation of the same internal strengths that it will reduce uncertainties from the lenders position and thus increase their chance of accessing external

credit (Al Jassim, 2014). Some of the perceived strategic decisions that the women-owned SMEs can make to increase their chances of accessing credit include restructuring the owners' characteristics, building their collateral capacities, networking and adoption of an appropriate risk management practices. In addition, the ability of the owners to conform within the prevailing legal and regulatory environment is thought to influence the lenders positive screening of the firms. These are deliberate measures from the business unit activity (Atieno, 2012).

1.1.1 Global Perspective of Access to Credit by Women Owned SMEs

Women entrepreneurship is an important driver of productivity, economic growth, employment and innovation and it is widely acknowledged as a key ingredient of economic growth in many countries (ILO, 2016). Indeed, its role in the economic development would have been much higher – more so in the developing countries, had it not been because of a challenge of accessing credit to support their operation (Namusonge, 2014). The scholar avers that majority of the businesses owned by the rural poor women are characterized by low income, lack effective training, are poorly managed and thus assumed not to be credit worthy by financial institutions as compared to their male counterparts. Further, the very nature that women tend to prefer organizational employment over self-employment while on the other hand their male counterparts tend to elect entrepreneurship over salaried work suggest that form that a business ownership influences the organizational outcomes (Marlow & McAdam, 2013). In the same line, the performance of business entities has been found to be as a result of resource endowment capability and business structure in that, women who manage small enterprises are found to dismally perform as compared to their male counterparts and all that disadvantages women from accessing adequate credit to finance their businesses (Avouyi-Dovi, Horny & Sevestre, 2012).

In comparison to their male counterpart, the women owned enterprises are found to be temporary career transition with the goal being securing a permanent salaried employment in long-term. The result of this is that they are more likely to exit the organization when

a better opportunity arises and thus leading to the winding up of businesses more frequently. In addition, these businesses usually suffer from the dual ownership structure such that the man behind the scenes makes strategic decisions such as borrowing to finance the business operations (Also & Ljunggren, 2017). The uncertainty prevalent in such enterprises might fail to induce the necessary confidence to a lender to advance additional capital for expansion due to the inadequate confidence status in both short and long-term.

Commenting on factors that influence entrepreneurial engagement of opportunity among women and men in the United States and 32 countries in Europe and Asia, van der Zwan, Thurik, Verheul and Hessels (2016) found that the male entrepreneurs are more likely to be opportunity and business minded than their female counterparts and therefore are more likely to structure their business activities in a manner that will attract more access credit. Similarly, in regard to the start-up businesses, women are equally disadvantaged in accessing necessary financial support due to their socioeconomic characteristics that finds them to fall in a lower hierarchy than men. This finding supports earlier research by Stefani and Vacca (2013) in which while investigating the factors influencing credit access among women owned SMEs in the European Union member states found that firms owned or managed by women tend to be less capitalized in comparison to men owned business organizations due to the unfavorable assessment by the financial institutions that the young women might get married and move outside their present location and thus closing down the business. The same situation existed in Britain to the extent that more female applications for bank loans was found to be rejected than their male counterparts even when faced by similar screening conditions (Carter & Marlow, 2007).

In Bangladesh, the success of women owned firms was found to be determined by personal characteristics such as the capacity to take risk, interpersonal skills, training and motivation, and also the level of family support that they receive (Sarker & Palit, 2014). Similarly, the same study identified managerial skills as a factor that determined the level of funding that women entrepreneur accessed, irrespective of their age. In a similar study in Pakistan, Mahmood, Hussain and Matlay (2014), while investigating on the optimal

finances for women entrepreneurs, found that registration of businesses owned by women entrepreneurs improved their chances of accessing credit finances. This further improves the capacity of the SMEs to capture new opportunities in the market, undertake training and peer mentoring with other units that fall in the same market segment.

1.1.2 Regional Perspective of Access to Credit by Women Owned SMEs

In their study on challenges faced by women owned SMEs to access credit finances from Zimbabwean financial institutions, Matavire and Brown (2013) identified the inability to secure loans to the restraining requirements by the financial institutions, chief among them being high interest rates and collateral demands due to the higher risk perception of the businesses. As a result, small scale entrepreneurs have ranked difficulties in accessing credit as the top-most challenge in the SMEs sector as loan interest rates fly beyond reach (Sanya, 2013). These and other challenges, has caused the mortality rate of SMEs owned by women to be on the rise – way above the case of large corporate bodies that have been in operation for a longer period and thus been able to establish necessary bank-customer relationship.

Similar observations were made in Ghana, as reported through the Association of Ghana Industries Report (2013) where challenges in accessing credit emerged as the topmost obstacle hampering growth of SMEs. It is worth noting that, the worst hit were businesses owned by women. However, Amanoo (2011) opines that the determination of the exact factors that influence the level of credit access by women –owned SMEs in Ghana has not been conclusive. While he proposed that access to credit is affected by interest rates in Ghana, a differing opinion is given by Aryeetey (2017) from his study in Brazil that, demand for credit is not affected by interest rates, the study which concluded that the soaring interest rates are not a main concern for SMEs since the rate charged for loans is a function of risk perception of a business. Mahmood, Hussain and Matlay (2014) consequently suggest that it is necessary that a business unit that desires to access external funds need to re-structure its operations as well as have in place a management team that will induce a sense of confidence to the lenders with a view to reducing risk and by

extension interest rate. This need is more relevant for the women owned businesses operating in the rural setting in the developing countries. In South Africa and Ghana, a vast proportion of businesses are owned by women. These businesses contribute about 70% to Ghana's GDP and over 80% to employment and they represent about 87% of Ghanaian businesses. Consequently, empowerment of these business segment will be one way to enhance the economic development, not only of the rural setting but the entire country. This calls for concerted efforts by individual firms to arrange their business operations in such a way that will attract credit but also deliberate actions by the respective governments to develop appropriate policies. However, while acknowledging the not so optimal disbursement of credit to the women owned businesses, Okurut and Ama (2013) highlights that the government owned institutions that are formed to offer credit facilities to women entrepreneurs still lack adequate government funding to successfully meet the many applications for financial support and thus exposing these businesses to the skewed lending terms of commercial institutions. To access the funds, it therefore becomes imperative that business entities make strategic decisions to accumulate appropriate assets that will act as collateral.

1.1.3 Local Perspective of Access to Credit by Women Owned SMEs

Different categorization of what constitute small businesses is applied in Kenya. This differentiation is made based on different parameters that include number of employees in the organization, authorized share capital and turnover level in a particular period. According to the Kenya National Bureau of Statistics – which uses number of employees as the distinguishing parameter, identify three different categories of SMES, namely, micro, small and medium enterprises. It is estimated that in Kenya, there are 7.5 million micro small and medium enterprises (MSMEs) with women ownership accounting for over 62% of the total (Kenya National Bureau of Statistics, 2015). The number of business entities falling under each category is as presented in Table 1.1.

Table 1.1: Distribution of Micro, Small and Medium Enterprises in Kenya

Business Sector	Differentiation by number of employees	Proportion to total population
Micro Enterprises	1-9	92.1%
Small Enterprises	10-49	7.1%
Medium Enterprises	50-99	0.8%

Source:KNBS (2015)

The SME sector contribution to the Kenyan economy has been increasing over the years with its contribution to the gross domestic product having grown from 5.5% in 2010 to 12.6% in 2018(GOK, 2019). The increasing role of the SMEs to the equitable distribution of development to both the rural areas as been recognized because they are mostly labour intensive and geographically dispersed thus helping in moving economic development out of the urban centers (Kayanula&Quartey, 2016). Considering that women owned SMEs constitute a high proportion of the MSMEs in Kenya, there need to be concerted efforts to support this segment of the national economy. Interventions by financial Institutions and the government agencies would remain to be critical to the success of micro, small and medium enterprises (MSMEs) in availing credit facility the poor women, especially those organized in self-help groups, to either start new businesses or expand existing ones (Namasaka, 2012). As such, there is need to lower credit cost and improve the access of credit to spur up economic growth in a wide part of the country. To supplement the role by the mainstream financial institutions in financing the women owned-SMEs in rural Kenya, Gichuki, Mulu-Mutuku and Kinuthia (2014) propose that village level savings and credit associations be empowered to help in bridging the financing gap.

1.1.4 Strategic Decision Making by Women Owned SMEs

The unequal access of credit by women owned businesses as compared to their male counterparts' calls upon a deliberate set of strategic decision measures that falls under

their control and which eventually would allow them to receive favourable consideration by the credit lenders. Indeed, Ibarra (2015) assert that the main causes of failure among women owned SMEs include lack of effective strategic decisions regarding sources of funds, poor strategic projection, and capital mismanagement. Unfortunately, most of the women-owned SMEs are characterized by such weaknesses as a lack of product differentiation, expensive cost of capital, inappropriate balancing of capital sources and risky sources of finances, all that can be attributed to ineffective strategic decision process (Ospina, 2011). The lack of effective strategic decisions by majority of small businesses can be attributed to a lack of knowledge and their predisposition to the limited understanding on payment of taxes and rates procedures and less on strategic decisions that relate on prevailing market conditions. Additionally, majority of the women-owned small businesses do not have specialized personnel with expertise on strategic planning, administration and requisite financial judgment abilities, and as such, the owners end up making key decisions without any requisite strategic move (Van Auken & Howard, 2013).

The success of SMEs to a large extent is dependent upon their ability to make appropriate strategic decisions (Robinson & Pearce, 2013). Strategic decision made by managers or owners of small and medium sized enterprises regarding the access to credit form the heart of entrepreneurship and can therefore be considered essential for the growth of the SMEs, yet little is known about strategic decision-making process of those who are in charge of SMEs since past research have tended to mostly focus on the 'procedural rationality' of strategic decision in large firms (Brouthers, Nakos & Hadjimarcou, 2017). It is expected that one benefit of strategic decision making by SMEs is the ability to structure organizational activities in such a way as to attract credit financing from the formal financial institutions. For these firms to make relevant strategic decisions require, at least, minimal understanding of the business environment in which organizations operate.

Eisenhardt and Zbaracki (2012) aver that the strategic decision process is often a complex process involving multiple actors and is frequently an outcome of organizational politics. The same situation is not helped by the perceived position by many researchers that the present-day strategic management process tends to be inclined to large business

organizations and therefore the available business models might not be suitable to apply to the small and medium enterprises owned by women and more so operating in a rural setting (Papadakis, Spyros & David, 2018). Business owners of SMEs are more susceptible to the use of decision-making biases and heuristics decisions than managers in large organizations, a situation that would demand a unique decision-making process if the different needs are to be realized (Busenitz & Barney, 2017).

Regarding the difference in decision processes between the SMEs and large enterprises, Gibcus, Vermeulen and de Jong (2016) identify three differences, the main being the fact that SMEs face an environment that is highly uncertain as compared to large enterprises, and therefore owners of SMEs lack access to information which the large enterprises can access. In addition, large enterprises are supported by a large pool of qualified staff and managers, making the environment less uncertain for them (Busenitz & Barney, 2017). Further, complexity and dynamism in business environment is greater for SMEs as compared to large enterprises because in large firms, managers have schedules for making decisions and this delays such decisions unlike in SMEs where turnaround in decision making is quick due to lack of bureaucracy (Busenitz & Barney, 2017). Further, in SMEs, owners are the main decision makers hence can deal with emergent strategic issues to realign their businesses in a manner to make them attract external funding (Mador, 2015).

1.2 Statement of the Problem

As per the Kenya National Bureau of Statistics Survey (2018), women owned businesses account for over 48% of the SMEs, contribute around 20% of the GDP and employment of about 75% of the workforce. With this critical role that the SMEs play, all efforts should be directed towards supporting such an important segment in the country's economy to achieve its full potential. Despite the importance of the women owned SMEs being acclaimed globally, organizations and different scholars have highlighted that these SMEs face challenges that affect their capacity to expand their operations as well as to finance their day-to-day operations (Mugo, 2012; Kinyua, 2014; Kamunyu & Theuri, 2017).

One of the major challenges facing women owned SMEs in Kenya is lack of adequate funding to support their working capital needs, growth, and expansion process (OsaOuma& Rambo, 2013). With a limited capital base, women entrepreneurs find themselves exposed to market forces such as competition, recession, and changes in the regulatory environment. The conventional commercial banks who would have been expected to provide the necessary funding to the women owned SMEs have largely failed to live to the expectation by using such determinants as a lack of collateral due to business ownership practices, risk management matters; and perceived limited organizational and management capacity of women, as reasons for not advancing or limiting the amount advanced to the entities (Kamunyu, & Theuri, 2017; VanAuken&Howard, 2013). Consequently, it has been argued that for women owned business units to access credit, in the face of the many hurdles that face them, they need to come up with deliberate strategic decisions that will make them attractive to be advanced the necessary credit. Therefore, the understanding of what strategic decision would affect their credit access would come in handy towards supporting this critical segment of the national economy. Despite the importance of SME strategic decision making in accessing credit, few studies have looked at how the business units can restructure their operations to become credit worthy.

Majority of the studies that have sought to address factors that hinder women owned SMEs from accessing credit have approached the important issue from the supply side (Wellalage& Locke, 2017; Abu, Domanban&Sekyi, 2016; Alhassan, & Alhassan, 2016;). Prior focus has held the view that the women owned businesses cannot influence their access to credit by re-organizing their operations. It is the view of the researcher that demand side factor in similar way influence access of credit by the women owned businesses. This study therefore sought to establish the strategic decision factors that influence access to credit by women owned SMEs. To come up with the effects, the research sought to investigate the strategic decision factors relating to characteristics of business owners, networking, collateral, and risk management.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to investigate the strategic decision factors influencing access to credit by Women Owned Small and Medium Enterprises in Nairobi County, Kenya.

1.3.2 Specific Objectives

The study sought to:

- i. Establish the influence of business owner's characteristics on access to credit by women owned small and medium enterprises in Nairobi County, Kenya.
- ii. Examine how networking influences access to credit by women owned small and medium enterprises in Nairobi County, Kenya.
- iii. Determine how collateral influences access to credit by women owned small and medium enterprises in Nairobi County, Kenya.
- iv. Establish the influence of risk management on access to credit by women owned small and medium enterprises in Nairobi County, Kenya.
- v. To determine the moderating influence of legal and regulatory environment on the relationship between strategic decision factors and access to credit by small and medium enterprises.

1.4 Research Hypotheses

The research hypotheses for the study were:

H₀₁: Characteristics of business owners has no significant influence on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

H₀₂: Networking has no significant influence on access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

H₀₃: Collateral has no significant influence on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

H₀₄: Risk management has no significant influence on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

H₀₅: Legal and regulatory environment do not have a moderating influence on the access of credit by women owned small and medium enterprises in Nairobi County, Kenya.

1.5 Significance of the Study

1.5.1 Policy Makers and Regulators

The research on the strategic decision factors determining women-owned SMEs' access to financing will go a long way toward improving the performance of women-owned businesses in Kenya and the MSME sector. Policymakers, program implementers, government ministries, departments, and organizations, as well as other sectors involved in the creation and promotion of women's economic empowerment, will benefit from the study's findings.

1.5.2 Scholars and Researchers

Other researchers may find the study useful in adding to the existing body of knowledge and using it as a foundation for future research.

1.5.3 Women Entrepreneurs

This study may be useful to women entrepreneurs who operate small businesses since the findings may help them make strategic decisions about finance access. The study on the strategic decisions made by women-owned SMEs in respect to finance availability, on the other hand, may serve as a guidance for creditors. This may enable creditors to create solutions tailored to women-owned SMEs in order to increase their credit uptake.

1.6 Scope of the Study

The researchers focused at the strategic choice factors that influence women-owned SMEs' access to credit in Nairobi County, Kenya. Those owned by men were not included because the target population was women-owned SMEs operating in Nairobi County. The study's scope was limited to a few strategic decision elements that influence women-owned SMEs' access to finance, namely, business owner characteristics, networking, collateral, and risk management. Between January 2018 and May 2021, the study was carried out. A questionnaire was used to collect data, and it was sent to the intended respondents by email and physical delivery.

1.7 Limitation of the Study

The focus of the study was on strategic factors influencing access to credit by women owned SMEs in Nairobi County. Since the study focused in one county and investigated only four predictor variables, its generalizability and transferability of its findings to similar business units outside Nairobi might not be appropriate. This brings about a gap in which future research might seek to fill by expanding the scope of coverage to other parts of the country.

The research was also exploratory and as such investigated only four established factors that are perceived to influence access to credit by women owned SMEs, namely, Characteristics of business owners, Networking, Collateral and Risk management. Future research should aim to expand the possible factors from the demand side that might be influencing access to credit by women owned SMEs. In addition, some of the targeted respondents were hesitant to fully participate in the research and this was overcome through by the researcher reassuring them that the study was only for academic purposes and if they so wish, the findings was going to be shared to them.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section extensively reviews literature on the previous related studies relevant to determining how strategic decision factors influence access to credit by women owned small and medium enterprises in Kenya. The chapter presents the views of researchers, scholars, academicians, and various literatures both empirical and theoretical concerning the authority on access to credit by women owned small and medium enterprises. It provides explanations of the hypothetical underlying principle of the research problem as well as the empirical framework related to completion of the study. It develops the conceptual framework and reviews the independent variables in relation to the dependent variable.

2.2 Theoretical Review

A theory is defined as a set of interrelated constructs, definitions and propositions that present a systematic view of phenomena by specifying relations among variables with the purpose of explaining or predicting the phenomena (Gakure, Ndwiga&Waithaka, 2015). A theoretical review, therefore, consists of concepts, together with their definitions, existing theories that are used for a study. The theoretical structure must express perceptive of theories and concepts that are significant to the study and that will relate it to the broader fields of knowledge in the topic under investigation (Oso &Onen, 2009). According to Mugenda and Mugenda (2013), the development of the theoretical framework helps to demystify the implicit theory in a clearer manner, helps consider other possible frameworks and reduces bias that may sway the research interpretation.

The theoretical framework also gives a picture of how to conceptualize the research problem, its basis, and the choice of the analysis to investigate that problem. This framework makes the study to perceive, make sense of, and interpret the data. Explanation

of the theoretical framework helps in understanding the study's perspective and context. This study is anchored on the following theories that attempt to explain how strategic decision factors adopted by women owned SMEs influence their access to credit. These theories include; Human Capital Theory, Theory of Social Capital, Resource Based View and The New Institutional Economic Theory.

2.2.1 Human Capital Theory

Human capital theory finds its origin from the work of Becker (1964) and was later refined by Flamholtz and Lacey (1981). The theory avers that, employees in an organization have their own unique skills and knowledge that act as a relevant resource in determining the direction of an organization outcomes and capacity – including access to capital. Managers or owners of an organization that is characterized by such qualities as higher educational level, extensive work experience and tested credibility have intellectual resource capacity that form a firm human capital base. Consequently, the theory suggests that it is the difference in these organizational characteristics that explains the difference in performance as measured by the capacity to meet both internal and external obligations (Argote&Fahrenkopf, 2016). Previous literature has identified individual/borrowers characteristic, loan factors, firm factors, and the lender perception to risk as critical factors that determine the repayment performance of a loan (Colye, 2000; Ozdemir&Boran, 2004). The owners' characteristics forms an important screening tool when advancing loan by a lender since during the loan application process, lenders will always select the 'good' borrowers from the 'bad' and even after awarding the loan, the way a borrower utilizes the loan and repays the loan acts as an important measure of the borrower character.

Equipped with this knowledge, an individual or corporate borrower can strategically develop appropriate characteristics which will receive favourable consideration from the lender. Hence, the business organization that will have built the requisite firm and individual characteristics that will appeal to the lender is expected to be better placed to access credit from the different lenders. Consequently, the capacity of an SME to access

credit can be determined by intentional actions tailored to meeting the lenders expectations of the owner borrower.

Small and medium businesses face difficulties in obtaining credit as a result of both choice and involuntary financial exclusion, which stems from either the decision owner/preferences manager's or the bank's risk aversion (Irwin& Scott, 2010). Small businesses are viewed as hazardous and so unattractive by banks, and this is due in part to the qualities of the managers involved in day-to-day operations. In other instances, the owners/managers of the small firms exclude themselves from the loan by not having the necessary qualities that will give the lender confidence on better utilization of resources. Several factors have been identified to form the characteristics of a borrower and thus influence the capacity to access credit.

The education level of owners/managers is recognized by the human capital theory as having a significant positive correlation with access to bank loan (Zarook et al., 2013). The educational competence of a manager is represented by the basic education that one has attained, professional competency and knowledge about the laws governing the firm operations. Nguyen and Luu (2013) showed that these sub-variables had a positive and significant influence on access to credit. A similar conclusion was arrived by Mukiri (2012) who while investigating the influence of training and educational level on credit access from an entrepreneurial perspective found that the educational level of an entrepreneur has a positive influence on access to finance. With limited educational level, a business owner might not be able to gather adequate information relating to the business.

Small businesses are more opaque than large ones in terms of available information in their operations and consequently lenders will resort in soft information about the borrower. Under such insufficient information, banks are left to use soft information about the firm and the owner/manager characteristic to assess the credit worthiness. Zhao, Wu and Chen (2016) consider the owner/manager characteristic to be an important component that banks consider in assessing the creditworthiness of firms. This implies that women owned SMEs can structure their top management and owners' characteristics in such a

way that it will induce confidence to lenders to advance credit to the organizations. One of the strategic decisions that can be adopted is to co-opt qualified persons as owners and thus shore up the banks' confidence on the firm. This is because educated owner/manager is better placed to overcome obstacles of accessing bank loan and understanding the bank credit requirements. Similarly, the human capital theory recognizes the length of service that an owner manager has been in a particular business as yet another important characteristic that will influence access to credit since a longer tenure represents greater understanding in a particular line of business (Aga & Reilly, 2011). It follows therefore that small and medium enterprise that is well endowed with the appropriate set of human characteristics, all factors remaining constant, will be better placed to access credit than those with an opposite set of owner/manager characteristics.

2.2.2 Theory of Social Capital

Hanifan (1916) proposed the social capital theory to describe how members of a rural school community gathered social capital to improve school performance. More theorists, including as Bourdieu (1986), Granovetter (1983), Jonsson, and Lindbergh, have been added to the mix (2013). Woolcock and Narayan (2010) went on to apply the idea to the world of business. Social capital, according to Bourdieu (1986), is the sum of actual or potential resources related to a long-term network of relationships that gives members with collective access to a pool of knowledge regarding superior business methods. These theorists specifically employed social capital theory to explain how low-income groups and sole proprietors can access capital by the strength of their self-help group network. The theory suggests that individuals with good network are likely to get information on better lenders as measured by rates of interest, repayment period, as well as lenders that are inclined to the line of business that is of interest to a businessperson (Bourdieu, 1986).

According to Granovetter (1983), if an owner or manager is part of a weak network, they have limited access to knowledge and resources outside of their social circle of friends, resulting in sub-optimal decisions and performance at the workplace. This viewpoint is consistent with the social capital theory's thesis that individuals cannot achieve much on

their own unless they collaborate to maximize their individual abilities. Woolcock and Narayan (2010) described how social capital theory had enabled poor entrepreneurs in developing countries to access more finances as a result of sharing information about financial institutions terms and available credit extension available. Social capital can also form an important resource of accessing credit for poor borrowers that do not have collateral assets or credit history since other members of the group can stand as a guarantor for the loan amount (Mwangi, 2012). However, the theory asserts that for equitable access to the group benefits, it is necessary that individuals in the business network groups share a common norms and values that bind them together and reduce the transaction costs. Pearson, Carr, and Shaw (2008) used the three social capital dimensions of structural, relational, and cognitive; to identify the unique behavioral resources and capabilities of family firms. Through the same, owners of these kind of firms can make use of the knowledge skills, and social capabilities of their members to access information and resources with which to improve business performance. Further, Pearson et al (2008) idea of using social capital as a medium of exchanging informational resource by businesses on the nature of changes in the business environment has been supported as an important avenue to enhancing business sustainability.

Jonsson and Lindbergh (2013) explained how entrepreneurs use social capital to obtain external funding during the firm's development stage when internal sources of finance are insufficient. Due to a lack of adequate collateral and having not operated for a long period to develop requisite confidence to the financial institutions, the firms at their developmental stage would the social capital benefits from their networks to obtain resources that would otherwise be costly to acquire. Limited networking capabilities among women entrepreneurs may result in the inability to access information about affordable and cheaper credit facilities offered by lenders in the market and thus suggesting that an intentional move to belong to a group of similar minded businesses can act as a resource when the need to access credit arises (Peng, 2011).

Networking increases a firms' legitimacy in accessing external finance because of its ability to spread knowledge about a firms' existence as well as help firms learn appropriate

business and thus obtain needed support by the general public (Hoang & Antoncic, 2013; Ngoc & Nguyen 2013; Peng, 2011). In addition, networking acts as an efficacious way for SMEs to access external financing, including bank loans since they can get to interact with relatives and friends, trade credit and government agencies staff that extend credit to certain categories of business and thus being more convenient and accessible avenue (McKenzie & Woodruff, 2013; Ngoc & Nguyen, 2013). Similarly, networking among peers enhances an entity's strategic decision process in accessing credit by providing new information, knowledge and legitimacy advantage especially for those firms that have not established alliances for affordable information access. Indeed, one of the challenges that have been identified to limit access to credit by women owned business is the lack of an effective network of similar minded firms to share information on the available sources of finances at affordable rates (Ngoc & Nguyen 2013).

2.2.3 Resource Based View

The Resource Based View (RBV) concepts were originally developed by Penrose (1959) and Wernerfelt (1984) and later improved by Barney (1991). The RBV is of the view that an organization is a package of important resources and capabilities that are managed by a client and in return allows the organization to formulate and execute strategies that increase its competitiveness. Organizational resources are those tangible and intangible assets that connect a firm in semi-permanent way while capabilities are the different ways in which to undertake the activities (Grant, 1991). However, the importance of these resources and capabilities depends on context because an important resource in one context might not be a source of competitive advantage in another context. In this regard, an intangible resource that an SME has can be an important resource that will determine the amount of credit that it might access and at what favourable rate because the available asset acts as a sign of security and collateral. Further, the influence that resources and capabilities have on organizational performance is dependent on the difficulty that competitors have in copying it and the difficulty that they have in getting them in the market (Kraaijenbrink et al., 2010). This implies that if the management employ immovable assets in their operations, it is plausible to assume that they will be in a better

position to give out these assets as collateral when seeking credit facility from financial institutions. It is important to note that not all resources in a firm are a source of competitive advantage because they need to be valuable, rare and hard to copy; implying that a firm management must strategically identify internal resources such as available knowledge base, assets, management experience that will provide it with an upper hand when seeking for external funding (Stefanović et al., 2015).

The distinction between organizational resources and capabilities was explained by Woldesenbet, Ram, and Jones (2012) who asserted that resources are regulated assets that are tangible (financial or physical) in companies and that it can be quantified, measured and exchanged. On the other hand, intangible assets are rooted in the company's culture or covered by intellectual property rights. Conversely, the resource capabilities represent clusters of interrelated processes and routines that firms have in place to accomplish explicit business operations by deploying resources that are related. In the basis of this differentiation, complementarity of ability and power is supposed to result in synergy when combined than if only one is present or handled separately. Nakata, Zhu and Izberk-Bilgin (2011) affirms that the aim of the company is to recognize mutually reinforcing pairs of variables that do not have mere additive but also multiplier impacts, rendering them powerful.

Irrespective of how good a firm's competitive position stands, there is need to augment it with an elaborate strategy that covers the firm's core competencies, product and service developments, competitive priorities and customer driven strategies. In this endeavor, the management plays an important role in deciding the nature and size of assets that it needs to have in the firm in order to have an upper hand in sourcing external resources aimed at supporting its operations. In addition, appropriate capabilities need to be put in place in a synergistic manner. This is because, as Boyer, Swink and Rosenzweig (2005) highlights, organizational capabilities on their own will not improve a company's performance but rather the capacity of the organization to combine these internal capabilities in a manner that will create a synergy and thus improve the organizational performance. These controllable capabilities and resources decide the strategic advantage of the business in

accessing additional resources and operate more competitively in a particular market. As a consequence, the organization will be willing to establish internal skills that will promote their sustainability in the long run and construct their operational structure within the scope of these capabilities (Styles & Lages, 2016).

However, the RBV has attracted criticism owing to its static nature and lacks the ability of a company to adjust procedures and reconfigure resources with a view to increasing its productivity (Vera, Crossan&Apaydin, 2011). Indeed, RBV does not adequately clarify how businesses build and implement their capabilities and resources in order to achieve a competitive edge at the marketplace. Consequently, theorists advancing the dynamic capability principles have explored the possible ways of doing away with this constraint by suggesting that rather than having a company considered as ownership of capabilities and resources, this feature alone cannot put a company in a strategic position to win a bigger share in a competitive market and thus propose that a firm should have a strategic approach that executes resources and capabilities that suits the operational environment of the company and will help spearhead market penetration (Eisenhardt & Martin, 2000).

As a result of the inadequacy of the resource-based theory, Newbert's (2008) advanced the Resource–Capability theory, which assert that neither resources nor capabilities alone create necessary competitive advantage to a firm but rather they complement each other. This theory differs from the traditional position held by the resource advantaged theorist who asserts that a firm's competitive advantage is as a result of the internal resources that a firm has which are valuable, rare, inimitable, and non-substitutable drive firm performance (Barney, 1991; Villanueva, Van de Ven, and Sapienza, 2012). The second school of thought claims that what results in a strategic edge is the allocation of capital, a mechanism guided by operational skills that improve the organization's success (Morgan, Vorhies, and Mason 2009; Vorhies, Morgan, and Autry 2009). This context is reinforced by the interpretation that while it is important to have resources, it is insufficient to drive performance. The importance of capital is expressed in their potential to boost business results.

2.2.4 The New Institutional Economic Theory

The New Institutional Economic (NIE) Theory is considered relevant in understanding the strategic decision factors that influence access to credit by women owned small and medium enterprises in Kenya and hence provides the theoretical background for this study. According to (North, 1986, Williamson, 2000), the New Institutional Economic Theory alludes that, while the rules in a society or organization are devised to reduce uncertainty, they are rarely complete due to the humanly devised constraints that shape human interactions. This uncertainty is a measure of risk that arises due to changes in technologies and preferences in an organization and therefore necessitating a new or different set of rules. Further, the theory asserts that institutions were never created to be efficient but rather the prevailing rules at any point in time are meant to serve the interest of those with greater bargaining power (King & Pearce, 2010). In this case, for an SME to access a credit facility from a lender, then it is expected that it should have put in place adequate mechanism that would lower the risk exposure to the external party.

In regulated industries, the top management is provided with few opportunities for discretion in corporate investment and financing decisions since firms face tighter scrutiny and face lower contracting costs, implying that they would be less likely to hedge against the risk exposure in their operations (Froot, Scharfstein, & Stein, 2003). Therefore, regulation is a key determinant of a firm's corporate financial policy to the extent that if external financing is more expensive than internal sources, then it implies that the lenders consider the operations of the organization to be riskier than the average market investment. There is need for an organization to adopt appropriate risk management practices which will reduce the risk exposure level and therefore attract lower interest rate. The high interest rate is as a result of incompleteness of institutions and that when these institutions are faced with high costs of transaction, they are likely to go look beyond the market by instituting organizational strategies that are aimed to limit the high institutional costs (Marquis & Raynard, 2015).

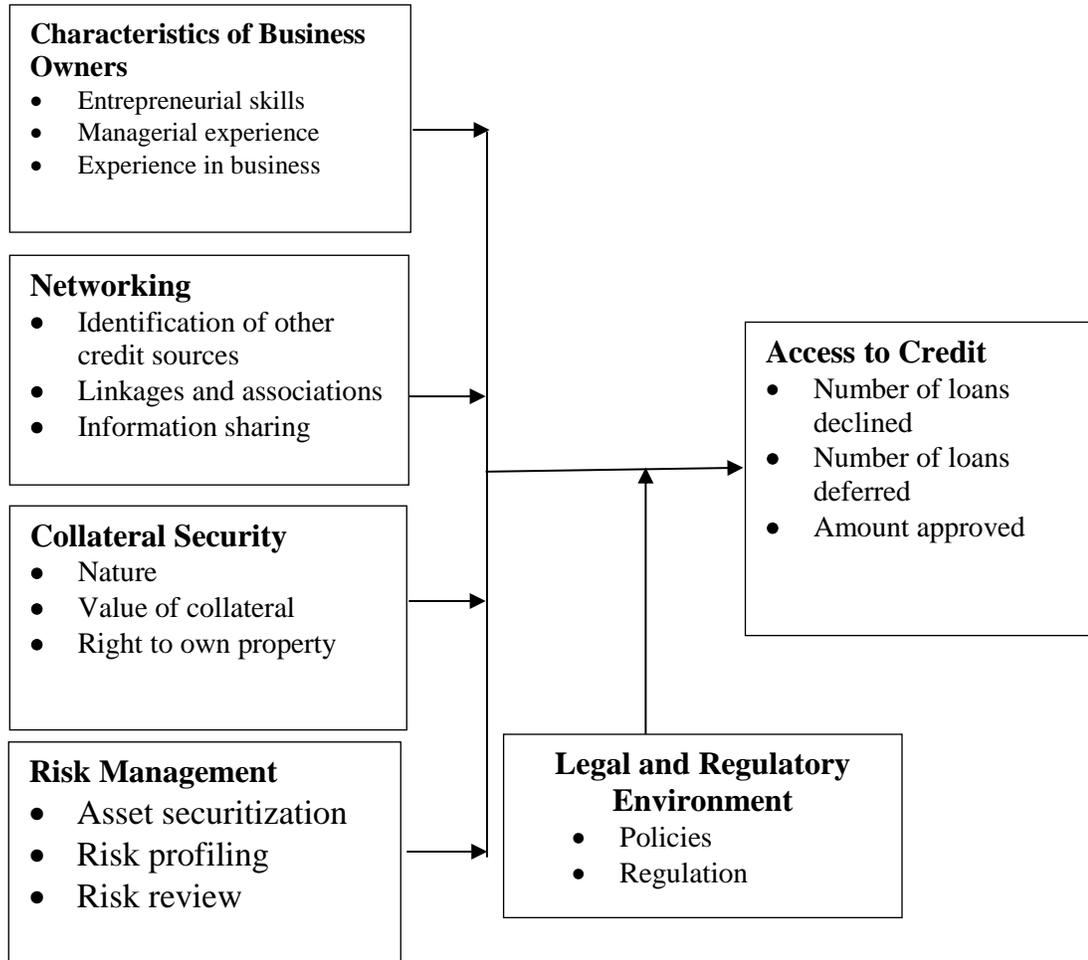
The strategies adopted by an organization to limit the high institutional costs can be divided into two; strategic intent and governance measures (Dorobantu, Kaul&Zelner, 2017). The strategic intent factors aim at transforming the organizational environment by altering formal institutional structures thus reducing the level of risk. On the other hand, an organization might opt to maintain the organization structures as they are and instead organize the focal transactions outside the market using governance mode (Williamson, 2000). In addition, Jia (2014) advocates the formation of a partnership that among business organizations that lowers the risk of opportunism and instead encourages the two parties to work for a mutual benefit. This can take the form of SMEs forming alliances when borrowing with the expectation that with more firms borrowing together, they will be accountable to each other and therefore reduce the risk exposure to a lender.

2.3 Conceptual Framework

2.3.1 Introduction

Conceptual framework is a theorized model that identifies the correlation between the dependent and independent variables (Mugenda&Mugenda 2013). Conceptual framework is also defined as a set of principles broad ideas taken from significant fields of enquiry and used to structure a subsequent presentation (Kombo & Tromp 2010).

Figure 2.1 shows the conceptual framework that represents the relationship between independent variables and a dependent variable.



Independent Variables **Moderating Variable** **Dependent Variable**

Figure 2.1 Conceptual Framework

2.3.2 Characteristics of Business Owners

The relationship between an SME and a lender is characterized by informational asymmetry, and this has been identified as a major hindrance to the access to loans in Sub-Saharan Africa (Osano&Languitone, 2016). Information asymmetry and moral hazard challenges can be mitigated by establishing a long-term relationship with the lenders through which banks obtain soft information through repeated conversations with the firm owners.

Soft information refers to the nature of relationship that has been developed between a business owner and different group of stakeholders ranging from financiers, suppliers, neighborhood businesses and customers. The credit history that has been developed over previous transactions is expected to result in favourable response from the banks or other informal networks of funding to a business organization (Berger & Udell, 2006).

The educational level of an entrepreneur has been found to result in a business growth positively and significantly because education helps to enhance communication skills, improve managerial skills and foresight (Marquis & Raynard, 2015). As a consequence, the development of these skills enhances the capacity of a manager to present a credible case for a loan to a banker at the time of preparing a loan proposal and therefore convince the banker during the client interview (Kungu, 2011). Similarly, higher education of business owners influences easy access to financial services because they have the ability to provide strong business plans and financial information compared to the less educated.

According to Kings and McGrath (2012), education of managers is one of the aspects that impact positively on the growth of organizations. The less educated ones, especially women, face lot of difficulties in accessing credit from banks because of lack of information on how to secure loans (Lakow, 2014). Bank managers are often more hesitant in lending to females than to males. Lower education does not necessarily emphasize on entrepreneurship skills but instead it reduces the possibilities that women entrepreneurs will have enough knowledge to stand out in business, and this leads to contribution to the country's overall monetary growth (Mwobobia, 2012).

In most developing countries, education of boys is given more priority than that of girls; consequently, the education level of most women entrepreneurs is significantly low, creating an obstruction to access business developments services and training (Kungu, 2011). The demand on women as mothers, wives, and home makers due to ethnically set household tasks, presents serious challenge for the women to successfully operate enterprises. Any woman who endeavors to trail the entrepreneurial spirit does so at the cost of her family (Commonwealth Secretariat, 2012).

Namusonge (2014) observed that entrepreneurial training and education play a key role in inspiring self-employment and entrepreneurship. Further, the scholar asserts that despite the survival of business development services in Kenya, only few female entrepreneurs are found to access it with a view to identifying less costly sources of capital nor their availability. King and McGrath (2012) while examining those entrepreneurs with superior stocks of human capital as measured in terms of education and vocational training are found to be better placed to become accustomed in their enterprises to continuously changing business environments.

Managerial experience of firm owners has been found to determine access to credit by a firm since the resultant knowledge and startup experience positively influence firms' performance. Furthermore, Fatoki and Asah (2011) explain that firm owners with a long-term experience in the business are more likely to avoid some costly mistakes than those ones with no or less experience; hence they are better placed in accessing credit. In addition to the access of credit, Olekamma and Tang (2016) highlight that in Nigeria; a lack of management skills among the SME owners is found to be a major challenge to the survival of the firms and therefore affect SME in getting finance from commercial banks.

Lenders are unwilling to give a loan to small and opaque firms that do not have structured financial statement and audited accounts due to the asymmetric information and especially no establishment of credible credit bureaus in these countries (Sacerdoti, 2005). Firms with audited financial statements have a higher chance of getting credit at a lower cost than those without audited financial statement (Allee 2007). Banks use the firms audited accounts to analyze their present performance and forecast their future performance trajectory, therefore, the information obtained from the financial statements acts as indicator of borrower's prospects and ability to service a loan. However, business information provided by firms can be given more credence if supplemented by information provided by credit referencing bureaus which are considered more objective since it combines information from different lenders into one repository (Kitindi, Magembe&Sethibe, 2007). It is therefore hypothesized that an SME takes a strategic decision to keep proper records of business affairs and to hold a positive position with

credit referencing bureaus since as Sarapaivanich and Kotey (2006) asserts that a lack of adequate information leads to information asymmetry and credit rationing.

2.3.3 Networking

Women's access to economic resources is limited by the practice of financial institutions declining to consider them for credit because of a lack of the requisite experience and that their businesses are not sustainable (Fletschner, 2009). The extent to which financial institutions approach women and the circumstances under which they do so vary distinctly, but women are at most time disadvantaged when the institutions fail to finance their business ideas or enterprises, or issue loans of lower amounts which does not make proper business sense (Fletschner, 2009 & Ospina, 2011). This subjectivity makes loan analysts profile women as often unable to repay.

Networks are the arrangement among members of the network to receive and disseminate different kinds of knowledge and resources (Ayyagari, Demerges & Maksimovic, 2012). According to Ibarra and Hunter (2015), ability to marshal information, support, and resources from one sector of a network to achieve results in another is referred to as strategic networking. There are two major issues that determine whether a firm in the network really benefit from the network that is a member: network structure and the relational characteristics. Structural characteristics of the network focus on the capability of the network in giving to its members a favorable environment for getting support, resources, and information. According to Asiedu, Isaac, Leonce and Akwasi (2013), elements of the network structure are the size of the network, density of the network and network centrality that is whether the information within the network is disseminated among members of the network equally or not. Choudhury (2012, defined Networks as systems of relationships between entrepreneurs and the outside world particularly valuable to the small business sector.

The capacity of an organization to establish networks has been identified as a solution to overcome the challenges of access to credit (Atieno, 2012). Using networks, SMEs can

get invaluable information, advice, and capital for being associated with a trade union, professional bodies or other social associations (Kungu, 2011). Thus, it is hypothesized that networking positively influences SMEs access to credit. Supporting these arguments, quantitative studies in Paraguay, Malawi and Bangladesh found that women are more likely to be credit constrained than men because of diverse reasons (Fletschner, 2009; DeAngelo&Masulisis, 2010). The difference in the investment patterns of the two gender is due their dissimilarity is attributed to differences in options, risk attitudes and constraints.

Shahriar (2012) in his study on “Impact of Microfinance on Seasonal Hardship in Northern Bangladesh” found that by engaging in alliances and other co-operative arrangements, small firms can gain individual strength and independence out of the association unlike when operating outside the alliance. Cooperation among SMEs in a membership is associated with several benefits that include economies of scale, sharing of information about the latest techniques and technologies of operations, efficient distribution of activities and increases the size of production capacity (Wachilonga, 2013).

To survive in the business, SMEs have two alternatives: one to grow, second co-operate in networks. But networks are modern alternative for SMEs to get access to the resources which they would be unable to obtain by acting alone, Shahriar (2012). Further, being in a membership network is associated to access to foreign market information, access to foreign markets, access to knowledge through experiential learning and access to external finances (Ayyagari et al, 2012) Since SMEs are small in their size and financial capacity, it is not suitable for them to acquire knowledge through research and development activity rather they rely on upgrading their human resources with knowledge and experience and making them active for searching knowledge through collaborating with external firms and institutions (Choudhury, 2012).

2.3.4 Collateral

Women in Middle East and North African countries are considered to have less inheritance rights than men when it comes to tangible material goods that can be used as security to access credit from financial institutes (World Bank, 2012). This is not only localized to the middle East and North Africa region because globally, women own just 1 percent of the world's resources and this is only in two thirds of countries, and that in terms of legal and constitutional rights to property, the position decline after marriage. In Kenya although inheritance laws were raised with the succession Act of 1981, still a greater percentage of women do not have properties in their own rights and rarely inherit land.

Customary rules and legal regulations are often restricting women's control and access to own tangible assets that can be accepted as collateral such as land or livestock. Women are neither likely to have land titles in their names, despite their families owning land nor have control over them than men even when they formally own it. Agarwal (2013) opined that subjective inheritance rights have often granted land to male relatives, leaving both daughters and widows disadvantaged. Fletschner (2009) observed that rural women entrepreneurs are more credit constrained than men of equivalent socio-economic conditions. This is because men have traditional rights to own land and thus, they have collaterals that give them ability to borrow.

2.3.5 Risk Management

The risk exposure of a firm is an important factor that explains whether banks extend credit or not since firms, which a bank deems will have challenges to repay loans, is riskier for the bank and hence are more likely to be credit rationed. Under this scenario, (Zambaldi, Aranha, Lopes, & Politi, 2009) submit that the bank will be threatened by default risk which represents the inability of the SME to fulfil its obligations to the bank. In the case of SMEs, banks perceive their operations to be risky because they face more uncertain competitive environment than larger firms. This coupled with the perception that SMEs

experience more unstable rates of return and higher failure rates, is sufficient justification for commercial banks to institute credit rationing. In addition, as the theory of credit rationing (Stiglitz & Weiss 1981) asserts, in uncontrolled interest regime, the presence of imperfect information in credit markets creates risk that will result to lenders adopting a profit maximising behaviour through charging of discretionary interest rates.

The risks that an SME face can be categorized into external and internal with the internal risks being out of such factors that the firm has control over. According to Mensah (2004), the common risks that an SME face include risk of reduced demand for products and services, risks to financial profitability and growth, injury and inability to compete in the marketplace, high labor turnover, supply chain risk and raw material price risk. Hutchinson and Xavier, (2006) also highlight that, lenders face both adverse selection and moral risks when dealing with SMEs because of the assumption that the firms might withhold some crucial information during the loan application process and be awarded the loan, the SMEs might divert use of funds to other unrelated activities, and as result endanger the interest of the lender. It is such risks that, according to Malhotra et al, (2007) inform banks to minimise loan approval for SMEs and for that reason, to improve their capacity, and they need to institute operational strategies, especially those that relate to growth and expansion. Consequently, the understanding of the different risks that women-owned SMEs acts as an important step to their management.

Falkner and Hiebl (2015) while investigating the different types of risks that face SMEs in their quest to access credit noted that a stringent risk management may enable them to cope with these risks. They also agreed with Poba-Nzaouet *al.*, (2014) suggestion that strategic risk management practices in SMEs are informal, which in turn inhibits their being shared and thus also building risk management capacity in SMEs. There is need for SMEs to continuously review all of their data on business assets, activities and staff; as well as utilize the firm's financial statements to identify the sources of potential financial losses. To be able to do this effectively, there is need for an SME to build the risk management capacity of its employees. After the identification of risks prevalent in the SME, there is need to measure or estimate the potential frequency of losses

and the potential influence of the risk on the company operations and this will involve ranking the different risks in order of importance to the firm. Once the risks prevalent in an SME have been identified, it is necessary at this point to establish risk management priorities and provide a starting point for selecting appropriate risk management techniques. According to Cioccio and Michael (2007), the common risk mitigating techniques that SMEs can adopt include insurance, weather derivatives, selection of buyers, overcapacity in production and asset securitization.

2.3.6 Strategic Decision Making and Access to Credit

Since any form of business activity requires capital to grow and expand, adopting appropriate decision-making strategies might prove to be an important step to accessing credit for every business entity (Levitsky, 2012). A lack of appropriate strategies that will influence the lenders to make favorable assessment and decision of a business unit is therefore hypothesized as an important determinant to the access of credit. With financial position among many women, the small income normally earned from the business is in most cases used to cater for basic family needs instead of being re-invested in the business. Most women owned MSEs in the rural areas, for example, have been found to lack adequate capacity to make internal strategic decision that can enhance their access to credit (Agarwal, 2013). Further, women who own businesses have been found to lack sufficient support from their spouses, hardly own property and assets which are required by financial institutions as collateral to offer credit, are time poor due to other demanding household chores hence not able to create valuable relationships for networking purposes; consequently, they are not attractive to formal financial institutions (Alila, 2012).

A survey of new enterprises in Côte d'Ivoire, Kenya, Nigeria, and Senegal found that majority of women entrepreneurs 'venture into micro enterprises that are categorized as being in the informal sector as opposed to venturing into formal businesses. Income generating activities in the informal sector in Kenya have lower incomes compared to those in the formal sector. Such enterprises with low income generally have poor credit

history and for this reason, do not easily meet the criteria for credit from the established MFIs (Mwobobia, 2012).

2.4 Empirical Review

Empirical literature review is a direct search of published works that discusses theory and present empirical results that are significant to the study at hand (Zikmund, Babin, Carr & Griffin, 2013). It is a comprehensive survey of previous inquiries related to a search question. Although it can often be wide in scope, it is narrowly tailored, addressing on the scholarship that is directly related to the search question (Guirkinge & Boucher, 2012). Empirical review allows a researcher to place his or her research into an intellectual and historical context and helps the author declare why their research matters (Kothari, 2016). This section will review and evaluate reports of previous studies including observations, conclusions and recommendations related to planned study leading to appreciating and understanding the research that has already been done in the area of access to credit by women owned enterprises.

2.4.1 Characteristics of Business Owners

There are three types of women entrepreneurs operating SMEs in Kenya, namely, micro enterprises, *Jua Kali* enterprises and small-scale enterprises. According to Ondieki, Nashappi and Moraa (2013), these forms of SMEs differ in terms of their demographic outline, needs, extent of previous business experience, growth orientation and access to resources. Irrespective of the nature of the SME, over the last decade, the proportion of these businesses owned by women in Kenya has steadily increased in the last twelve years from constituting 48% in 2008 (International Labour Organization (ILO), 2008), the proportion has increased to 72% of all SMEs in 2019 in Kenya (ILO, 2020).

Majority of women entrepreneurs in Kenya control enterprises connected to traditional women's responsibility such as retail and wholesale outlets, hotels, restaurants, and hairstyling (ILO, 2008). Women enterprises are making a considerable contribution to the

economy of Kenya, accounting for 20% of Kenya's Gross Domestic Products (GDP) with many of the businesses owned by women being in the informal sector. Its role in job creation is further explained by statistics showing that in 2010, for example, out of the 462,000 jobs that were created 445,000 originated from the informal sector, where women own 85% of the existing businesses in 2018 (KNBS, 2020).

Mwongera (2014), in his study of 'factors influencing access to credit from Microfinance Institutions by young women entrepreneurs', established that 90% of all small and micro enterprise owned by women collapse in their first year of startup as a result of financial constraints. Further, a study by Gakure (2015) on "factors affecting job creating and low job creating firms owned by women in Kenya" established that the constraints faced by women are both internal and external. The internal constraints pertain to lack of self-confidence, lack of experience and business managerial skills, lack of markets, lack of planning and lack of total commitment. External constraints on the other hand pertained to lack of finances multiple roles, societal attitude, and interference from husbands. The study generally concluded that the major external problem faced by women owned enterprises is lack of finances.

A study by Njeru and Njoka (2012) to examine firm size as a determinant of choice of source of entrepreneurial finance for medium-sized and small enterprises in Thika District, Kenya revealed that not all financiers consider firm size as a determinant factor when lending to SMEs. Despite the finding, firm characteristics such as ownership structure, firms' credit history, the firm size and location of business plays a very important role in determining SMEs' access to credit.

Shahriar (2012) on the other hand conducted a study to establish how firm size and financial source preferences of SMEs influence the capital structure of SMEs in Eldoret Municipality, Kenya. The study revealed that owners of SMEs preferred to use internal sources of financing because of lack of assets required as collateral for obtaining bank loans. His findings further reveal that firms that are incorporated and strategically located

were more likely to access credit than those that which are incorporated and not located in strategic places.

Women entrepreneurs have received growing interest in recent years, both at the policy and academic level because their input to the economy has been noted to be more significant if not equal to that of men in entrepreneurial activities (Boden &Nucci, 2012). The role of women in running, creating and growing businesses is acknowledged as essential for poverty reduction and growth. The critical role of women in the economy of countries is evidenced by the number of women owned enterprises which grew by more than 34% between the years 2010-2015 developing countries (World Bank Group's Enterprise Surveys, 2016).

2.4.2 Networking

Small organizations that are restricted to resources may be inhibited from having contacts or engaging in any networks, due to the cost implicated by such associations. This may limit the degree to which they can manipulate the support machinery like legislation, infrastructure and policies that affect businesses. Small organizations, therefore, face several constraints that are institutional in nature, but their limited or nonexistent linkages, limit the extent and weak organizational ability to which they can deal with such constraints.

A study by Gaitho (2013) on “the role of credit reference bureaus on strategic credit access by SMEs in Kenya” revealed that having a credit reference bureau (CRB) allows commercial banks to have a network through which they can share credit information on prospective borrowers, which facilitates the assessment of credit requests by SMEs. The findings also indicated that sharing of credit information of SMEs allow commercial banks to mitigate the risks of bad debts consequently reducing the cost of credit and thereby enhancing their ability to access credit. Moyi (2013) in his study to “establish the credit and employment growth among small enterprises in Kenya” found that limited access to technology and permanent networking websites were a constraint on SMEs’ ability to

access credit. Strategically located firms that have access to technology were more likely to access information than those that are not, thereby gaining access to credit.

Nkonge (2013) on the challenges faced by small and medium enterprise suppliers when bidding for tenders in Thika, Kenya revealed that poor networking among SMEs owned by women is a major constraint to gaining access to credit. In a study to examine the factors affecting the performance of small and medium enterprises (SMEs) traders at City Park Hawkers Market in Nairobi County, it was revealed that most organizations get their loans from their relatives and friends (Ntakobajira, 2013). The findings implied that credit is a constraint to enterprises development due to process of the credit allocation. This locks out organizations with feasible projects and the legal institutions framework that enforces contracts, making lenders to either deny loans to potential borrowers or rely on the social networks. The asymmetry of information that exists in these markets creates the need for contract and institutional arrangements that ensure enforcement of contracts. Nevertheless, these informal loans play a minor role in substituting bank loans. Most medium and large enterprises which are considered formal firms with established network systems acquire trade credit, with a superior percentage being from formal sector compared to micro and small firms which are considered informal firms and lacks good networks.

2.4.3 Collateral

Globally, women face legal and logistical difficulties in starting and running businesses. In North African and Middle East countries, men have been found to have higher inheritance rights than women, with the later constituting two thirds of the country's population but owning only 1% of the property. Legal rights for women decline with marriage (World Bank, 2012). In Kenya, though heritage laws were raised by the succession Act of 1981, women have hardly ever inherited land and other property in their own rights. Customary rules and legal regulations often control women from accessing and controlling assets that may be availed as security such as livestock or land. Women are not likely to have land titles under their names hence not likely to have control over

them as men. Subjective inheritance rights often grant land to male, leaving both daughters and widows at a disadvantage (Agarwal, 2013).

Mbogo (2013) in his study on ‘the collaterals provided by small scale farmers to access loans’ observed that neither the recent market-assisted land reforms nor the state mandated agrarian reforms of past decades granted much of the land to household heads who were typically men, have led to considerable improvement in women’s right to use and control land. Countries where laws protect women’s land rights are limply implemented and regulated (USAID, 2011). Women’s control over families’ livestock varies from culture to culture (Tipilda&Kristjanson, 2011). Naturally, men oversee big animals, such as oxen, horses and cows while women maintain control over small animals such as poultry, sheep, goats and pigs (World Bank, 2018 & IFAD, 2014). In settings where men are the main bread winners, women’s capability to offer family assets as security is subjective to family dynamics that are probably prioritizing men’s investments (Ospina, 2011).

Despite 48% of the SMEs in Kenya being owned by women, less than 10% of them have access to credit (ILO, 2008). Mbogo (2013) in his study cited stringent terms and conditions of loan requirement, among them being provision of various forms of collateral securities such as land title deeds and maintaining accounts with the financial institutions for at least six months prior to being given the loans which most businesses owned by women cannot comply with.

2.4.4 Risk Management

In order for SMEs to identify the dominant types of risk that might determine the success or existence of the company, it needs to adopt appropriate risk management practices because the inability to recognize these risks might have disastrous consequences, ranging from customer loss to damaging liability and possibly even bankruptcy (Brustbauer, 2014). However, while investigating project risk methodology adopted by small firms, Marcelino-Sádabaet *al.*, (2014) confirmed that many SMEs do not, due to their limited resources, apply adequate risk management practices. Different SMEs have been found to

adopt strategic risk management because of the different internal and external factors that compel them to align to.

Manab, Kassim and Hussin (2010) while investigating enterprise-wide risk management practices found that the main factors that influence adoption of risk management include the corporate governance tenets in place in the organization, compliance to regulations, corporate organizational failures, and complexity of risks. Similarly, the proprietor level of education, technology advancement and demands by financiers was found to be main drivers for the adoption of the risk management practices. Golshan and Rasid (2012) further found that business entities implement risk management practices because of its potential benefits, increased occurrence of risk events and emergence of new business trends. The reasons underlying the implementation of strategic risk management have been found to be varied among SMEs in different countries with the finding being that among the Malaysian firms, corporate governance and shareholder value was found to be the main determinant of organizational risk management practices (Manab, Kassim & Hussin, 2010).

Different scholars document that the main source of financing for SMEs is external finance in forms of loans, but at the same time this involves the risk that interest rates on the loans may change (Altman *et al.*, 2010; Mutezo, 2013; Gama and Geraldes, 2012). The change in the interest rates is due to the banks' fear concerning information asymmetries and thus perception of SME risk, which might in turn also limit the likelihood of SME interest rates changing. This can explain the preference of the SMEs to the fixed interest rates compared to the adjustable-rate loans and further explaining the fewer propensities of SMEs to risk. Similarly, in a study of 4,000 European SMEs, Kim and Vonortas (2014) found that educated SME owners are likely to take strategic action to mitigate financial risks, such as interest rate risk as compared to the less educated ones.

Earlier studies have documented that the main reason that informs the banks decision to advance required borrowings by SMEs is the level of risk that is perceived to be inherent in these organizations (Pretorius and Shaw, 2004; Malhotra et al, 2007). Consequently, a

significant reduction in operational risk, is seen as a possible antidote to credit rationing and therefore, a better form of financial deepening that can improve investor's access to growth-incline credit. As a measure to increase the SMEs risk management position, different strategic decision measures have been suggested by both management practitioners as well as scholars. Key among them is the need for the SMEs to reduce their failure rate probability through an increase of both human and financial resources to withstand economic resources (Van Aardtand Fatoki, 2012). Further, since majority of the SMEs are geographically dispersed and thus being costly for commercial banks to reach, it is strategic for the women owned SMEs to locate their businesses near busy commercial centres and therefore making them accessible for evaluation.

2.4.5 Strategic DecisionMaking and Access to Credit

Accessibility of credit enhances the capacity of small and medium enterprises in many ways, for instance access to markets, choice of technology and access to essential resources which to a great extent influence the feasibility and success of the SMEs. Securing capital for business operation or business start-up is one of the major hindrances every entrepreneur faces mainly those in the SME sector. Anderson (2015) conducted a survey based on three ideas about the reason of using accounting information at managerial level, the results revealed that economic analysis of credit information is an indispensable tool to support strategic processes in SMEs. Regardless of the level at which it occurs, strategic decision-making requires a thorough analysis of business operations, to undertake internal evaluation of resources available, to be conversant with the whole market conjuncture, to schedule tasks in conjunction with the resources and requirements, a prospective thinking about the company in general. The study established that books of accounts are a key source financial position and performance that can help owners of SMEs in making strategic decisions regarding credit access.

Fleishman and Tyson (2004) in their study identified managerial decision-making and control, as the most important for SMEs when it comes to credit access, they concluded that adoption of aneffective strategic decision enhances their capability to being

considered by lenders for credit. Jog and Srivastava (2014) conducted a study that examined decision-making processes and access to finance in Canadian SMEs, as well as techniques used by the SMEs in making decisions on capital budget, financing costs and sources, and dividends. The findings of the study revealed that investment strategic decision-making processes significantly influence access finance by the SMEs. The study also established that most Canadian SMEs achieve optimal funding because of excellent strategic decision-making processes.

Kamath (2014) studied long-term credit access decisions in SMEs and found that most SMEs do not maintain an objective in their efforts to access to credit, preferring a financial hierarchy. They also showed that the main issues in credit decisions are those related to maintaining financial flexibility and ensuring the survival of a business entity in the long run. Zopounidis and Doumpos (2015) used "Multi-criteria decision Aid" (MCDA) to evaluate strategic decision-making in relation to credit, by investigating aspects such as corporate performance, investment, financial challenges, and access to credit. The results of the study revealed that strategic decision making by business entities enhances the access of credit and financing. According to the K-Rep (2009), the two key challenges facing SMEs includes lack of strategic decision-making processes in relation to financing as well as poor access to markets.

The findings of a study by Gakure, Ngugi, Ndwiga and Waithaka (2015) on influences of credit risk management technique on performance of unsecured bank loans in commercial banks in Kenya supports this theory. The findings revealed that risk identification affects the performance of unsecured bank loans to a great extent and that inspection by bank officers influenced the performance of unsecured loans. The study further concluded that risk monitoring moderately affected the performance of commercial banks and that the controls put in place by the commercial banks also influenced the performance of the banks greatly. Women mainly borrowed from these sources for lack of the collaterals needed for the formal borrowing. This was also coupled with laxity to take risks that go along borrowing from the bank. Though the minimum start-up capital required for establishing micro-enterprises might be low, inadequate funding for expansion leaves the

micro-enterprises owned by women in a vicious cycle of low investment, low income, low profits and savings for investment (Levisky, 2012).

2.5 Critique of Existing Literature

The study by Mwongera (2014) that investigated factors that influence young women entrepreneurs in access to credit from Microfinance institutions sought to evaluate the problem from the supply (bank) perspective and not from the borrower point of view. Though the study found that collateral was an important determinant in access to credit, the study did not go an extra mile and establish how young women entrepreneurs could strategically re-structure their asset base to make it easier for them to access the facility. Though Gakure (2015) identified lack of planning as a significant factor that affects performance of women entrepreneurs, the study failed to identify the role that the women owned firms play in strategically positioning themselves by having appropriate staff and management with requisite skills and expertise. With the exception of the study by Njeru and Njoka (2012) that identified strategic location of the women owned business as an important strategic factor that influence the capacity of an SME to access credit, the other studies have generally assessed the determinants from the lenders point of view. Generally collateral is identified as a critical determinant to accessing credit but several studies have adopted a case study approach and thus cannot be generalized since they relate to one industry (Boden & Nucci, 2012; Marcelino-Sádaba *et al.* 2014). Granted that the firm characteristics is an important determinant – and has been identified as such, the reviewed studies have tended to examine the problem of women owned businesses accessing credit from the supply side and not appreciating the fact that the businesses have an influence as well through development of desired business characteristics by the lender.

In recognition of the challenges faced by women owned SMEs in accessing credit, the reviewed studies have unanimously pointed out the challenge that these business units face in accessing credit from the formal institutions (Ntakobajira, 2013; Nkonge, 2013). In order to overcome this challenge, women entrepreneurs have resorted to using informal sources of credit such as using friends, family members and other members in self-help

groups (Moyi,2013). The studies that have appreciated the role of a business owner network in the credit access has not gone a step further and investigated how businesses can develop appropriate strategic networks that will eventually result in improved access to credit. This research will seek to bridge this gap.

The availability of collateral as a determinant of access to credit has attracted attention of scholars (Mbogo, 2013; Tipilda&Kristjanson, 2011). However, the studies have sought to basically investigate determinants of credit access from the lenders' perspective and not from a business entity point of view and how they can strategically accumulate the requisite collateral in anticipation of using the same as security in accessing credit in future. This is an important move by the women owned business in accessing the credit facility. The same case applies to risk management practices that have been adopted in the women owned business units.

2.6 Summary of Literature Reviewed

From the studies it is evident that most SMEs owned by women have limited access to credit. This hampers their eventual and emergence growth. Their main source of capital are informal savings, retained earnings and loan associations, which are not very secure, unpredictable and have little scope for risk sharing because of their sectoral or regional focus. Access to formal credit is poor because many SMEs have weak financial statements or do not maintain proper books of accounts and hence making it difficult for financial institutions to evaluate their credit worthiness.

Access to credit is considered as an important factor of profitability, increasing sales and employment creation. However, this should not for all time be assumed to be so. Although access to credit is a well-liked tool in the SME development, it is not a solution to all challenges facing SMEs. Financial institutions require perceiving access to credit as part of the package and re-designing their products for SMEs to enhance growth and development of SMEs rather than perceiving it as the perfect solution to all their problems. Nevertheless, for SMEs to access the much-needed credit from financial institutions, they

ought to plan on how to receive positive consideration during the financial institutions screening process and this therefore requires appropriate planning.

2.7 Research Gaps

Up-to-date research on SME financing has been done in other countries such as Vietnam, during the 2012 financial crisis and recession period. A study by Malesky and Taussig (2009) found no significant relationship between bank finance and organization profitability. Shinozaki (2012) showed a positive relationship between bank lending and sales growth of SMEs. Nevertheless, the results of both studies might not be applicable to SMEs owned by women in Kenya due to contextual and environmental differences.

According to Ondieki, Nashappi and Moraa (2013), limited access to credit is attributed to factors such as lack of collateral, high risk profile of SMEs, an oligopolistic banking sector and bias by MFIs against SMEs. Banks in most of the African countries have made minimal effort to reach SMEs due to difficulties mainly in monitoring, challenges in screening small scale borrowers, high risk of default and high cost of managing loans (Gichuki, Mulu-Mutuku&Kinuthia, 2014). SMEs are in general under-capitalized, and this suggests major operational difficulties in pursuing corporate goals such as access to credit.

In her study on determinants of access to bank credit by micro and small enterprises in Kenya, Mukiri (2011) observed that 18.4% of the SMEs in Kenya cited firm size as the second sternest constraint after market access. Access to credit is associated with improved performance of SMEs in Kenya as demonstrated by Ondiege (2013). In addition, Ogojiuba and Ohuche (2014) while investigating on the information needs relating to available finances to the Kenya manufacturing SMEs conclude that firm that have limited access to credit are also likely to be less productive and cannot always move to points of best practice.

The newly introduced law under CBK Act, 2014 on interest capping has adversely affected SMEs since Financial institutions have slowed down lending as the expected interest income is not as high (GOK, 2014). On the other hand, deposit taking microfinance (DTMs) prefer lending to the customers they know and are in their database as a risk mitigation strategy else they levy high interest rates to cushion themselves from inherent losses; consequently, reducing credit access which as a result affect growth and profitability of women owned SMEs.

It is evident that there is limited research on how strategic decisions influence access to credit by SMEs, yet literature supports the view that it is critical. Furthermore, there lacks research on strategic decision factors in the SMEs owned by women in Kenya. Studies by Elbanna and Child (2017) and Papakidis et al (1998) reveal that majority of previous research studies conducted on strategic decision making have mainly focused on well-established large firms as well as the manufacturing sector, neglecting the SME sector and specifically the ones owned by women.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology that was employed to conduct the study is described in this chapter. The research objectives in chapter one served as a guide. The research design is discussed in Section 3.2, and the chosen design is justified. The target population, sampling technique, sample size, sampling frame, data collection equipment and procedures, pilot study, research instrument reliability and validity, data processing, and presentation are all covered in sections 3.3 to 3.8.

3.2 Research Philosophy & Design

3.2.1 Research Philosophy

A research philosophy is a set of principles for gathering and analyzing evidence on a phenomenon. Research philosophy, according to Mackenzie and Knipe (2015), is the method to comprehending and writing the knowledge gathered via research. Research philosophy, according to Saunders, Lewis, and Thornhill (2015), is concerned with the generation of knowledge and the nature of that knowledge, as well as important assumptions about how researchers interpret the world.

In terms of knowledge and reality, there are two extreme philosophical viewpoints (schools of thought). Positivism (also known as deductive research) and Phenomenology are two of them (also known as induction research). Phenomenology is a philosophy of science that focuses on the immediate experience, according to Saunders et al, 2015. A phenomenological approach emphasizes describing subjects as they are, rather than as people imagine them to be.

The research was guided by positivism philosophy whose key ideal is that social world exists externally, and that its properties should be measured through objective methods rather than being inferred subjectively through sensation, reflection, and intuition (Orodho, 2011). The positivist philosophy premises that knowledge is based on facts and that no abstractions or subjective reality considerations can be entertained. Positivism perspective holds that there is objective reality which can be expressed numerically based on explanatory and predictive power (Mugenda&Mugenda, 2013). Positivism research philosophy was chosen for this study to enable a vigorous process of setting hypothesis as well as conducting and in-depth analysis to measure the results. Thus, the philosophical foundation underpinning this study was positivism where the scientific process was followed in hypothesizing and deducing of observations to determine the correct position of the hypothesis.

3.2.2 Research Design

The study adopted descriptive research design guided by cross sectional survey to provide a framework to examine current conditions, trends and status of events. Descriptive research design allows for the description of each of the construct and effectively establishes the relationship between the independent and dependent variables.

Descriptive research design is also more investigative and focuses on a variable factor. Cross sectional survey is a method that involves the analysis of data collected from a population, or a representative subset, at one specific point in time (Mackenzie & Knipe, 2015). Further, the study used both qualitative and quantitative approach. McMillan and Schumacher (2014) assert that qualitative research is concerned with understanding the social phenomenon from the participants' perspective while quantitative research is an inquiry into an identified problem, based on testing a theory, measured with numbers, and analyzed using statistical techniques. A combination of the two approaches provided a richer presentation of the reality (Zikmund et al, 2013). The study measures the strategic decision factors' quantitative influence on access to credit by women owned SMEs through open ended questions while a deeper insight on the relationship of the variables

studied sought qualitatively through close ended questions. The choice of descriptive research design is suitable for this study since it utilizes a questionnaire as a tool of data collection.

3.3 Target Population

A population, according to Kombo and Tromp (2010), is a group of things, individuals, or items from whom samples are taken for measurement. Any finite or infinite collection of individual elements, according to Lavrakas (2013), constitutes a population. The target population, according to Mugenda and Mugenda (2013), is a complete set of individual case objects with some common characteristics to which the study generalizes the findings. Because Nairobi County has the biggest number of women-owned SMEs that are fully operational with excellent organizational structures and significant turnover, the study's target population was women-owned SMEs operating in Nairobi County. According to the Nairobi Licensing data (2018), there are 6,145 women owned SMEs that are operated in Nairobi.

3.4 Sampling Technique and Sample Size

3.4.1 Sampling Technique

To produce a detailed statistical description for a large population, probability sampling is performed. According to Brace (2012), probabilistic sampling involves deciding on the population of interest, or the population under research, and then establishing a frame. A probabilistic approach is then used to select a sample from this frame. It's worth noting that each element of the frame has a known probability of being chosen, and that the probability of choosing the study sample can be estimated. Non-probabilistic sampling, on the other hand, does not utilize a "randomization distribution" to determine the sample's outcomes. Instead of using the probability model, assumptions are made. Because the population was homogeneous, a simple random sample procedure was adopted in this study.

Simple random sampling has the least bias and often the most generalizability (Bacon-Shone (2015). In a simple random sample of a given size, all such subsets of the frame are given an equal probability. Each element has an equal probability of selection. A sample size must be large enough to adequately represent the significant characteristics of the reachable population (Mugenda&Mugenda, 2013).

3.4.2 Sample Size

The number of observations used to calculate population estimates is referred to as a sample size (Smith, 2014). It represents the total number of people needed for the study's final analysis. According to Mugo (2012), sample size is determined by the nature of the analysis to be performed, the required precision of the estimations, and the kind and quantity of variables to be studied at the same time. Slovin's formula was used to pick people from the target population.

Sloven's formula is used to calculate the sample size (n) given the population size (N) and a margin of error (e). It's a random sampling technique formula to estimate sampling size. It is computed as $n = N/(1+Ne^2)$. With $N=6,145$ and $e=0.05$, then $n=375$; then $375/6,145 = 6.1\%$. The study will sample 6.1 % of every stratum and the selection will be done as indicated in Table 3.1.

Table 3.1: Sampling

Business Category/Strata	Population	Sample Size (6.1%)
Small Enterprises	4,983	304
Medium Enterprises	1,162	71
Total	6,145	375

Although the sample size was 375, out of the 420 questionnaires distributed, only 370 responded.

3.5 Sampling Frame

A sampling frame is a list or device used to define the population targeted for a study. The sampling frame defines a set of elements from which a sample for a study can be selected from the target population (Brace, 2012). According to Bacon-Shone (2015), a sample is the respondents carefully selected from population of study, so as to be a representative of the whole population with the relevant characteristics and sampling as the process of selecting a number of individuals in such a way that they represent the large group from which they were selected. Greenfield & Greener (2016) describes sampling frame as the total number of all the population intended to be selected for study out of which the sample was selected as representative of total population. The sampling frame was drawn from the registered SMEs owned by women in Nairobi County.

3.6 Data Collection Instruments and Procedures

3.6.1 Data Collection Instrument

Data collection instrument refers to the tools used for collecting data from the informants and how those tools are developed (Kombo & Tromp 2010). The research used primary data that was collected using of a questionnaire. According to Brace (2012), a questionnaire is a research instrument that gathers data over a large sample and its objective is to translate the research objectives into specific questions, and the answers provide the data for hypothesis testing.

According to Mung'atu (2013), a questionnaire is a set of structured questions presented to a respondent for answers. They enhance collection of comprehensive data on a variety of factors and allow greater uniformity in the way questions are asked thus ensuring greater compatibility in the responses (Cooper & Schindler, 2014). The questionnaires enabled the researcher to effectively focus on the respondent's attention on all the significant items. Since they were administered in a written form, the standardized instructions for recording responses during the study ensured high level of uniformity.

The questionnaire had both open and close ended questions together with a triangulation approach to measure the objectives. Further, a five-point non-comparative Likert scale was used for the close ended questions. The Likert scale represent different aspects of the respondent attitude (Kothari & Garg, 2014).

3.6.2 Data Collection Procedure

Data collection procedure is an essential element in the gathering and production of data useful for analysis (Kothari, 2016). The researcher developed and constructed the data collection instrument that is the questionnaire, to be administered to the targeted respondents for collection of the primary data. According to Mung'atu (2013), when the survey is confined to a local area, and the organizations are willing and able to assign a person or a group of employees to respond to the questionnaire at the workplace, a good method to collect data is to personally administer the questionnaires. Research assistants were trained on the interpretation of the responses and the ethical procedure of collecting data. While the sample size was 375, a higher number of questionnaires (420) were administered to the respondents to take care of the non-responsive respondents. To increase the response rate, a letter of introduction was attached to the questionnaire. It took approximately one and a half months to collect back the filled questionnaires.

3.7 Pilot Study

A Pilot test as explained by Cooper and Schindler (2014) is conducted to detect weaknesses in design, instrumentation and to provide proxy data for selection of probability sample. The procedures used in pre-testing the questionnaire was identical to those used during the actual study or data collection. The number in the pre-test ought to be small, about 1% to 10% of the target population (Mugenda&Mugenda, 2013). In this study the questionnaire was pilot tested on 37 randomly selected SMEs in Nairobi County, a number that represented 8.8 % of the entire sample size. Those who participated in the pilot study did not participate in the actual research.

3.7.1 Reliability and Validity of the Research Instrument

Jack and Clarke, (2012) define reliability as the stability, repeatability, or internal consistency of a questionnaire. According to Kombo and Tromp (2010) reliability is realized when one administers an instrument to a subject twice and gets the same score on the second administration as on the first. According to Cooper and Schindler (2014), the size of a sample to be used for reliability testing varies depending on time, costs, and practicality, but the same would tend to be 5- 10% of the main survey.

Mugenda and Mugenda (2013) define validity as the degree to which results obtained from the analysis of the data represent the phenomenon under study. According to McMillan and Schumacher (2014), validity is the degree of equivalence between the clarification of the realities and the phenomena of the world. Validity is how well a test measures what it is purported to measure. It encompasses the entire experimental concept and establishes whether the results obtained meet all the requirements of the research method. Validity controls the credibility of the questions in the questionnaire to ensure that they are asked in line with the purpose of the study. Validity, therefore, is concerned with the meaningfulness of research components.

To check on the validity and reliability of the research instruments, the pre-requisite tests statistical technique was used. Under this approach, identical scale of questions was administered in two different time periods and the responses evaluated. Determination of the degree of similarity between the two measurements was done through the computation of a correlation coefficient. From the pilot study results, a correlation result of 0.82 was found, suggesting the existence of a high level of reliability of the research instrument.

3.8 Data Analysis and Presentation

Data analysis refers to examining what has been collected in a survey or experiment and making deductions and inferences (Kombo & Tromp 2010). Quantitative data analysis

method was used for the study. According to Mung'atu (2013), this method is most suitable for large well designed and well administered surveys using properly constructed and worded questionnaires. The data analysis involved editing of the questionnaires to detect and correct errors and omissions as appropriate to ensure accuracy and consistency for ease of coding and tabulation. Coding was done by assigning numbers into answers in order to classify and categorize them to facilitate data capture, inputting into computer, tabulation and summarizing the raw data before displaying in a statistical table to enable comparison, summation of errors and statistical computations.

Statistical Package of Social Sciences (SPSS version 24) programme was used to run the regression model, excel was also used to get results for questions which required multiple answers. Inferential analysis was carried out which involved tests of significance. This assisted in estimation of population values, drawing conclusions and inferences.

3.8.1 Inferential Analysis

The multiple regression analysis was used as there was one dependent variable and several independent variables; the objective was to make a prediction of the dependent variable based on its response with the other independent variables to measure the quantitative relationships existing between the variables. Oluwatayo (2012) defines regression analysis as a statistical model used to establish the nature and magnitude of the relationships between the variables and to test the hypothesized relationships in each study.

The goal of analysis for using this model was to find the best fitting and most reasonable model to describe the relationship between the variables. Different objectives were evaluated using different regression technique as presented in Table 3.2.

Table 3.2: Analytical Model

Independent Variables	Hypothesis	Analysis Method
<p>Objective 1</p> <p>Establish the influence of business owner's characteristics on access to credit by women owned small and medium enterprises in Nairobi County.</p>	<p>H₀₁: Characteristics of business owners has no significant influence on the access to credit by women owned SMEs in Nairobi County.</p>	<p>Logistic Regression.</p> <p>Accept if $p \geq .05$, else</p> <p>Reject if $p < .05$</p>
<p>Objective 2</p> <p>Examine how networking influences access to credit by women owned small and medium enterprises in Nairobi County.</p>	<p>H₀₂: Networking has no significant influence on access to credit by women owned SMEs in Nairobi County.</p>	<p>Probit Regression</p> <p>Accept if $p \leq .05$, else</p> <p>Reject if $p > .05$</p>
<p>Objective 3</p> <p>Determine how collateral influences access to credit by women owned small and medium enterprises in Nairobi County.</p>	<p>H₀₃: Collateral has no significant influence on the access to credit by women owned SMEs in Nairobi County.</p>	<p>Principal Component Analysis model.</p> <p>Accept if $p \leq .05$, else</p> <p>Reject if $p > .05$</p>
<p>Objective 4</p> <p>Establish the influence of risk management on access to credit by women owned small and medium enterprises in Nairobi County.</p>	<p>H₀₄: Risk management has no significant influence on the access to credit by women owned SMEs in Nairobi County.</p>	<p>Principal Component Analysis model.</p> <p>Accept if $p \leq .05$, else</p> <p>Reject if $p > .05$</p>

Objective 5

To determine the moderating influence of legal and regulatory environment on the relationship between strategic decision factors and access to credit by small and medium enterprises.

The relationship between strategic decision factors and access to credit by women owned SMEs is not significantly moderated by legal and regulatory environment.

Regression analysis $AC4 = \alpha + \beta_1 SD + \beta_2 LR + \beta_3 K + \epsilon_4$
Where: α = the constant (intercept) $\beta_1 \dots \beta_3$ = regression coefficients
 $AC5$ = composite index of access to credit
 SD = composite score of strategic decision
 LR = composite index of legal and regulatory environment, K = interaction term of strategic decision and legal and regulatory environment and ϵ_4 = error term.

3.8.2 Diagnostic Tests

Diagnostic tests in regression analysis seeks to assess the validity of a model in various ways. It is an exploration of the underlying statistical assumptions in a model, an examination of the model's structure by considering formulations with fewer, more or different explanatory variables, or a study of observations, looking for those that are either represented by the model poorly or that with relatively large influence on the regression model's prediction.

Homoscedasticity Test

Homoscedasticity is one of three major assumptions underlying parametric statistical analyses. In univariate analyses, such as the analysis of variance (ANOVA), with one quantitative dependent variable and one or more categorical independent variables, the homoscedasticity assumption is known as homogeneity of variance. In this context, it is assumed that equal variances of the dependent variable exist across levels of the independent variables. For this test squared residuals were used that is a plot of squared residuals verses any independent variable was made. Visual inspection of the plot confirmed homoscedasticity.

Multicollinearity

Multicollinearity is the occurrence of high inter-correlations among independent variables in a multiple regression model. For this test, variance inflation factor (VIF) was used. Multicollinearity was tested by examining tolerance and the Variance Inflation Factor (VIF). Tolerance is a measure of collinearity reported by most statistical programmes such as SPSS; the variable's tolerance is $1-R^2$. A small tolerance value indicated that the variable under consideration is almost a perfect linear combination of the independent variables already in the equation and that it should not be added to the regression equation. According to Kinyua, Minja and Kiruthu (2016) a predictor with a tolerance of less than 0.2, implies the predictor shares more than 80% of its variance with another predictor in the model.

Normality

Normality test is used to determine whether sample data has been drawn from a normally distributed population (within some tolerance). The assumption of normality is the supposition that the underlying random variable of interest is distributed normally, or approximately so. Intuitively, normality may be understood as the result of the summation of a big number of independent random events. The assumption of normality is often NOT about the variables under study, but about the error, which is estimated by the residuals. In linear regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_i z_i + \epsilon$; there is no assumption that Y is normally distributed; only that ϵ is.

Linearity Assumption Test

Here ANOVA test will be used. If $F = R^2 / (K-1) / (1-R^2) / (n-1)$ is significant, then the linearity assumption holds. High R^2 means that the dependent variable (strategic decision factors that influence access to credit) can be explained by the independent variables (Characteristics of Business Owners, networking, collateral, and risk management).

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The chapter presents the empirical findings and results after analysis of data gathered using the research methodology set out in the study. It focuses on descriptive and inferential statistics.

4.2 Response Rate

The data was collected from women owned SMEs in Nairobi County. A total of 420 questionnaires were distributed out of which 370 were filled and returned reflecting a response rate of 88%. This response rate was satisfactory to make conclusions for the study and is adequate for generalization. According to Mugenda and Mugenda (2013), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Based on the assertion, the response rate was excellent. This was attributed to the data collection procedures. The potential respondents were pre-notified of the intended survey, a self-administered questionnaire was utilized, and follow-up calls made to make any clarifications before the filled forms were collected. Table 4.1 presents a summary of the response rate.

Table 4.1: Summary of the Response Rate

Questionnaires	Respondents
Questionnaires distributed	420
Questionnaires returned	370
Questionnaires returned but not usable	0
Response rate	88%

4.3 Pre-Requisite Tests

The study performed tests on statistical assumptions that cover test of the assumption of the regression model used and statistic used. These tests include sampling adequacy, normality, linearity and homogeneity and multicollinearity. When the assumptions of the linear regression model are correct, ordinary least squares (OLS) provides efficient and unbiased estimates of the parameters (Noor, 2016).

4.3.1 Sampling Adequacy Tests

Sampling adequacy test was done to test the relevance and suitability of the factors. Kaiser-Meyer-Olkin Measure (KMO) of sampling adequacy and Bartlett's Test of Sphericity were used to establish data's sampling adequacy. Table 4.2 presents the results of the sampling adequacy test. The KMO measures of sampling adequacy produced a value of 0.914 while Bartlett's test of sphericity had a consistent significance of $p < .001$ which suggest and confirmed sampling adequacy. The results from the Kaiser-Meyer-Olkin of sampling adequacy value is higher than the cut-off value of 0.8 and approaches 1.0 indicating that the sampling number collected is adequate (Shields & Rangarjan (2013). This result is further confirmed by the Bartlett's Test of Sphericity which re-affirms the adequacy of the data collected ($0.000 < p < 0.05$).

Table 4.2:KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	3260.590
	Df	370
	Sig.	.000

4.3.2 Normality Assumption Test

Normality tests are done to determine whether the sample data has been drawn from a normally distributed population. Normality assessment can be done by using a graphical or numerical procedure. The numerical procedures include inferential statistics such as Kolmogorov-Smirnov and Shapiro-Wilk. The Kolmogorov-Smirnov test is considered appropriate for samples larger than 2000 while Shapiro-Wilk test is deemed appropriate for samples ranging from 50 to 2000.

In this study, the sample size was 420 and hence Shapiro-Wilk test was used to test normality. Shapiro-Wilk test also has power to detect departure from normality due to either skewness or kurtosis or both. The statistic range between 0 to 1 and a figure higher than 0.05 indicate the data is normal (Noor, 2016). Shapiro-Wilk test assesses whether data is normally distributed against hypothesis that:

H_0 : Sample data is normally distributed.

H_a : Sample data does not follow a normal distribution.

The study was based on an alpha value of 0.05 and therefore when the p-value is greater than the alpha value, then the null hypothesis that the data is normally distributed is rejected, while if the p-value is greater than 0.05, then null-hypothesis is not rejected.

Table 4.3 shows the results of the Shapiro-Wilk normality test. From the table, one cannot reject the null hypothesis H_0 that Characteristics of Business Owners ($p = .869$), Networking ($p = .889$), Collateral ($p = .891$), Risk management ($p = .902$), Access to Credit ($p = .903$) and Legal and Regulatory Environment ($p = .891$). This leads to p-values higher than 0.05 hence we can conclude that the data is normally distributed.

Table 4.3:Shapiro-Wilk

	Statistic	Df	Sig.
Characteristics of Business owners	.869	370	.000
Networking	.889	370	.000
Collateral	.891	370	.000
Risk management	.902	370	.000
Access to Credit	.903	370	.000
Legal and Regulatory Environment	.891	370	.000

4.3.3 Autocorrelation Test

Cameron & Miller (2011) defined autocorrelation as the relationship existing between members of a series of observations ordered in time or space. It is often used in situations where the order of observations is important, commonly in a scenario where the same variable is measured on the same participant repeatedly over time. Autocorrelation is a characteristic of data in which the correlation between the values of the same variables is based on related objects; it generally exists in those types of data-sets in which the data, instead of being randomly selected, is from the same source. This study used Durbin Watson (DW) test to establish that the residuals of the models were not auto correlated since independence of the residuals is one of the basic hypotheses of regression analysis. According to Gujarat (2010), the Durbin-Watson statistic ranges in value between 0 and 4. A value near 2 indicates non-autocorrelation; a value closer to 0 indicates positive correlation while a value closer to 4 indicates negative correlation. The study sought to establish whether there was any presence of autocorrelation between the dependent and independent variables. From Table 4.4, Durbin-Watson coefficient was 1.909, a value close to 2.0 which shows non-autocorrelation between the independent variables and the dependent variable. This finding is in linewith Miles et al., (2014).

Table 4.4: Test for Autocorrelation Between Study Variables

Model Summary	
Model	Durbin-Watson
1	1.909

Predictors: (Constant), Characteristic of owners, Networking, Collateral, Risk Management

Dependent: Access to credit

4.3.4 Multicollinearity Test

Multicollinearity is exhibited if one or more independent variables can be articulated in terms of the other independent variables. Thus, it represents a state of very high inter-associations among the independent variables or a type of disturbance in the data, and if present in the data the statistical inferences made about the data may not be reliable (Muhammad, 2013). That would imply that the predictors are not truly independent of each other as assumed by fitting the OLS model. The fitted OLS model assumed that the independent variables do not exhibit multicollinearity. Mugenda and Mugenda (2013), posit that multicollinearity can occur in multiple regression models in which some of the independent variables are significantly correlated among themselves. Multicollinearity is a situation that occurs when the independent variables are highly correlated (Martz, 2013).

In their study, Mutunga, Minja and Gachanja (2014) tested for multicollinearity using the VIFs and tolerance. Variance Inflation factor is the inverse of tolerance and that if the value of tolerance is less than 0.2 and the VIF is greater than 10, then multicollinearity is a challenge in the relationship. If a predictor has a tolerance of less than 0.2, it implies that the predictor shares more than 80% of its variance with another predictor in the model. In a relationship of the variables, existence of multicollinearity results in a high confidence interval between the variables and therefore becomes challenging to reject the null hypothesis. Under such circumstance where multicollinearity exists, Sidola et al (2012)

avers that one of the variables should be dropped so that a model with significant coefficients can be obtained.

The fitted model was tested for multicollinearity as shown in Table 4.5. To confirm that there was non-multicollinearity in the model, all the independent variables were shown to have tolerances values above 0.2 and VIFs of below 5, the set benchmark, implying that multicollinearity among the variables of the study is not a major challenge and thus the model can be relied upon.

Table 4.5:Multicollinearity

	Tolerance	VIF
Characteristics of Business Owners	.836	1.211
Networking	.800	1.113
Collateral	.952	1.059
Risk management	.819	1.145
Access to Credit	.896	1.137

4.3.5 Homogeneity Test

Homogeneity tests are used to describe the statistical properties of a data set. The test is done to check whether all the items in the population have same variance across the samples taken. Homogeneity of variance is also called homoscedasticity and is used to describe whether a set of data has the same variance. In this study, homoscedasticity was tested by use of Levene’s test of homogeneity of variances (Leven, 1960). This test is an inferential statistic used to review the correspondence of variances for a variable designed for more than two groups.

Multiple regression analysis assumes that variance of the population from which diverse samples are drawn are the same. Levene’s tests appraise this assumption by testing the

null hypothesis that the population variances are equal. The testing criteria is such that if the resulting p-value of Levene's test is less than the significance level of 0.05 that has been adopted, then the differences in sample variances are not likely to have occurred based on random sampling from a population with equal variances (Gastwirth, 2009).

From the results, the null hypothesis of identical variances is rejected. It is therefore concluded that there is a variation amid the variances in the population. The results of the homogeneity test are presented and Levene's significances were characteristics of business owners (p=.054), networking (p=.290), collateral (p=.071), risk management (p=.333). This leads to p-values higher than 0.05.

Table 4.6: Homogeneity Test

	Sig.
Characteristics of Business Owners	.054
Networking	.290
Collateral	.071
Risk Management	.333

4.4 Background Information

This section presents personal information of the respondents who participated in the research study. The researcher sought to establish the age distribution of the respondents, the number of years they have operated the businesses, their level of education and the sources of financing.

4.4.1 Age Distribution of the Respondents

The researcher sought to establish the age distribution of the respondents. The respondents were asked to state their age bracket they were in. The results revealed as follows; 50.3%

of the respondents were aged between 25-35 years, 46.5% were aged between 36-50 years, 2.7% were aged below 25 years and a mere 0.5% were aged above 50 years.

Table 4.7: Distribution of Respondents by Age

Age Distribution	Frequency	Percentage
Below 25 years	10	2.7
25-35 Years	185	50.3
36-50 years	173	46.5
51-60 years	2	0.5
Total	370	100

The result as illustrated in Table 4.7 reveals that SMEs are operated majorly by level II and level III of the age bracket that is youth (25-35 years) and the middle aged (36-50 years) respectively. The results agree with findings by Baloi and Price (2014) in a study that revealed that late twenties and mid-forties are the two natural age peaks correlated to entrepreneurship.

4.4.2 Years in Operation

The researcher sought to establish the number of years respondents worked in the businesses. The findings of the study revealed that an overwhelming majority (77.3%) of the women owned SMEs had been in operation for 1-2 years, 19.2% had operated for 3-5 years and just 3% had operated for less than one year.

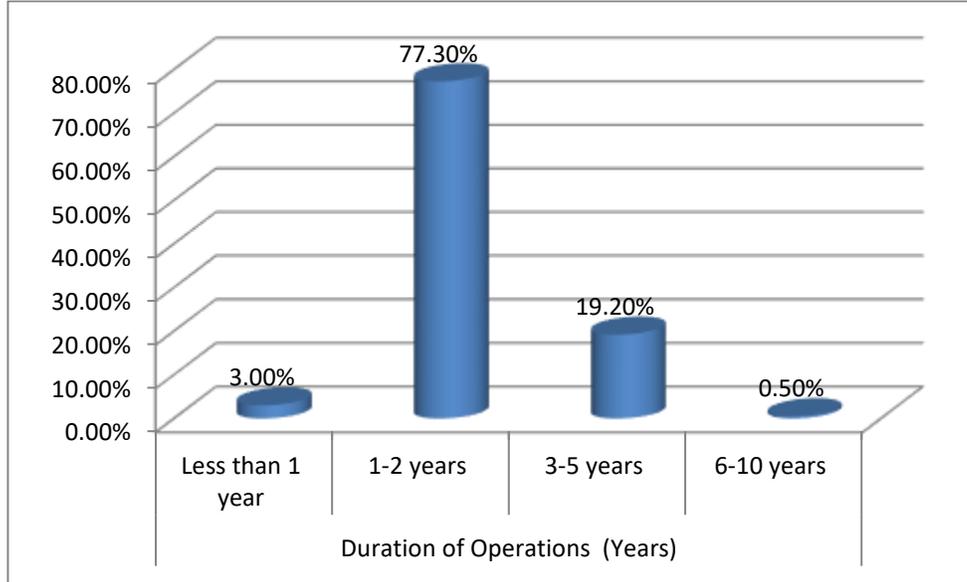


Figure 4.1 Years of Operation

As illustrated in Figure 4.1, the findings are consistent with previous empirical studies on the age of SMEs in South Africa by Baloi and Price (2014) in a study of SMEs in Johannesburg, which stipulated that 47% of enterprises surveyed had operated between 1 and 10 years.

4.4.3 Level of Education

The researcher sought to establish the level of education of the respondents. From Table 4.8, it is revealed that, majority of the respondents (84.1%) held college Diplomas, 11.4% of the respondents held bachelor's degrees, 4.3% of the respondents held O-level certificates while a mere 3% held postgraduate degrees.

Table 4.8: Distribution of Respondents by Highest-level of Education

Level of Education	Frequency	Percentage
O-Level	16	4.3
College Diploma	311	84.1
Bachelor's Degree	42	11.4
Postgraduate Degree	1	3.0
Total	370	100

As illustrated in Table 4.8, the participants had adequate level of education, which was important in helping to appreciate the concept of Strategic Decision making viz a viz the factors that influence access to Credit, a managerial skill necessary for growth of SMEs. This result agrees with findings by Marten (2015) in the study on the success of small businesses in Canada, that the education of owner is positively related to the success of the business. The results also agree with the findings by King and McGrath (2012) who established that in today's constantly fluctuating business environment, education is one of the factors that impact positively on growth of SMEs. The findings show that the level of education is an important factor in the growth of SMEs.

4.4.4 Sources of Financing

This study sought to establish the sources of finance for the women owned SMEs. The results are as follows; 59.3% reported own savings as their main sources of finance, 0.8% reported loans from commercial banks, 33.5% of the surveyed SME firms obtained finance from Government Affirmative Action Funds while 6.5% obtained loans from non-bank financial institutions.

Table 4.9: Sources of Financing

Sources of Financing	Frequency	Percentage
Own savings	219	59.3
Loans from Commercial Banks	3	0.8
Loans from non-bank Financial Institutions	24	6.5
Loans from Government Affirmative Action Funds	124	33.5
Total	370	100

As illustrated in Table 4.9, the SMEs prefer internal sources of finances as opposed to external sources. The findings corroborate the research by Wachilonga (2013) whose study on how firm size and financial source preferences of SMEs influence the capital structure of SMEs in Eldoret Municipality, Kenya revealed that owners of SMEs preferred to use internal sources of financing because of their inability to offer adequate collateral for obtaining bank loans. As a result, women owned SMEs do not rely on external funds as their main sources of financing, but rather internal sources as well as from their social groupings. This position was earlier highlighted by Mwaura (2011) while investigating factors that influence MSEs access to credit among commercial banks in Kenya which established that due to the higher risk perception of the firms, lenders demand immovable form of collateral which the smaller business units lack.

4.5 Descriptive Analysis

Quantitative analysis provides a way of explaining and describing a phenomenon through a statistical system (Greenfield & Greener, 2016). The analysis is not based on subjective interpretation but on the objective analysis of the numerical findings derived from observations. The analysis in this study began by descriptive statistics, which helped to show or summarize data in a meaningful way, which allows a simpler interpretation of data. There are normally two general types of statistics that are used to describe data. These are measures of central tendency and measures of spread.

A measure of central tendency describes the central position of a frequency distribution for a group of data for example the mode, median and means (Greenfield & Greener, 2016). On the other hand, a measure of spread is a way of summarizing data to describe how the scores are spread out. To describe this, we use range, absolute deviation, variance, and standard deviation. The responses were rated on a scale of 1-5 and respondents were expected to select which suits them best, where 1= *Strongly Disagree*, 2= *Disagree*, 3= *Neutral*, 4= *Agree* and 5= *Strongly Agree*.

The descriptive analysis with regard to the four predictor variables is presented in the following sections.

4.6 Characteristics of Business Owners

The study sought to determine if Characteristics of Business Owners influence Access to Credit by Women Owned SMEs. The following 3 sub-variables were measured: (i) Entrepreneurial skills (ii) Credit Reference Bureau (CRB) Reports and (iii) Experience in business. Table 4.10 presents the results.

Table 4.10: Descriptive Statistics for Characteristics of Business Owners

Characteristics of Business Owners	1	2	3	4	5	μ	SD
The entrepreneurial skills of the business owners have influenced the decision of financial institutions to give credit to women owned businesses	3%	6%	14%	48%	29%	3.95	.537
CRB reports of the business is always a factor considered by financial institutions before they give credit	6%	35%	21%	17%	21%	2.80	.789
The level of experience of the managers is not a major determinant of credit access by women owned businesses	5%	46%	19%	11%	19%	2.76	.708

n = 370, μ=Mean, SD=Standard Deviation

1= *Strongly Disagree*, 2= *Disagree*, 3= *Neutral*, 4= *Agree* and 5= *Strongly Agree*.

Based on the data presented on Table 4.10, the results were analyzed as follows:

4.6.1 Entrepreneurial Skills

This section measured if the entrepreneurial skills of the business owners influence the decision of the financial institutions to give credit to women owned businesses. The results suggest that 3% strongly disagreed with the statement, 6% disagreed, 14% were neutral while close to half (48%) agreed with the statement and a third (29%) of the respondents strongly agreed ($\mu=3.95$; $SD=.537$) as illustrated in Figure 4.2 and Table 4.10.

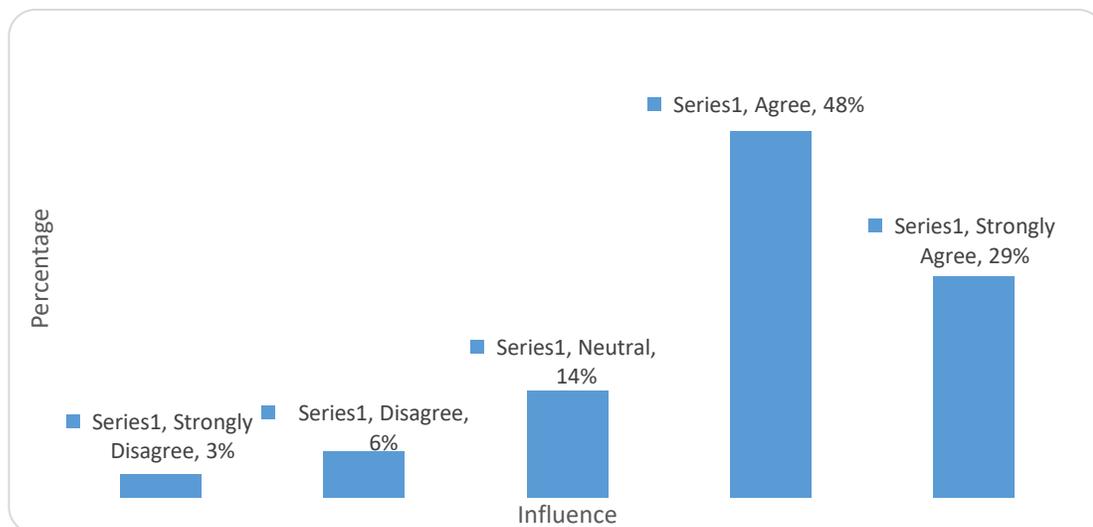


Figure 4.2: Influence of Entrepreneurial Skills of Business Owner on Access to Credit

From the foregoing, over three-quarters (77%) of the respondents agreed that the entrepreneurial skills of the business owners strongly influence the decision of financial institutions to give credit to women owned businesses. Only a small proportion (9%) disagreed with the statement.

The findings are in line with the study by Gakure et, al (2015) who while investigating factors affecting job creation and low job creation capacity of firms owned by women in Kenya established that the constraints faced by women are both external and internal with the internal constraints pertained to lack of self-confidence and acquisition of business

and managerial skills which generally concluded that the major external problem faced by women owned enterprises is finance. Further, literature by Carter et al (2015) assert that the SMEs that had operated for several years benefit from established capital markets than small firms that have operated for a short time and thus have limited ability to raise funds, a position that is corroborated by the findings of the study. Similarly, the findings support the study by Olekamma and Tang (2016) that lack of entrepreneurial skill such as management skills by the SME owners affects SMEs in getting finance from commercial banks. As Osano and Languitone (2016) found out that the existence of informational asymmetry between the SME and commercial banks requires that business owners strategically restructure their entrepreneurial skill that includes the educational background of managers and managerial experience in a manner that will reduce the informational asymmetry that exists. The findings imply that entrepreneurial skills of the business owners strongly influence the decision by lenders to give credit to women owned SMEs.

4.6.2 Credit Reference Bureau Reports

This section measured if CRB reports, which reflects on the business owners 'experience and creditworthiness in business are always a factor considered by financial institutions before giving credit to women owned SMEs. The results were as follows: 6% strongly disagreed with the statement, 35% disagreed, 21% were neutral, 17% agreed with the statement and 21% of the respondents strongly agreed. Majority of the respondents (41%) disagreed while 38% concurred with the statement ($\mu=2.80$; $SD=.789$) as illustrated in Table 4.10.

These results are in line with research by Barron and Staten (2009) which suggest that lenders consider the credit reference bureau reports of business owners to some extent in order to significantly reduce their business default rate by including more comprehensive borrower information in their default prediction models. Another study by Bikker and Metzmakers (2005) opined that default rate decreases when more information of business owners is available on borrowers. The findings imply that financial institutions do not

always rely on credit reference bureau reports of business owners before giving credit to women owned SMEs. The findings also suggest that business information provided by firms can be given more credence if supplemented by information provided by credit reference bureaus which are considered more objective since it combines information from different lenders into one repository (Kitindi, Magembe&Sethibe, 2007). Therefore, women owned SMEs need to strategically purpose to establish favorable position with credit reference bureaus to access credit when needed.

4.6.3 Experience in Business

This section measured if the level of experience of managers influences Access to Credit by women owned businesses. The findings were as follows: 5% strongly disagreed with the statement, 46% disagreed, 19% were neutral, 11% agreed with the statement while 19% of the respondents strongly agreed ($\mu=2.76$; $SD=.708$) as illustrated in Table 4.10. From the foregoing, majority of the respondents, 51%, disagreed with the statement that the level of experience of the managers has not been a major determinant of credit access by women owned businesses. Only 30% of the respondents agreed with the statement.

The findings are in line with the research by Carter et al, 2015 who observed that SMEs that have operated for several years benefit from established capital markets as opposed to those firms that have operated for a short time. Johnston and Loader (2013) found that lack of appropriate financial management experience by managers of SMEs hinders proper and critical financial planning, often leading to bankruptcy and therefore lenders consider the experience of SME managers before advancing credit. Most entrepreneurs acquire experiences and skills ‘on the job’ with further literature indicating that women owned SMEs have experienced unplanned growth attributable to a lack of proper planning on the part of managers. They are caught unaware and therefore feel overwhelmed in managing credit (OECD, 2011). The findings imply that the experience of SME managers is a major factor considered by lenders before giving credit to women owned businesses.

The results of the study which reveal that the experience of the owner managers is not an important factor in determining access to credit is contrary to the findings by Fatoki and Asah (2011) which explain that firms' owners with a long-term experience in the business are more likely to avoid some costly mistakes than those ones with no or less experience; hence such women owned firms are better placed to access credits. This therefore implies that women owned businesses can strategically purpose to have persons with wide experience manage their business firms.

4.7 Networking

The study sought to determine the extent to which Networking influences access to Credit by women owned SMEs. The sub-variables measured were (i) Identification of other Sources of Credit (ii) Linkages and associations (iii) Information sharing. Table 4.11 shows the results.

Table 4.11: Descriptive Statistics for Networking

	1	2	3	4	5	μ	SD
Networking							
Networking has enabled businesses owned by women identify othersources of credit	2%	11%	27%	25%	35%	4.01	.325
Networking has enabled businesses to create linkages and associations	3%	6%	14%	29%	48%	4.32	.534
Networking has enabled businesses share beneficial information	33%	8%	22%	19%	18%	2.88	.754

n = 370, μ =Mean, SD=Standard Deviation

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

Based on the data presented on Table 4.11, the following findings are generated:

4.7.1 Identification of Other Credit Sources

This section measured if Networking has enabled businesses to explore new sources of credit. The results were as follows: 3% strongly disagreed with the statement, 6% disagreed, 14% were neutral, 29% agreed with the statement while 48% of the respondents strongly agreed ($\mu=4.01$; $SD=.325$) as illustrated in table 4.11.

From the foregoing, majority (60%) of respondents concurred with the statement that networking has enabled businesses to explore new credit sources. This is in line with findings by Nkonge (2013) on the research on the challenges faced by small and medium enterprise suppliers when bidding for tenders in Thika, Kenya which revealed that poor networking among SMEs owned by women is a major constraint to gaining access to credit. The findings reveal that using networks that include trade unions, professional bodies and other social groupings such as clubs provide valuable source of information on cheaper source of finances (Kung'u, 2011). The findings imply that networking enables women owned businesses identify new credit sources.

4.7.2 Linkages and Associations

This section measured if Networking had enabled the businesses owned by women to create linkages and associations that are beneficial to their businesses. The results were as follows; 2% strongly disagreed with the statement, 11% disagreed, 27% were neutral, 25% agreed with the statement while 35% of the respondents strongly agreed ($\mu=4.32$; $SD=.534$) as illustrated in Table 4.11.

From the foregoing, majority of the respondents (77%) concurred with the statement that networking has enabled the businesses owned by women to create useful linkages and associations. This is collaborated by findings by Moyi (2013) in his study to establish the credit and employment growth among small enterprises in Kenya that found that limited access to technology and permanent networking websites were a constraint on SMEs' qu

est to accessing credit. This implies networking enables women owned businesses create linkages and associations that are beneficial to the growth and survival of the businesses.

4.7.3 Information Sharing

This section measured if Networking has enabled business get information about cheaper credit. The results are as follow: 33% strongly disagreed with the statement, 8% disagreed, 22% were neutral, 19% agreed with the statement while 18% of the respondents strongly agreed ($\mu=2.88$; $SD=.754$) as illustrated in Table 4.11. From the foregoing, majority of the respondents (41%) disagreed with the statement.

The findings support the study by Ntakobajira (2013) on the factors affecting the performance of MSE traders at City Park hawkers' market in Nairobi County, Kenya which concluded that access to relevant information on sources of credit affects performance of MSEs to a great extent because it limits the entrepreneurs' ability to identify credit providers. A similar study conducted by Nalyanya (2012) also revealed that information sharing is a direct determinant influencing access to Credit by MSEs.

4.8 Collateral

The study sought to establish the extent in which strategic decisions relating to firm's ability to offer appropriate collateral influences access to credit by women owned SMEs. The following 3 sub-variables were measured: i) Nature of collateral ii) Value of collateral and iii) Cost of perfecting collateral.

Table 4.12: Descriptive Statistics for Collateral

Collateral	1	2	3	4	5	μ	SD
The nature of collateral security influenced the decision of financial institutions to give credit to women owned businesses	9%	21%	26%	28%	16%	3.33	.725
The value of collateral security influenced the decision of financial institutions to give credit to women owned businesses	7%	18%	30%	35%	10%	3.41	.628
The cost of perfecting collateral influence business owners from accessing credit from financial institutions	16%	18%	22%	38%	6%	2.60	.825

n = 370, μ =Mean, SD=Standard Deviation

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

Based on the data presented on Table 4.12:

4.8.1 Nature of Collateral

This section measured if the nature of collateral security influences the decision of financial institutions to give credit to women owned businesses. The results are as follow: 9% strongly disagreed with the statement, 21% disagreed, 26% were neutral, 28% agreed with the statement while 16% of the respondents strongly agreed ($\mu=3.33$; $SD=.725$) as illustrated in Table 4.12 and Figure 4.3. From the foregoing, majority of the respondents (44%) agreed with the statement.

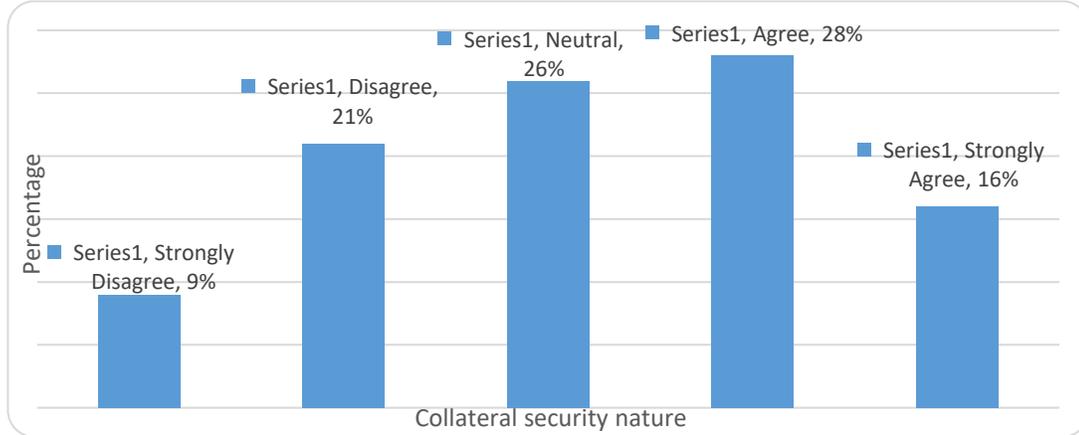


Figure 4.3 The Nature of Collateral

The findings support the results by Atieno (2012) on the access to credit by small and medium enterprises owned by women which revealed that commercial banks and other formal financial institutions fail to cater for the credit needs of women who are smallholder business entrepreneurs, mainly because women entrepreneurs do not have tangible assets to meet the lending terms and conditions relating to collateral requirements. Atieno (2012) concluded that it is generally the rules and regulations of the commercial banks and other formal financial institutions that have created the myth that the micro, small & medium enterprises are not credit worth since they cannot afford the required collateral. This implies that the nature of collateral security provided influences the decision of financial institutions to give credit to women owned businesses. The higher the liquidity or marketability of collateral, the higher the chances that financial institutions will issue credit. This is the basis financial institutions insist on the provision of collateral by businesses owned by women as a primary lending condition. Lack of the women owned SMEs to present an appropriate type of collateral is found to hinder access to Credit by women owned SMEs.

4.8.2 Value of Collateral

This section measured if value of collateral security influences the decision of financial institutions to give credit to women owned businesses. The findings are as follow: 7% strongly disagreed with the statement, 18% disagreed, 30% were neutral, 35% agreed with the statement while 10% of the respondents strongly agreed ($\mu=3.41$; $SD=.628$) as illustrated in Table 4.12. From the foregoing, majority of the respondents (45%) agreed with the statement.

The findings concur with those of a study conducted in Ghana by Vuvor and Ackah (2011) to examine the challenges faced by Small & Medium Enterprises (SMEs) in accessing credit which revealed that the inability of SMEs to own highly valued assets to provide as collateral to financial institutions make it extremely difficult to access credit. This implies that value of collateral security provided influences the decision of women owned enterprises in relation to access to credit. Financial institutions have lending margins depending on the marketability and type of security. The higher the value, the higher the chances that the lender will grant loan against the security, these issues are considered by women owned enterprises while making strategic decisions.

4.8.3 Cost of Perfecting Security

This section measured if cost of perfecting collateral security to ensure property ownership right is instilled, that is, the legal process of charging and assigning collateral security to the financial institution affects access to credit facilities. The results are as follows: 16% strongly disagreed with the statement, 18% disagreed, 22% were neutral, 38% agreed with the statement while 6% of the respondents strongly agreed ($\mu=2.60$; $SD=.825$) as illustrated in Table 4.12. From the foregoing, majority of the respondents (44%) agreed that cost of perfecting a collateral affects credit access by women owned SMEs.

4.9 Risk Management

The study sought to establish the extent to which risk management practices adopted influence Access to Credit by women owned SMEs. The following 3 sub-variables, that is, loan repayment history, business location, and corporate governance were measured.

Table 4.13: Descriptive Statistics for Risk Management

Risk management	1	2	3	4	5	μ	SD
The loan repayment history of the SMEs influences their new loan advance	8%	5%	14%	46%	27%	4.09	.463
The location in which the women owned SMEs operate influence access to credit	26%	32%	26%	10%	6%	2.64	.876
The extent to which an SME uphold corporate governance influence their access to credit	24%	35%	25%	11%	5%	2.76	.708

n = 370, μ=Mean, SD=Standard Deviation

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

Based on the findings presented on the table:

4.9.1 Loan Repayment History

This section measured if the women owned SMEs loan repayment history influences their access to credit. The results are as follows: 8% strongly disagreed with the statement, 5% disagreed, 14% were neutral, 46% agreed with the statement while 27% of the respondents strongly agreed ($\mu=4.09$; $SD=.463$) as illustrated in Table 4.13. From the foregoing, majority of the respondents (73%) agreed with the statement.

The results from Table 4.13 supports that of Hoff and Stiglitz (1990) who find that SMEs whose repayments of loans is uncertain are considered risky by banks and hence are more likely to be credit rationed. Under this circumstance, the bank is threatened by default risk, being the risk that the SME cannot fulfill its obligations to the bank and to reduce this type of risk exposure, a bank will reduce loan advancement to such business units.

4.9.2 Business Location

This section sought to investigate whether the location of the business and the neighboring surrounding business area of operations influences access to credit by the women owned SMEs. The results are as follows: 26% strongly disagreed with the statement, 32% disagreed, 26% were neutral, 10% agreed with the statement while 6% of the respondents strongly agreed ($\mu=2.64$; $SD=.876$) as illustrated in Table 4.13 and Figure 4.4.

These research findings in regard to the influence of business location in influencing credit access by women owned enterprise provides contrary position to that arrived by Zambaldi, Aranha, Lopes and Politi, (2009) who while investigating credit access by small firms in Brazil found that location of a business in a crime prone area or persistent labour unrest affected the chance of these business entities to access credit. Consequently, it is evident that the location of the business firm is a determining factor when the small firms seek additional funding.

4.9.3 Corporate Governance

The study sought to investigate if observance of corporate governance in an organization influences the access to credit by women owned SMEs. The results in Table 4.13 show that: 24% strongly disagreed with the statement, 35% disagreed, 14% were neutral, 11% agreed with the statement while 5% of the respondents strongly agreed ($\mu=2.76$; $SD=.708$) as illustrated in Table 4.13. From the foregoing, majority (59%) respondents disagreed with the statement. This implies that financial institutions do not rely on the state of corporate governance in the women owned SMEs as a basis of advancing loan facilities.

4.10 CreditDecisions on Funding Requests by Women Owned SMEs

The section identifies the situations under which requests for financing by women owned SMEs are declined. The three sub-variables considered include i) Number of requests declined due to insufficient collateral ii) Number of requests deferred due to insufficient

information and iii) Number of requests approved at lower-level amounts. The finding is presented in Table 4.14.

Table 4.14: Credit Decisions on Funding Requests by Women Owned SMEs

Statement	1	2	3	4	5	μ	SD
Application for financing declined due to insufficient collateral	10%	23%	19%	30%	18%	2.85	.734
Application for financing deferred due to insufficient information	9%	15%	21%	37%	19%	3.37	.608
Application for financing approved at lower amounts due to inability of the business to repay	6%	7%	20%	41%	26%	4.00	.250

n = 370, μ=Mean, SD=Standard Deviation

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

4.10.1 Applications for Financing Declined due to Lack of Collateral

This section measured if lack of an appropriate collateral security influences the decision of financial institutions to decline credit to women owned businesses. The findings are as follow: 10% strongly disagreed with the statement, 23% disagreed, 19% were neutral, 30% agreed with the statement while 18% of the respondents strongly agreed ($\mu=2.85$; $SD=.734$) as illustrated in Table 4.12. From the foregoing, majority (48%) of the respondents agreed with the statement.

The results concurred with the findings by Vuvor and Ackah (2011) in a study in Ghana to examine the challenges faced by SMEs in accessing credit which revealed that the inability of SMEs to own highly valued assets to provide as collateral to financial institutions make it extremely difficult to access credit.

This implies that availability of collateral security influences the decision of financial institutions to give credit to women owned businesses. Financial institutions have lending margins depending on the marketability and type of security. The higher the value, the higher the chances that the financial will grant loan against the security.

4.10.2 Applications for Financing Deferred due to Insufficient Information

This section measured if financing requests from women owned SMEs are deferred due to lack of sufficient information, business and financial records, proper documentation, and appropriate collateral. The results are as follow: 9% strongly disagreed with the statement, 15% disagreed, 21% were neutral, 37% agreed with the statement while 19% of the respondents strongly agreed ($\mu=3.37$; $SD=.608$) as illustrated in Table 4.11. From the foregoing, majority (56%) respondents agreed with the statement.

The findings support the study conducted by Nalyanya (2012) that revealed that information sharing between lenders and borrowers had a direct influence on the level of loan access by SMEs. This implies that a lack of sufficient information; financial records and proper documentation by a borrower influences financial institutions to defer their loan requests.

4.10.3 Applications for Financing Approved at Lower Amounts

This section sought to establish if the ability to repay a loan influences financial institution to scale down loan amounts applied with a view to mitigate on default. The results are presented in Table 4.14. The findings suggest that 6% strongly disagreed with the statement, 7% disagreed, 20% were neutral, 41% agreed with the statement while 26% of the respondents strongly agreed ($\mu=4.00$; $SD=.250$) as illustrated in Table 4.13. From the foregoing, majority (67%) of the respondents agreed with the statement.

The findings are in line with the views of Mwongera (2014) who asserted that financial institutions have often charged high interest rates on credit given to small medium and micro enterprises and this has discouraged entrepreneurs especially women from seeking credit from financial institutions. This implies that lack of demonstration of ability to repay loans influences financial institutions to reduce loan amounts granted to women owned businesses.

4.11 Inferential Statistics

The inferential statistics was done for each predictor variable and then a combination of all the predictor variables. The inferential statistical measures that were used include correlation, ANOVA, and regression analysis to determine the relationship between the independent variable and the dependent variables. According to Stevens (2009), Pearson's correlation is used when one is working with two quantitative variables in a population to establish the magnitude and direction of the relationship. The possible research hypotheses are that the variables will show a positive linear relationship, a negative linear relationship, or no linear relationship at all. The direction of the relationship is also very important in that if it is positive (+) it means that there is a positive relationship between the two variables, implying that when one variable increases, the other variable also increases or when one variable decreases the other variable also decreases. The Pearson correlation coefficient, r , can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables while a score of 1 suggests a perfect correlation which is found when a variable is correlated with itself (Taylor, 2014).

4.11.1 Correlation Between Characteristics of Business Owners and Access to Credit

Despite the fact that the Affirmative Action Funds set up by the Government such as the Women Enterprise Fund and the Uwezo Fund have largely influenced the scope to which women entrepreneurs are able to develop and build their entrepreneurial skills and capacity, consequently improving their credit worthiness, the high and ever-growing number of potential small-scale women entrepreneurs outnumber the available capacity in the state funded financial institutions. This is in line with findings by Lin (2012) which showed that women owned SMEs tend to face greater financial constraints than do larger firms due to fewer financial lending institutions.

Lack of knowledge of the rights that women have and how to enforce them is a challenge. Women may not be aware of the legal issues that they need to address to start a business, and they can find it difficult to navigate the complex array of laws and regulations.

Education equips women with the knowledge and skills they need to better manage and succeed in their businesses (Allen,2007). Research shows that the level of formal entrepreneurial activity among women increases as their education rises, and there is a major jump in business ownership among those who go beyond secondary education. Education and skills are needed to run a business which is lacking in majority of SMEs in Kenya (Atieno, 2012).

According to King and McGrath (2012), those with more education and training are more likely to be successful in the sector. The literacy level was reflected in their ability to carry out managerial routines which includes making decisions on financial investment. Credit markets present asymmetric information problems. Lenders know neither the past behavior and the characteristics, nor the intentions of credit applicants. This creates a moral hazard problem that causes lenders to make credit decisions based on the average characteristics of borrowers rather than on individual characteristics (Stiglitz & Rothschild, 1976). Moral hazard implies a lower probability of payment and making credit more expensive. This influences the decision on the external funding of SMEs.

This study sought to establish the existence of a correlation between characteristics of business owners and access to credit. The findings are summarized in Table 4.15.

Table 4.15: Correlation Between Characteristics of Business Owners and Access to Credit

		Access to Credit	Characteristics of Business Owners
Access to Credit	Pearson Correlation	1	.372**
	Sig. (2-tailed)		.000
	N	370	370
Characteristics of Business Owners	Pearson Correlation	.372**	1
	Sig. (2-tailed)	.000	
	N	370	370

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

From the Table 4.15, a positive correlation coefficient of .372 (or 37.20%) exists between Characteristics of Business Owners and Access to Credit by women owned SMEs.

4.11.2 Correlation Between Networking and Access to Credit

Many authors consider social networks such as family and friends, as the most common types of network tie (Shu, Page, Gao & Jiang, 2012). They observed that the amount of time required to improve performance and gather information will be reduced by social networks. They further indicate that having a relevant social network is essential for a manager/owner of a firm in order to obtain bank loans. On the other hand, several authors have suggested that managerial ties could facilitate the firm's performance by providing opportunities to approach external resources. Thus, in some countries, particularly developing countries, ties with government are critical for SMEs survival (Ngoc & Nguyen, 2013). This study sought to establish whether there was any form of correlation between Networking and Access to Credit. The findings are summarized in Table 4.16.

Table 4.16: Correlation Between Networking and Access to Credit

		Access to Credit	Networking
Access to Credit	Pearson Correlation	1	.196**
	Sig. (2-tailed)		.000
	N	370	370
Networking	Pearson Correlation	.196**	1
	Sig. (2-tailed)	.000	
	N	370	370

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

From the table, it can be observed that there was a positive correlation coefficient of .196 (or 19.6%) between Networking and access to Credit.

4.11.3 Correlation Between Collateral and Access to Credit

This study sought to establish whether there was any form of correlation between Collateral and Access to Credit. The findings are summarized in Table 4.17.

Table 4.17: Correlation Between Collateral and Access to Credit

		Access to Credit	Collateral
Access to Credit	Pearson Correlation	1	-.242**
	Sig.(2-tailed)		.000
	N	370	370
Collateral	Pearson Correlation	-0.242**	1
	Sig.(g2-tailed)	.000	
	N	370	370

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

From Table 4.17, it can be deduced that there is a negative correlation coefficient of .242 (or 24.2%) between the collateral that women owned SMEs have and Access to Credit. The negative association between collateral and capacity to access credit by women owned businesses contradicts the long-held belief that a business organization with adequate collateral is more likely to access credit because the same assets act as a security to the loan advance (Mbogo, 2013). The reason behind this result is that majority of the SMEs do not have tangible assets held in their names – but rather their spouses which is not acknowledged by the lenders. The existence of the subjective land laws and property in general, especially in rural areas, might explain why women despite ‘owning’ property through their spouses do not necessarily benefit from the same because of the customary laws which still consider assets to be owned by the husband (Agarwal, 2013).

4.11.4 Correlation Between Risk Management and Access to Credit

This study sought to examine whether there was any form of correlation between Risk management and access to Credit. The findings are summarized in Table 4.18.

Table 4.18: Correlation Between Risk Management and Access to Credit

		Access to Credit	Risk management
Access to Credit	Pearson Correlation	1	.108**
	Sig. (2-tailed)		.000
	N	370	370
Risk management	Pearson Correlation	0.108**	1
	Sig. (2-tailed)	.000	
	N	370	370

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

From the findings in Table 4.18, a negative correlation coefficient of 0.108 (or 10.8%) exist between risk management practices adopted and access to credit by women owned SMEs. The finding suggesting the existence of a weak positive correlation between risk management practices and access of credit shows that the women owned SMEs under investigation do not consider adoption of risk management practices such as the adoption of corporate governance not to be relevant due to the size difference unlike the corporate bodies (Manab, Kassim&Hussin, 2010). The business sizes of the majority of the SMEs reduces the nature of risks that the firms face and this means that the owners appreciate the importance of reducing the level of risk exposure in their operations but the same is not considered to be critical to influence their access to credit. This finding is in line with that arrived by Golshan and Rasid (2012) who submits that business implement risk management practices because of their potential benefits and therefore when they find that it will not impact much their operations, they tend not consider the same in much regard.

4.12 Regression Analysis

Regression analysis is a technique for modeling the relationship between a scalar variable y and one or more variables denoted x . In linear regression, data are modeled using linear functions, and unknown model parameters are estimated from the data. This is in line with the findings of Maheshwarkar and Sohani (2013), who observed that such models are called linear models. Most commonly, linear regression refers to a model in which the conditional mean of Y given the value of x is an affine function of x (Gray et al., 2013).

At the inferential analysis stage, the study, which adopted Statistical techniques, sought to explore the nature of relationship between the independent variables and their respective influence on the dependent variable, access to Credit. In addition, the degree to which individual variables affected access to credit was determined.

4.12.1 Logistic Regression Between Characteristics of Business Owners and Access to Credit

In analysis of logistic regression model, four basic assumptions should be made based on the data relating to variables under consideration. One of the assumptions is to ensure that the dependent variable (access to credit) is measured on a dichotomous scale. The respondents were asked whether their business have access to credit or not. Therefore, the dependent variable in the current study was measured on dichotomous key where the responses were given in two groups. Assumption two is to have one or more independent variable that is either continuous or categorical. The present study incorporated characteristics of business owners which were coded as continuous data. Assumption three is about independence of observation and to have a dependent variable that has mutually exclusive and exhaustive categories. Assumption four is about linear relationship between the variables (characteristics of business owners and access to credit). There needs to be a linear relationship between any continuous independent variables and the logistic transformation of the dependent variable. The results in relation to logistic model summary is presented in Table 4.19.

Table 4.19: Model Summary: Variance Explained

Step	-2 Log likelihood	Cox & Snell R^2	Nagelkerke R^2
1	454.955 ^a	.122	.164

a. Estimation terminated at iteration number 20 because maximum iterations have been reached. Final solution found.

From the model summary table, Cox & Snell R^2 and Nagelkerke R^2 values are presented. The two statistical values are used to calculate explained variation in binary logistic model. The Cox & Snell R^2 and Nagelkerke R^2 values are referred to as R^2 in multiple regression though they will have lower values. From the model, the Cox & Snell R^2 and Nagelkerke R^2 values are 0.122 and 0.164 implying that the explained variation in the dependent variable based on our model ranges from 12.2% to 16.4%, depending on whether you reference the Cox & Snell R^2 or Nagelkerke R^2 methods, respectively.

Nagelkerke R^2 is a modification of Cox & Snell R^2 , the latter of which cannot achieve a value of 1. For this reason, it is preferable to report that characteristics of business owners explain 16.4% of the total variation in access to credit.

Binomial logistic regression estimates the probability of an event (in this case, access to credit) occurring. If the estimated probability of the event occurring is greater than or equal to 0.5, SPSS Statistics classifies the event as occurring (e.g., business access to credit). If the probability is less than 0.5, SPSS Statistics classifies the event as not occurring (e.g., no access to credit). It is very common to use binomial logistic regression to predict whether cases can be correctly classified (i.e., predicted) from the independent variables. Therefore, it becomes necessary to have a method to assess the effectiveness of the predicted classification against the actual classification. There are many methods to assess this with their usefulness often depending on the nature of the study conducted. However, all methods revolve around the observed and predicted classifications, which are presented in the "Classification Table", as shown below:

Table 4.20: Classification Table

			Predicted		
			Access to credit		Percentage Correct
	Observed		Yes	No	
Step 1	Access to credit	Yes	184	31	85.6
		No	95	60	38.7
Overall Percentage					65.9

a. The cut value is .500

The critical value or the cut-off value is .500. This means that if the probability of a case being classified into the "yes" category is greater than .500, then that particular case is classified into the "yes" category. Otherwise, the case is classified as in the "no" category (Kleinbaum & Klein, 2010). The findings suggested that logistic regression model correctly classified 65.9% of accessibility to credit by business owners given that their characteristics are preferably good.

To determine the contribution of the independent variable to the dependent variable, Wald test was carried out. The variables predict the probability of an event occurring based on a one-unit change in an independent variable when all other independent variables are kept constant. The result is presented in Table 4.21.

Table 4.21: Wald Test

							95% C.I. for EXP(B)		
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Characteristics of business owners	-21.203	40183.140	.000	1	1.000	1.000	.000	.
	Constant	21.203	40183.140	.000	1	1.000	1615202404.207		

a. Variable(s) entered on step 1: Characteristics of business owners.

The Wald test ("**Wald**" column) is used to determine statistical significance for each of the independent variables. The statistical significance of the test is found in the "**Sig.**" column. From the analysis, it suggests that the odds of a business with perfect characteristics of business owners accessing credit is 1.000. This finding is statistically significant given the fact that the significance value of the variable is less than 5%. The findings are in line to the findings by Gakure (2015) who assert that among the SMEs, factors such as lack of self-confidence, experience, business managerial skills, in adequate capacity to planning and lack of total commitment to the business venture sends a negative signal to the potential lender about the operational sustainability of the business in both the short- and long-term period and thus limit or decline all together advancement of credit. In addition, Njeru and Njoka (2012) observe that the small size of majority of the SMEs owned by women deprives them the capacity to employ qualified staff to manage the firms professionally and therefore lack necessary managerial competence.

4.12.2 ProbitRegression Analysis Between Networking and Access to Credit

Probit regression, also called a Probit model, is used to model dichotomous or binary outcome variables. In the Probit model, the inverse standard normal distribution of the probability is modeled as a linear combination of the predictors. Therefore, to test the significance and influence of networking on credit access by women owned small and medium enterprises in Nairobi County, Kenya, the study conducted a Probit regression analysis to model credit access outcome which was regarded as yes for accessibility or no for inaccessibility. The resultant chi-square test is presented in Table 4.22.

Table 4.22: Probit Regression Results for Networking on Access to Credit

	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT ^a	Networking	-.394	.172	-2.290	.022	-.730	-.057
	Intercept	1.523	.584	2.606	.009	.938	2.107
a. PROBIT model: PROBIT(p) = Intercept + BX							
Probit regression		Number of obs	=	365			
		Wald chi ² (7)	=	46.63			
		Prob>chi ²	=	0.0000			
		Log pseudo likelihood	=	152.05403	Pseudo R ²	=	0.1186

a. Since the significance level is greater than .150, no heterogeneity factor is used in the calculation of confidence limits.

b. Statistics based on individual cases differ from statistics based on aggregated cases.

p-value and the log likelihood chi square ratio are 0.0000 and 0.1186 respectively. This shows significance of the Networking in explaining the access to credit by women owned SMEs in Nairobi County, Kenya and 11.86% of the change in access to credit is explained by the changes in Networking. Therefore, we reject the null hypothesis and accept the alternative hypothesis that Networking has a significant influence on access to credit by women owned SMEs in Nairobi County, Kenya. The parameter estimates of the Probit regression is presented in Table 4.23.

From the parameter estimates table, we can see that networking as an independent variable has a significant (p=0.022) effect on credit accessibility. The overall Probit function obtained is; $PROBIT(p) = 1.523 - 0.394X$

From the model therefore, it shows that networking has a negative effect on credit access by women owned small and medium enterprises in Nairobi County, Kenya. This finding showing that networking has an inverse relationship to credit access is going against that of Moyi (2013) and Gaitho (2013) which shows that networking of businesses resulted in improved repository of knowledge in the organization on areas such as available government support to small businesses and support in terms of training. The reason attributed to the negative relationship in regard to networking and access to credit shows is attributed to the size of the firms which are mainly managed by one person.

The p value and the log likelihood chi square ratio are 0.0000 and 0.1186 respectively. This shows significance of the Networking in explaining the access to credit by women owned SMEs in Nairobi County, Kenya and 11.86% of the change in access to credit is explained by the changes in Networking. Therefore, we reject the null hypothesis and accept the alternative hypothesis that Networking has a significant influence on access to credit by women owned SMEs in Nairobi County, Kenya.

Table 4.23: Average Marginal Effects Regression of Networking on Access to Credit

Variables	dy/dx	Standard error	Z	P>z	[95% ConfidenceInterval]
Networking	0.2444872	0.0644457	3.79	0.000 ***	0.118176 0.3707984
Intercept	0.1071859	0.0465984	2.30	0.021 **	0.0158548 0.198517

Based on the marginal effects of the model for the significant variables, findings reveal that having networking is more likely to increase the access to credit by women owned SMEs in Nairobi County, Kenya by 24.4% all factors held constant. These marginal effects measure the alteration in the probability of an access to credit by women owned SMEs in Nairobi County, Kenya with a unit change in a given independent variable, holding all other variables constant at their mean networking have significant marginal effects on access to credit by women owned SMEs in Nairobi County, Kenya at the 5% level of significance.

4.12.3 Principal Component Regression for Collateral and Access to Credit

The study sought to establish the influence of collateral on access to credit by women owned SMEs as stated in objective three. By fitting the communalities for the correlation analyses, the proportion of variance accounted for in each variable by the rest of the variables is explained by the extraction communalities. Extraction communalities are estimates of the variance in each variable accounted for by the factors in the factor solution. Small values indicate variables that do not fit well with the factor solution and should possibly be dropped from the analysis. From Table 4.24, it shows that the extraction communalities for this solution are acceptable.

Table 4.24: Extraction Communalities

	Initial	Extraction
Access to credit	1.000	.598
Networking	1.000	.598

Extraction Method: Principal Component Analysis.

Fitting a principal component regression model for Yield on the 3 principal components produced the following PCR statistics represented in Table 4.25.

Table 4.25: Principal Component Regression Statistics

Component	Coeff	Std Error	P-Value
Comp.1	3.494	0.24	0.000**
Comp.2	1.216	0.318	0.000**
Comp.3	0.783	0.345	0.024**

From the above table, the principal component regression equation is given by:

$$\text{Access to credit} = 3.494\text{Comp.1} + 1.216\text{Comp.2} + 0.783\text{Comp.3}$$

According to the findings of the study, the nature of collateral security will increase access to credit by women owned SMEs in Kenya by 3.494, the value of collateral security will increase access to credit by women owned SMEs in Kenya by 1.216, and the cost of perfecting or charging security to secure a loan will increase access to credit by women owned SMEs in Kenya by 0 while other factors remain constant. The findings highlight the importance of collateral for women-owned SMEs seeking finance. The positive association reveals that when a SME has a basis of resources that can be supplied as a security to the lender, the chances of obtaining loan are raised (Tipilda&Kristjanson, 2011). Despite the prevailing situation in the dominant culture in Kenya that few women own the assets legally, the results in support of the findings by Mbogo (2013) that though there have been land reforms in Kenya, the SMEs appreciates the importance of collateral in improving chances of being financed.

4.12.4 Linear Regression Analysis of Risk Management and Access to Credit

As mentioned in the fourth goal, the study sought to determine the impact of a firm's risk management on access to credit. Figure 4.4 depicts a scatter plot of risk management policies used by SMEs in Kenya and their access to credit.

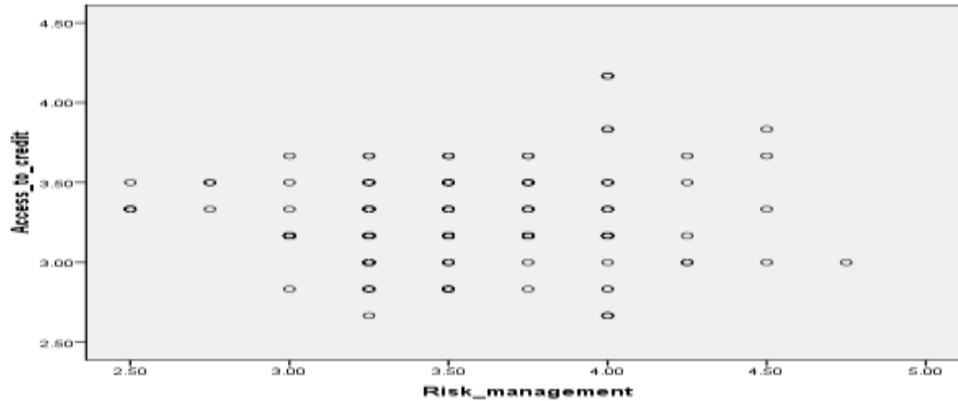


Figure 4.4: Scatter Plot for Risk Management and Access to Credit.

The majority of the plots appear in the third quadrant, according to Figure 4.4, and the line of best fit indicates a decreasing estimate line. This means that risk management and access to credit for women-owned SMEs have a negative linear relationship.

H₀₄: Risk Management has no significant influence on the Access to Credit by women owned SMEs in Nairobi County, Kenya.

Fitting a principal component regression model for Yield on the 3 principal components produced the following PCR statistics.

Table 4.26: Principal Component Regression Statistics

Component	Coeff	Std Error	P-Value
Comp.1	4.654	0.256	0.000**
Comp.2	3.521	0.231	0.002**
Comp.3	1.654	0.391	0.001**

From Table 4.26, the principal component regression equation is given by:

$$\text{Access to credit} = 4.654\text{Comp.1} + 3.521\text{Comp.2} + 1.654\text{Comp.3}$$

Transforming these PCR statistics using the eigenvectors attributed to the eigen values of the standardized X variables results in the Multiple Linear Regression coefficients results in the following PCR statistics.

Table 4.27: Transformed Multiple Linear Regression Coefficients

Variable	Linear Regression Coefficient
Loan repayment history	3.165
Business location	1.604
Corporate governance	1.213

Transforming to a multiple linear regression model yields the above coefficients as shown in Table 4.27. The Multiple Linear Regression (MLR) equation therefore becomes:

$$AC = \beta_0 + 3.165LPH + 1.604BL + 1.213CG$$

Based on the study findings, it is evident that holding other factors constant, loan repayment history will increase access to credit by women owned SMEs in Kenya by 3.165, the environments in which the women owned SMEs operate will increase access to credit by women owned SMEs in Kenya by 1.604 while the extent to which an SME uphold corporate governance will enhance external financing by women owned SMEs in Kenya by 1.213. The importance of risk management by SMEs has been reinforced by the findings by showing that previous loan repayment history of the borrowing firm determines the subsequent capacity to access external funding (Marcelino-Sádaba *et al.*, (2014). It is important therefore that the business unit strategically establishes a good credit rating by honouring its obligation with a view to receiving favourable consideration in future applications (Mutezo, 2013). The findings also show that the least risk management factor in influencing external funding is corporate governance and this finding contradicts the findings by Manab, Kassim and Hussin (2010) which suggest that corporate governance is an important determinant of risk management among small firms.

4.12.5 Overall Regression Analysis

The study carried out a regression analysis between the independent variables and the dependent variable.

Table 4.28: Overall Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.432 ^a	.187	.178	.21934

Predictors: (Constant), Characteristics of Business Owners, Networking, Collateral and Risk Management

This Model Summary Table presents an R² result of .187 meaning that the independent variables alone can explain up to 18.7% of the total variability in the dependent variable, Access to Credit. The remaining 81.3% of the variation in the dependent variable is unexplained by this one predictor model but by other factors not included in the model.

Table 4.29: ANOVA for the Combined Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.035	4	1.009	20.967	.000
	Residual	17.560	365	.048		
	Total	21.595	369			

a. Dependent Variable: Access to Credit

b. Predictors: (Constant), Characteristics of Business Owners, Networking, Collateral, and Risk Management

From the ANOVA Table 4.29, the model is statistically significant as the p-value is less than .05. The values of $F(1, 369) = 20.967$, $P < 0.05$, shows that all the independent

variables (Risk Management, Networking, Characteristics of Business Owners and Collateral) statistically and significantly predict the access to credit (that is, the regression model is a good fit of the data) and that all the independent variables significantly influence the access to credit by women owned SMEs. Further, the coefficients of the independent variables were established to evaluate the magnitude of their influence on access on credit. The finding is presented in Table 4.30.

Table 4.30: Coefficients of the Combined Model

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.346	.226		5.950	.000
	Characteristics of Business Owners	.302	.044	.334	6.945	.000
	Collateral	-.158	.051	.160	3.084	.002
	Networking	.121	.047	.125	2.563	.011
	Risk Management	-.004	.034	-.005	-.107	.915

a. Dependent Variable: Access to Credit

Characteristics of Business Owners and Access to Credit by Women Owned SMEs in Kenya adds a statistically significant value (p-value =.000) of .302 to Table 4.30 on the coefficient of the combined model. The model reveals that the characteristics of company owners have a favorable impact on women-owned SMEs' access to credit, with a unit change in the mean index of Characteristics of Business Owners increasing access to credit by 0.302 for women-owned SMEs in Kenya. As a result, the alternative hypothesis HA1: that there is a strong association between company owner characteristics and external financing to women-owned SMEs in Kenya is a viable option.

The influence of collateral on women-owned SMEs' access to financial services in Kenya has a statistically significant value (p-value =.002) of -0.158. This means that a change in collateral reduces the ability of women-owned SMEs to obtain loans by a factor of 0.158. As a result, the alternative hypothesis HA1: that there is a strong association between collateral and credit access by women-owned SMEs in Kenya is ruled out. In the case of

networking, a unit change in networking increases credit access by 0.121. As a result, the alternative hypothesis must be true. H_{A1} : that there is significant relationship between networking and access to credit by women owned SMEs in Kenya is therefore accepted.

Finally, risk management contributes a statistically significant value (p-value = .915) of -0.004, implying that a unit change in risk management will reduce the access to access to credit by women owned SMEs by a mean index of 0.004. The alternative hypothesis H_{A1} : There is significant relationship between Risk Management and access to credit facilities by women owned SMEs in Kenya is therefore rejected.

4.12.6 Moderating Influence of Legal and Regulatory Environment

The moderating influence of Legal and regulatory environment on the relationship between strategic decision factors and performance was measured using Baron and Kenny (1986) four-step method. In the study, it was hypothesized that legal and regulatory environment indirectly influences the access to credit by women owned small and medium enterprises in Nairobi County, Kenya. Previous literature supports the moderating role of legal and regulatory environment, and this leads to the third hypothesis:

H₀: There is no significant moderating influence of legal and regulatory environment on the relationship between strategic decision factors and access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

This hypothesis was tested using the Baron and Kenny (1986) four-step method. Stepwise linear regression was used in each step. In step one, the regression was done between Strategic decision factors and access to credit by women owned small and medium enterprises in Nairobi County, Kenya while holding the moderator constant. The relationship is expected to be significant. If R^2 and beta coefficients are statistically significant, the process would move to step two. If they are not significant, the process terminates and concludes that Legal and regulatory environment does not moderate the

relationship between Strategic decision factors and access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

The second step involved regressing the strategic decision factors on Legal and regulatory environment. If the results are significant, the process moves to step 3 because the necessary condition for moderation exists. In step three, the influence of Legal and regulatory environment on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya is tested using a simple linear regression model. A statistically significant influence of Legal and regulatory environment on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya is a necessary condition in testing for moderation. The last step involves regressing Regression results for the influence of strategic decision factors and legal and regulatory environment on the access to credit by women owned SMEs in Nairobi County, Kenya. This is a necessary condition in testing for moderation.

Table 4.31 presents the results of the regression that was conducted between Strategic decision factors and access to credit by women owned SMEs in Nairobi County, Kenya while holding the moderator constant.

Table 4.31:Regression Results forStrategicDecisionFactors on the Access to Credit

Model Summary						
Model	g	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.494	.244	198	.52833	
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.471	1	1.471	5.271	.003
	Residual	102.951	369	.279		
	Total	104.422	370			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
	(Constant)	.951	.763		1.247	.218
	Strategic decision factors	.787	.243	.416	3.236	.002

a. Dependent Variable: Access to credit by women owned small and medium enterprises in Nairobi County, Kenya

b. Predictors: (Constant), Strategic decision factors

Table 4.31 shows that strategic decision factors have a direct influence on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya as indicated by a coefficient of 0.494. The results in the table indicate that the influence of strategic decision factors on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya is significant (R Square = 0.244, F = 5.271, $p < 0.05$) with 24.4% of the variation in the access to credit by women owned small and medium enterprises in Nairobi County, Kenya explained by strategic decision factors.

The F ratio indicates that the regression of strategic decision factors on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya is significant at $p < 0.05$, implying that the regression model had the goodness of fit. The beta was equally significant ($\beta = 0.787$, $t = 3.236$, $p < 0.05$). The first moderation condition that the independent variable should be linked to a large extent to the dependent variable without the existence of the moderating variable is therefore fulfilled. Table 4.32 shows regression results of the influence of strategic decision factors on Legal and regulatory environment.

Table 4.32: Regression Results for Legal and Regulatory Environment on Strategic Decision Factors

Model Summary						
Model	R	R ²	Adjusted R ²	Std. Error of the Estimate		
1	.671	.451	.446	8.17058		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.122	1	229.122	33.904	.000
	Residual	2,493.702	369	6.758		
	Total	2,722.824	370			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.451	5.507		4.258	.000
	Legal and regulatory environment	.778	.075	.671	10.406	.000

Dependent Variable: Strategic decision factors

Predictors: (Constant), Legal and regulatory environment

The results presented in Table 4.32 indicate that Strategic decision factors had a positive and significant influence on Legal and regulatory environment ($R=.671$ $P < 0.05$). The model presents 45.1 per cent ($R^2=0.451$, $F=108.288$, $p < 0.05$) variation in legal and regulatory environment is explained by strategic decision factors, leaving 54.9 per cent unexplained. The results, therefore, suggest that the second step of testing confirms moderating influence of Legal and regulatory environment in the relationship between Strategic decision factors and access to credit by women owned small and medium enterprises in Nairobi County, Kenya and thus permits analysis to move to step 3.

Table 4.33 presents the summary results of testing the influence of Legal and regulatory environment on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

Table 4.33: Summary Regression Results of Legal and Regulatory Environment on Access to Credit

Model Summary						
Model	R	R ²	Adjusted Std. Error of the R ² Estimate			
1	.341 ^a	0.116	0.110	0.836		
a. Predictors: (Constant), legal and regulatory environment						
ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.223	1	12.223	17.504	.000 ^b
	Residual	257.562	369	0.698		
	Total	269.785	370			
a. Dependent Variable: access to credit by women owned small and medium enterprises in Nairobi County, Kenya						
b. Predictors: (Constant), legal and regulatory environment						
Coefficients						
Model	Un-standardized Coefficients	Std. Error		Standardized Coefficients	T	Sig.
	B		Beta			
1	(Constant)	3.771	0.451		9.359	0.000
	Legal and regulatory environment	0.782	0.121	0.146	2.209	0.000
a. Dependent Variable: access to credit by women owned small and medium enterprises in Nairobi County, Kenya						

The results indicated in Table 4.33 indicates a weak relationship between legal and regulatory environment and access to credit by women owned small and medium

enterprises in Nairobi County, Kenya ($R=0.3341$) with legal and regulatory environment explaining 11.6 % variation in the access to credit by women owned small and medium enterprises in Nairobi County, Kenya. The difference of 88.4% is accounted for by variables not considered in this model. The third moderation condition that the independent variable should be linked to a large extent to the dependent variable without the existence of the moderating variable is therefore fulfilled.

Table 4.34 presents regression results for the influence of strategic decision factors and legal and regulatory environment on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

Table 4.34: Regression Results of Strategic Decision Factors and Legal and Regulatory Environment on Access to Credit

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.516 ^a	0.266	0.243	0.50376
2	.648 ^b	0.419	0.382	0.4552

a. Predictors: (Constant), Strategic decision factors

b. Predictors: (Constant), Strategic decision factors, legal and regulatory environment

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.944	1	2.944	11.601	.002 ^b
	Residual	93.726	369	0.254		
	Total	96.67	370			
2	Regression	4.642	2	2.321	11.200	.000 ^c
	Residual	76.176	368	0.207		
	Total	80.818	370			

a. Dependent Variable: access to credit by women owned small and medium enterprises in Nairobi County, Kenya

b. Predictors: (Constant), Strategic decision factors

c. Predictors: (Constant), Strategic decision factors, legal and regulatory environment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.102	0.892		0.114	0.910
	Strategic decision factors	0.847	0.249	0.516	3.406	0.040
	Legal and regulatory environment	5.114	1.631		3.136	0.004
2	(Constant)	1.383	0.922	0.544	2.794	0.002
	Strategic decision factors	1.164	0.251	0.709	4.647	0.000
	Legal and regulatory environment	-0.666	0.233	-0.437	-2.862	0.007
	Interaction term	0.234	0.073	1.533	3.202	0.007

Predictors: (Constant), Legal and regulatory environment, Strategic decision factors

Predictors: (Constant), Legal and regulatory environment, Strategic decision factors (interaction term).

Dependent Variable: Access to credit by women owned small and medium enterprises in Nairobi County, Kenya.

The link between strategic choice criteria and access to finance by women-owned small and medium firms in Nairobi County, Kenya was significant (R Square = 0.266, F = 11.601, $p > 0.05$), according to the regression data provided in Table 4.34. The findings show that strategic decision factors were responsible for 26.6 percent of the variation in access to credit by women owned small and medium enterprises in Nairobi County, Kenya, while other factors were responsible for 73.4 percent of the variation in access to credit by women owned small and medium enterprises in Nairobi County, Kenya. The F ratio indicates that the effect of strategic decision factors on women-owned small and medium businesses in Nairobi County, Kenya is significant. The beta (= 0.516, $t = 3.406$, $p < 0.05$) was significant.

Stepwise regression was used to determine the interrelationship influences of the Legal and Regulatory Environment on the connection between Strategic decision criteria and

access to financing by women owned small and medium firms in Nairobi County, Kenya. The second model (R Square = 0.419, F = 11.2, P 0.05) reveals that combining the predictors (Strategic decision factors and Legal and regulatory environment) was positive and significant. The F ratio indicates that regression of Strategic decision factors and Legal and regulatory environment on the access to credit by women owned small and medium enterprises in Nairobi County, Kenya is significant at $p < 0.05$. The beta values for Strategic decision factors were significant ($\beta = 0.709$, $t = 4.647$, $p < 0.05$), the beta for Legal and regulatory environment was significant ($\beta = -0.437$, $t = -2.862$, $p < 0.05$). The findings, therefore, support the hypothesis that Legal and regulatory environment moderate the association between Strategic decision factors and access to credit by women owned SMEs in Nairobi County, Kenya. The results were indicative of the fact that Strategic decision factors interacts with legal and regulatory environment and the interaction influences the access to credit by women owned small and medium enterprises in Nairobi County, Kenya. The study rejects the null hypothesis and accepts the alternative hypothesis that legal and regulatory environment moderates the relationship between strategic decision factors and the access to credit by women owned SMEs in Nairobi County, Kenya.

Legal and Regulatory environment has no moderating influence on the access to credit by women owned SMEs in Nairobi County, Kenya. From the discussion above, it is clearly in support of the null hypothesis on the moderating variable. The significance value is significantly higher than 0.05 thus implying that the impact of moderating variable on the relationship between independent and the outcome variable in the current study is insignificant. We therefore fail to reject the null hypothesis that legal and regulatory environment do not have a moderating influence on the access of credit by women owned SMEs.

4.12.7 Moderating Influence of Legal and Regulatory Environment on the Relationship Between Strategic Decision Factors and Access to Credit

Moderating variable (legal and regulatory systems) can change the strength or direction of the relationship between the outcome (access to credit) and predictor variables (Characteristics of Business Owners, Collateral, Networking and Risk Management). The impact may move the direction of the relationship from positive to negative and further the strength from strong to weak or vice versa. The moderating variable will be supported or implemented into a study if found to have a significant impact on the dependent variable when interacted with the predictor variable.

Table 4.35: Model Summary of the Moderating Influence of Strategic Decision Factors on Access to Credit

Model R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.433 ^a	.187	.21958

a. Predictors: (Constant), Legal and Regulatory, Collateral, Characteristics of business owners, Networking, Risk Management

From the findings, the R coefficient after moderation is 43.3% (0.433) and in the overall regression, the coefficient gives 43.2% (0.432). This shows an increase in the strength of relationship between dependent and independent variable by 0.1 % (0.001) because of moderating influence. This is very insignificant impact and consequently, the R square coefficient remained the same thus implying that the moderating variable have no impact on the relationship between predictors and outcome variables.

Table 4.36:ANOVA with Moderating Variable

Model		Sum of Squares	Df	Mean	F	Sig.
				Square		
1	Regression	4.045	5	.809	16.779	.000 ^a
	Residual	17.550	364	.048		
	Total	21.595	369			

a. Predictors: (Constant), Legal and Regulatory, Collateral, Characteristics of Business Owners, Networking, Risk Management

b. Dependent Variable: Access to Credit

The analysis of variance table shows that the moderating variable has no impact on the model. This is evident given that the regression and residual sum of squares remained unchanged. The only factor that brought a slight change on the F statistic (20.967- overall model, 16.779- moderated model) is the regression degrees of freedom.

Table 4.37:Coefficients with Moderating Variable

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	1.295	.253		5.118	.000
Characteristics of Business Owners	.303	.044	.334	6.944	.000
Collateral	.158	.051	.160	3.085	.002
Networking	.120	.047	.124	2.531	.012
Risk Management	-.003	.034	-.005	-.092	.927
Legal and Regulatory	.015	.033	.022	.454	.650

a. Dependent Variable: Access to Credit

The study findings show that the coefficients with moderating variable have changed slightly. The change however is insignificant in some variables. Table 4.37 shows the difference in β values between the initial variables and moderated variables.

Table 4.38: Comparison Table

Variables	B	Moderated β	Sig.	Moderated Sig.
(Constant)	1.346	1.295	.000	.000
Characteristics of Business Owners	.302	.303	.000	.000
Collateral	-.158	-.158	.002	.002
Networking	.121	.120	.011	.012
Risk management	-.004	-.003	.915	.927
Legal and Regulatory	-	.015	-	.650

In Table 4.38, it is evident that the difference in β (coefficient values) is very small. Statistically, this difference is insignificant to make an impact. In addition, the β for the moderating variable 0.015 is not significantly different from 0. The significance value (0.650, greater than 0.05) also supports the notion that the moderating variable is insignificant on the relationship between the dependent and independent variable.

Testing Hypothesis for the Moderating Variable

In Nairobi County, Kenya, the legal and regulatory framework has little effect on women-owned SMEs' access to credit. The null hypothesis on the moderating variable is obviously supported by the explanation above. The significance value of 0.650 is substantially higher than 0.05, showing that the moderating variable has no effect on the link between the independent and outcome variables in the current investigation. As a result, we are unable to reject the null hypothesis that the legal and regulatory environment have no effect on women-owned SMEs' access to finance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the research findings as guided by the research objectives and hypothesis. It covers the discussions of the research findings, conclusions, recommendations, recommendations for policy formulation and recommendations for further research.

5.2 Summary of the Findings

This study sought to establish the strategic decision factors influencing access to credit by women owned SMEs in Nairobi County, Kenya. Specifically, the study investigated the influence of the characteristics of business owners, networking, and collateral and risk management of the firms on their ability to access credit. In addition, the research sought to establish the moderating influence of legal and regulatory environment in the joint effect of owners' characteristics, networking, collateral and risk management on access to credit by the women owned SMEs in Nairobi County, Kenya.

5.2.1 Influence of Characteristics of Business Owners on Access to Credit

The study sought to investigate if characteristics of business owners influence the women-owned SMEs to access Credit. The three sub-variables used to proxy this variable were owners' entrepreneurial skills, credit worthiness or standing of the owner as evidenced in the local credit referencing bureaus and the owners' experience in business. The results shows that owners entrepreneurial skills enhanced their capacity to access credit because banks screened favourable SMEs managed by owners who exhibited high entrepreneurial skills. Entrepreneurial skills in a particular line of business were found to increase the owner's self-confidence, and a sign of managerial and business skills to adapt easily to changes that happen in the business environment. A high level of entrepreneurial skills as

manifested by experience and educational level limits the information asymmetry between the owners and lenders and thus increasing the chances of the women owned SMEs to access credit. From the logistic regression, the owner characteristics revealed that it influences the SME access to credit.

The results on the influence of credit referencing bureaus information was found not to be a significant factor that is considered by the SMEs while assessing firm and owner characteristics that financiers consider in loan advances. Regarding the level of experience as a strategic decision factor that influences their access to credit, half of the respondents agreed that it is an important factor that they endeavor their business to observe. A longer business and owner experience in a particular segment is associated with effective financial planning, limits business mistakes and can quickly capture opportunities arising in the operating environment. As a result, financiers tend to prefer businesses and owners with a wider business experience.

The correlation analysis between the characteristics of business owners and their ability to access credit shows that there is a positive and significant correlation between the two variables ($p < 0.05$ ($P=0.000$)). Similarly, the logistic regression results show that the business and owners characteristic determine the firm access to credit ($p < 0.05$). This position was further reinforced by the overall regression coefficient that shows that owners characteristics was a significant variable affecting access to credit ($p < 0.05$) and the variable had the highest positive factor by which the increase in credit access is affected ($\beta =0.302$).

The finding re-emphasizes the importance of an organization management in realization of its performance goals by showing that the entrepreneurial nature of managers of an organization coupled with a wide experience in running businesses gives the organization a head starts in being favorably considered for a loan. Therefore, women owned SMEs need to strategically employ a management team that is experienced, enterprising and at the same time need to have a favorable position with credit referencing bureaus.

5.2.2 Influence of Establishing Networks on Access to Credit by Women Owned SMEs

The second variable that defined strategic decisions by women owned SMEs was the extend of networking established by the owners. The sub-variables investigated under networking were improved sources of credit financing, linkages and associations and information sharing capabilities by women owned SMEs in Kenya. The results suggest that the women –owned SMEs recognizing the importance of strategically establishing appropriate business network as a source of accessing credit.

These findings reinforce the importance of networking in an SME organization quest to accessing credit because of the resultant benefits that include a wide network of similar line organization that can share beneficial information on how and where to access credit on favorable terms. A whole spectrum of network sources were identified in the study that provided an avenue of accessing appropriate financing avenues to the SME and from which provide a source of credit on favourable terms. A lack of information technology competence among the SME owners was found to be an impediment to get relevant financing options available in the market, and thus linkages and association networks prove to be important source of such information. Despite the importance of association and business linkages on information sharing, the results shows that limited information sharing was gained and thus providing an avenue for further re-evaluating the working of the networks established by the businesses.

The correlation between networking variable and access to credit by the women owned SMEs established revealed a positive association ($r=0.196$). The researcher adopted Probit component regression factor to analyze the relationship between networking of the SME owners on accessing of credit. This networking variable was found to be significant (p -value = 0.000) in determining access to credit and that it explains 11.86% of the SMEs capacity to access credit. The second hypothesis thus shows that networking affects the access to credit by women owned SMEs with a t -value of 5.444 (p -value =0.000). The

research hypothesis that there is a significant relationship between networking and Access to Credit by women owned SMEs is accepted.

5.2.3 Influence of Collateral on Access to Credit by Women Owned SMEs

The third strategic decision variable that was investigated to determining the access to credit was level of collateral that was accumulated by the business. The characteristics of the collateral investigated included, nature, value and cost of the collateral. The results reveal that the nature and value of the security were identified as the dominant features of the collateral that influenced the ability of the women owned SME to accessing credit. The cost of performing the security was not found to influence accessing of credit. The results suggest that an SME can strategically accumulate assets with value and immovable with a view to using the same as a security when seeking for additional funding in future. Assets that are easily liquidated and of high value, create an important strategic position to a firm while seeking for additional funding in future. Financial institutions assess the risk level of an SME on the basis of available collateral that it provides to the lender as a security.

To assess the relationship between the available collateral on the ability of the SME to access credit, the researcher adopted a logistic regression. A negative correlation ($r=-0.242$) was arrived at between the two variables. This was an interesting finding because it shows that a lower level of collateral resulted in higher access to credit, a position that goes against the norm that suggest that more collateral increases the chances of an organization to access credit. This was explained the by the possibility that SMEs with higher level of collateral have accumulated adequate resources and as such required minimal financing unlike the young firms that have greater appetite for funding. The principal component results shows that the three sub-variables are significant in affecting access to credit by the SME with the nature of the collateral resulting to the higher chance of accessing collateral ($\beta= 3.494$, $p=0.000$), value of collateral ($\beta= 1.216$, $p=0.000$) and the cost perfecting the collateral proving the minimal influence –though significant, ($\beta= 0.783$, $p=0.024$).

5.2.4 Influence of Risk Management on Access to Credit by Women Owned SMEs

The fourth and last strategic decision investigated on its influence on access to credit by the SMEs was the risk management. The sub-variables investigated included the SME risk profile, operational environment of the firm and corporate governance. The finding reveals that the respondents were in agreement that loan repayment history of the SME had great influence on the access to credit by the SMEs, but the at the same more than four-fifths of the respondents did not agree that the environment in which the SMEs operate affected their ability to access credit.

The findings suggest that the loan repayment period was the most significant factor of risk management risk management ($\beta= 1.216$) and this was associated to the reduction of the information asymmetry between the SME and the financiers over the period. Overall, risk management was found to be insignificant to the access to credit by women owned SMEs ($\beta= -0.004$, $p=0.915$). The research hypothesis that there is no significant relationship between risk management and access to credit is therefore rejected.

5.2.5 Moderating Influence of Legal and Regulatory Environment on Access to Credit

The study findings show that the introduction of the legal and regulatory environment is not significant in some variables. In addition, the β for the moderating variable 0.015 is not significantly different from 0. The significance value (0.650, greater than 0.05) also supports the notion that the moderating variable is insignificant on the relationship between the dependent and independent variable. Therefore, the results indicates that indeed the strategic decision factors interacts with legal and regulatory environment and the interaction does influences the access to credit by women owned small and medium enterprises in Nairobi County, Kenya. Consequently, the study rejects the null hypothesis and accepts the alternative hypothesis that legal and regulatory environment moderates the relationship between strategic decision factors and the access to credit by women owned SMEs in Nairobi County, Kenya. Targeted measures by the government and local

authorities might influence such factors as availing finances to specific group of businesses under favourable terms.

5.3 Conclusion

5.3.1 Characteristics of Business Owners

The findings reveal that there exists a relationship between business owners' characteristics and access to credit by women owned SMEs. Therefore, since the characteristics of business owners are considered by lenders, women owned SME operators should improve their entrepreneurial capacity, business acumen gained over a period of time and improve their credit rating. This can only be gained over a period of time, or the business unit might need to recruit a management team with the requisite competency that will give confidence to lenders.

5.3.2 Networking

Based on the findings, despite networking not necessarily providing the women owned SMEs to access new businesses information about cheaper credit, it does provide an avenue through which SMEs identify new credit sources and new markets. Consequently, the business units need to establish appropriate linkages that will add create necessary competitive advantage in the relevant business line.

5.3.3 Collateral

Based on the findings of this study, the nature and value of collateral/security required from SMEs by credit providers is greatly considered while making credit decisions. While making strategic decisions regarding access to credit, women owned enterprises are likely to consider accessing credit from financial institutions that do not require highly valued collateral/security. Additionally, lack of appropriate types of collateral hinders access to credit by women owned SMEs, it can therefore be concluded that collateral significantly influences the access to credit by women owned SMEs in Kenya.

5.3.4 Risk Management

Based on the findings of this study, risk management has a negative influence on access to Credit by women owned SMEs in Kenya. While making strategic decisions on credit, women owned enterprises consider credit sources with high-risk management whether credit is needed for short- or long-term basis. High risk management discourages women owned enterprises in their efforts to seek credit from sources that unnecessarily set the terms at unnecessarily high.

5.4 Recommendations

5.4.1 Characteristics of Business Owners

There is need for more training and capacity building of women on financial management and planning. This will result to improved repayment rates of loans. Financial institutions should innovate on how to encourage women owned SMEs access to credit either by coming up with more friendly credit products or review the lending processes to suit business start-ups and those without collaterals. Experience, education and knowledge in business is critical for business survival, growth and expansion, more focus should be on building internal staff capacity in managing SMEs. It is recommended that the women owned SMEs come up with deliberate strategic moves aimed at increasing the entrepreneurial capacity of its members through training and exchange programs that will result in improved assessment of the owners by the lenders. At the same time, the women owned business organizations should endeavour to accumulate more decision making staff with appropriate skills before going for external loans and in absence of the same, it is recommended that the firms explore non-formal sources of funds such as from friends and acquaintances.

Affirmative action government funded organizations should take a leading role in financing the smaller women owned enterprises that would not have gained requisite experience to access credit from the mainstream financial institutions. Kenyan

government agencies such as the ministry of industry-based business training institute, Kenya Youth Employment and Opportunities Project as well as the County based SME capacity development bodies should organize more trainings for SMEs.

5.4.2 Collateral

Many women entrepreneurs have no conventional collateral securities partly attributable to cultural beliefs among many ethnic communities in Kenya which prohibits women from owning ancestral property such as land. In consideration that collateral was found to be a significant factor in affecting access to credit. Consequently, it is recommended that financial institutions (FIs) should accept business assets and introduce group guarantee, where borrowers form social groupings for the purpose of co-guaranteeing one another. This will reduce level of risk from FIs to the borrowers hence encouraging FIs to grant loans to borrowers consequently increasing credit access.

As part of affirmative action, the government should come up with a soft alternative to title deeds which will enable potential women entrepreneurs compete with men in borrowing or accessing credit facilities to ensure sustainability in entrepreneurial activities like fellow businessmen. Such examples include but not limited to credit guarantee funds. In relation to the numerous women owned SMEs which outnumber the available lending institutions, the government of Kenya needs to come up with fiscal policy which allows proliferations of credit providers in remote villages to ensure accessibility by easing requirements for registration of MFIs and regional banks.

As most of the SMEs, especially in their early stage, have a weak capitalization, they are not able to provide the required collateral to secure their repayment. It is recommended that institutions reduce the collateral requirements to encourage SMEs to apply for loans.

5.4.3 Networking

SMEs inclination to find and have a network to share knowledge, information and resources could open channels and enable SMEs to interact and develop relationships with influential people that might have a positive influence on their firms, for instance, by learning more from other entrepreneurs/individuals and improving the performance of their firms. Besides, networking by spreading knowledge of the firm's existence and improving the legitimacy of the firms could increase the firms' chance to have access to the bank loan.

Financial institutions should design appropriate lending models that promotes outreach and opening of branches to serve large population of women entrepreneurs in the remote villages that cannot for one reason or the other access them in urban centers. Numerous potential women entrepreneurs outnumber the few lending institutions in other parts of Kenya; consequently, there is need to encourage formation of business clubs for networking and mentorship purposes.

5.4.4 Risk Management

The findings suggest that risk management has a positive and significant influence on the access to credit by women owned SMEs. From previous literature, it has been found that SMEs lack a holistic approach to risk management. Therefore it is recommended that banks, SACCOs and other financial institutions need to include business advisory services, capacity building and training on their loan package for SMEs that are seeking loans. It is also important for women owned SMEs to know how to strategically identify, analyze as well as respond to various risks in today's business environment for them to survive since they are affected by various risks due their structural features and limited resources compared to larger organisations. Additionally, since SMEs generally have have

significant contribution in human capital and value-added creation, they require the adoption of influenceive risk management (RM) systems.

Managing risks is a major issue for women owned SMEs today. It is therefore important for the women owned SMEs to develop deliberate internal processes for identifying major business risks. The women owned SMEs should undertake the identification of key business risks in a timely manner, examining their likelihood, determining the significance of the financial impact of the risks on the outcome of business, establishing priorities for the allocation of necessary resources as well as communicating results.

5.5 Suggestions for Further Research

This study aimed to establish the strategic decision factors influencing access to credit by women owned SMEs in Kenya. The scope of the study was limited to SMEs in Nairobi not the entire country hence further research is recommended for other Counties since factors affecting credit uptake vary from one business environment, culture, and dynamics to another.

The findings reveal that the characteristic of the business owners play a significant role in SMEs access to credit. However, it is not clear from the literature and the current research whether the career part of the women SME owners have a direct influence on the characteristics of business owners. Further research should therefore investigate whether SME owners that had held a leadership position before establishing their business affects their capability to access credit.

Many potential women entrepreneurs have problem of lack of consciousness of the survival of some credit lending institutions and the numerous products and services they offer. There is no uniform and systematic flow of information to all able women in all corners to know what is happening in the market so there is need for further research in this area.

Further research should be conducted on why so many small-scale women entrepreneurs' businesses have high mortality rate that is they cannot celebrate third birthday in other words majority of these small business cannot last, that is they are not sustainable. There are other many factors other than the four variables studied that can be investigated if they determine access to credit facilities by women owned SMEs.

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APPENDICES

Appendix I: Research Questionnaire

Instructions to the respondents

The purpose for this questionnaire is to collect data on *“The strategic decision factors influencing access to credit by Women Owned Small and Medium Enterprises in Nairobi, County, Kenya.*

The respondents make a tick appropriate (√) where for their opinion.

SECTION 1: GENERAL INFORMATION BY THE RESPONDENT

1. What is your age.

Below 25 years

25 - 35 years

36 - 50years

51 - 60years

61 years and above

2. What is your gender:

Male

Female

3. What is your highest level of education?

O-Level

College Diploma

Bachelor's Degree

Post Graduate Degree

Others, (Specify).....

4. For how long have you been in business?

Less than 1 year

1-2 years

3-5 years

6-10 years

More than 10 years

5. What is the current number of employees in the business?

1 to 9

10 to 49

50 to 99

100 and above

6. What is the nature of business is the SME involved in;

7. Please indicate your designation

SECTION 2: ACCESS TO CREDIT BY WOMEN OWNED SMEs

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

Yes No

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

Yes No

If Yes, how do the credit services offered by the financial institution in any way affect business performance?

.....
.....

3. What is/ are your major source(s) of financing for the business? (Tick where appropriate)

Savings

Loans from commercial banks

Loans from non-bank financial institutions

Affirmative action Funds

Others, (Specify).....

4. How much (in Kenya Shillings) did the business access from financial institutions in the past financial year?

50,000

51,000-200,000

201,000-500,000

Above 500,000

5. The following are statements relating to credit access. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Statement	5	4	3	2	1
a.	Majority of loan requests from women owned SMEs do not have collateral security and their loan request are declined					
b.	High risk perception by financial institutions reduces women owned SMEs' ability to repay loans hence the requests are deferred					
c.	Financial institutions vary loan amounts approved depending on women owned SME's ability to repay and ability to fully secure the loan.					

SECTION 3: STRATEGIC DECISION FACTORS INFLUENCING ACCESS TO CREDIT

A] CHARACTERISTICS OF BUSINESS OWNERS

1. Do you think the business experience and skills of women entrepreneurs' influence access to credit by their businesses?

Yes No

2. Does the business engage in staff training?

Yes No

If YES, how often does the business engage in staff training?

Daily, Weekly, Monthly,

Once a year

3. The following are statements relating to characteristics. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2=Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Statement	5	4	3	2	1
a.	The entrepreneurial skills, level of education and trainings of managers of women owned businesses influences access to credit.					
b.	CRB reports of the business owners is always a factor considered by financial institutions before they give credit.					
c.	The duration the business has been in operation influences the decision of financial institutions to give credit to women owned businesses					

B] NETWORKING

1. How does the business acquire knowledge through business linkages?

- Training and Education
- Knowledge sharing and management
- Acquisition of new ideas and knowledge
- Others (Specify).....

2. Do the owners of the entity belong to any women association on networking group?

- Yes No

If Yes, list the women associations/ networking groups

.....
.....
.....

3. Do you have access to credit information networks relating women owned enterprises?

- Yes No

If Yes, list the networks

.....
.....

4. The following are statements relating to networking/linkages. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Statement	5	4	3	2	1
a.	Networking has enabled the businesses owned by women to identify other credit sources.					
b.	Networking has enabled the business link up and associate with other businesses hence get guarantors for loans					
c.	Networking has enabled businesses get information about cheaper credit					

C] COLLATERAL

1. Has your business obtained credit in the last one year?

Yes No

If Yes, how much?.....

2. Was security required by the financial institution?

Yes No

Give reasons for your answer above.

.....

3. If security was provided for the credit, what type of loan security did the business offer to obtain the credit?

Land title deed

Motor vehicle logbook

Shares

Others

(Specify).....

4. Which of the following credit attributes made you choose your financier in relation to collateral requirements?

The nature of collateral security required

Value of the collateral security

5. Were there any costs associated with availing the asset as collateral to the credit provider?

Yes No

If Yes, how much was the cost?.....

6. The following are statements relating to collateral. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2=Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Statement	5	4	3	2	1
a.	The Nature of collateral security required influences the decision of financial institutions to give credit to women owned businesses					
b.	The value of collateral security required influences the decision of financial institutions to give credit to women owned businesses					
c.	The cost of perfecting or charging security to secure a loan influences decision of the business owners to apply for credit from financial institutions					

D] RISK MANAGEMENT

1. Does high risk perception hinder women entrepreneurs' access to credit?

Yes No

If YES, to what extent?

Very great Extent

Great Extent

Moderate Extent

Little Extent

Not at all

2. Which of the following describes how the interest rate charged to the credit obtained was computed due to the risk management adopted by the women owned SME?

Flat rate

Reducing Balance

3. What was the repayment period for the credit obtained?

Less than 1 year

1-3 years

4-6years

More than 6 years

4. Was there any moratorium or grace period given for the credit obtained?

Yes No; If YES, what was the period?

Up to 1 month

1-6 months

6-12 months

5. The following are statements relating to risk management practices. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Statement	5	4	3	2	1
a.	Women owned SME's credit history influences lenders' decision to grant them loans.					
b.	The environments in which the women owned SMEs operate influences access to credit					
c.	The extent to which an SME uphold corporate governance influences their access to credit					

SECTION 4: Legal and Regulatory Environment

1. What kind of challenges do you face in accessing credit?

Challenge	Please tick the option applicable	Please rank the challenges
Legal and regulatory policy		
Information sharing		
Demand forecast		
Rates levied		

SECTION 5

OPTIONAL

For follow up questions, or enquiries, please give us your name and contacts

Name:

Email address:

Mobile number:

Postal Address: