DETERMINANTS OF CREDIT ACCESS TO SMALL AND MEDIUM ENTERPRISES (SMEs) IN TANZANIA

A CASE OF MBEYA CITY

By

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DECLARATION

I Borish Sarikiael Nnko do hereby declare that this dissertation is my own work and that it has not been submitted to any other University or Higher Learning Institution for any academic or professional award.

Signature…………………

Date………………………

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It is a common phenomenon for a person to be proud and joyful for making a certain achievement. This is very true on my side. The two years programme which led to realize this joy has come to an end. However the accomplishment of this programme is a result of collective efforts of many people, whom my joy will have no meaning if I fail to accord my heartfelt appreciations for their support.

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DEDICATION

This dissertation is dedicated with love to my parents Borish Tuwati Nnko (father), Itikisaeli Tuwati Mungure (Mother), My wife Tumikiael, my daughter Langa, other members of the family, relatives and friends.

ABSTRACT.

Small and medium enterprises (SMEs) are the main players in the economy of Tanzania and other developing countries. SMEs contribute prominently to the economy through creating more employment opportunities, generating higher production volumes, increasing exports and introducing innovation and entrepreneurship skills. The dynamic role of SMEs in developing countries is like an engines through which the growth objectives of developing countries can be achieved.

This study used a sample of 105 SMEs located in various areas of Mbeya city, it is from these SMEs data were obtained by using questionnaires, interview guides and documentary reviews. By using these methods of data collections, primary and secondary data were obtained to assess determinants of credit access and credit size by SMEs in Tanzania.

Analysis of data was conducted by running ordered logistic model to assess which factors determine credit access and credit size by SMEs. The study found that credit access and credit size by SMEs are significantly determined by factors like collateral, sales size, business experience, level of education, and form of business ownership.

Cross sectional data methodology was used, in this study, future studies can employ panel data designs that can allow to control for unobservable heterogeneity of individual SMEs.

Moreover further research is needed to examine with non-parametric statistical techniques, such as with neural networks, the relationships of all the variables that this study examined, as well as to run causality tests, in order to investigate which variable or SMEs characteristic causes the other. For instance, does gender influence ownership of assets whereby ownership in turn influence access to credit?.

LIST OF TABLES

LIST OF ACRONYMS

MSME	Micro, Small and Medium Enterprise
SME	Small and Medium Enterprises
URT	United Republic of Tanzania
UNDP	United Nation Development programme

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

There is generally no universally accepted definition of Small and Medium Enterprises (SMEs) and different countries are known to use different measures of size that depend on their level of development. Despite these variations, it is widely accepted that SMEs constitute those income generating activities that employ between one to fifty (1-50) persons (Ogutu 2006) Table no 1.1 shows how SMEs have been defined in Tanzanian context.

Table 1.1. Categories of SMEs in Tanzania

Category	Employees	Capital investment in Machinery (Tshs)
Micro enterprise	1-4	Up to 5 mil.
Small enterprise	5-49	Above 5 mil. To 200 mil.
Medium enterprise	50-99	Above 200 mil. To 800 mil.
Larger enterprise	100 +	Above 800 mil

Source: URT Ministry of Industry and Trade SMEs Development Policy 2002.

SMEs play an important role in economic development in Tanzania and in the world at large. This is due to the fact that, SMEs promote utilization of resources, entrepreneurship, culture, technological development and poverty reduction. It is estimated that, SMEs contribute one third of gross domestic product (GDP) of the country also SMEs make best use of local resources as they use simple technology (URT, 2002).

In in Tanzania SMEs employ about 20% of the labour force and this proportion is expected to increase due to the potentials for developing SMEs sector in the country[1]. On what we may call

[1] Ibid

the “static” front, SMEs contribute to output and to the creation of “decent” jobs; on the dynamic front they are a nursery for the larger firms of the future, are the next (and important) step up for expanding micro enterprises. They contribute directly and often significantly to aggregate savings and investment, and they are involved in the development of appropriate technology (Gabriel 2005)

Despite the crucial role played by SMEs in Tanzanian economy, yet SMEs are facing a number of challenges which negatively affect their growth and performance. These challenges can be categorized into those which are associated with internal factors on one hand, and those associated with external factors, on the other hand Simpson et al (2004) defines external factors to include socio-demographics, markets (local, international, emerging and established markets), cultural, economic, political, institutional, legal, technological, infrastructure and other physical factors of that particular environment.

The availability of appropriate economic resources is important for business development (Tustin, 2003; Czinkota and Ronkainen, 2003). This enables SMEs to secure the necessary expertise and raw materials to put entrepreneurial ideas into practice, to be competitive, to survive during unfavourable conditions and to grow. Lack of capital and limited access to finance is a factor inhibiting entrepreneurship and influencing growth negatively, as it impedes the progress that comes from timely application of resources (Nasser et al, 2003; Rwigema and Venter, 2004).

Furthermore, SMEs have been perceived as entities that operate in an unorganized / unregistered sector, or being entities in a third/parallel economy; non-institutional economy and black market/underground market (Shuaib, 2004). This perception made SMEs to have very limited access to financial services from formal financial institutions in particular credits to meet their working and investment capital needs. Rweyemamu et al. (2003) argued that formal financial institutions have failed to serve the low income earners and their enterprises in both urban and rural communities.

1.2. Statement of the Problem

The importance of SMEs in economic development is well recognized, SMEs in many countries, developing countries in particular are not performing well (Kessy and Temu 2010). One of the factors for poor performance is lack of adequate finance to finance the operations and expansion (Rweyemamu and Venter 2004).

Many SMEs do not have adequate finance because they are unable to access bank loans (Nasser et al 2003). Even those who get access to bank finance, don't get enough funds as they request. Thus banks or financial institutions practice what is so called bank loans rationing. In that practice, makes some firms to get loans and others fail to get loans at all. In addition, these firms that get loan do not get the same amount of loan they requested

Although some SMEs get small amount of loan and some do not get at all, various authors such as (Kessy and Temu, 2010; Kuzilwa, 2005; Rweyemamu and Venter, 2004; and Nasser et al, 2003) argues that inability to access finance is a challenge which impede performance of SMEs and in particular growth of SMEs. For instance, Kessy and Temu (2010) argues that, "*SMEs have very limited access to financial services from formal financial institutions in particular credits to meet their working and investment capital needs*". However, scholars have not mentioned any reasons / factors that explain limited access of credit to SMEs.

Furthermore, Nasser et al, (2003) argued that, lack of capital and limited access to finance is a factor inhibiting entrepreneurship and influencing growth negatively, as it impedes the progress that comes from timely application of resources. Like Kessy and Temu (2003), Nasser et al, insist that inability to access finance for entrepreneur is a major problem and serious setback to the growth of entrepreneurship. However, the literature is silent on the reasons that explain the limited access to finance by SMEs and entrepreneurs.

While it is therefore evident, that access to finance is one of the factors that impede the performance and growth of SMEs in Tanzania, the determinants of credit access have not yet been explained. My study therefore seeks to address, and is motivated by, this gap in literature to find out the factors which determine credit access to SMEs in Tanzania.

1.3.1 Objectives of the study.

The objectives of this study are divided into two parts which are general and specific objectives.

1.3.2. General Objective

The general objective of the study is to assess the determinants of credit access by SMEs in Tanzania.

1.3.3. Specific objectives

The specific objectives of the study are:-

i. To determine the factors that determine credit access by SMEs in Tanzania

ii. To determine the factors that influences amount of credit that a firm can obtain in Tanzania

1.4. Research questions

This study was guided by the following specific research questions:-

i. What factors determine credit access by SMEs in Tanzania?

ii. What factors determine the size of credit to the SMEs ?

1.5. Significance of the Study

Since capital is important to the operation of SMEs this study will be of significance in the field of microfinance and SMEs operations by exploring factors which determine credit access and size of credit provided to the SMEs in Mbeya city. The major beneficiaries of this study will be the SMEs community of Mbeya city as it can be used to educate on how microcredit can be used to improve their lives through business.

The study will be of significance also to the Mbeya city (authority and policy makers) as it can be used as reference point for designing opportunities, making policies and strategies which are helpful to the life of Mbeya city SMEs owners/managers. By improving Mbeya city citizen economic status the city will also benefit by the increase in term of revenue collections through tax.

1.6. Scope of the study

This study was confined to the SMEs located in Mbeya city, Geographically the study was carried out in Mbeya city; where by SMEs was selected randomly so as to get the required information to by the researcher.

1.7. Limitation of the study

The researcher faced the following limitations:-

i. Limitations due to nature of data set used (i.e. the use of cross sectional data vs time series data)
ii. Limitation due to resource constrains

From above point of view, this study was organized as follows; next chapter presents the literature review, whereas methodology, data type, targeted population and variable issues are discussed in chapter three of this report. Chapter four presents the empirical results and discussion of empirical results obtained. Chapter five is about conclusion and policy implication after examining results of empirical findings and chapter six presents references used in due course of conducting this study**.**

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

A literature review is a text written by someone to consider the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic (Cooper 1998). This chapter presents literature reviewed on theories and models related to determinants of credit access to SMEs together with determinants of credit size that SMEs can obtain.

Another part of this section is empirical studies related to this research and an estimation model. It also reviews empirical studies on the determinants of access to credit and a model for estimating the size of credit that SMEs can obtain.

2.1 Theoretical Literature Review

This section describes the theoretical perspective of the study, particularly the definitions of key items, and discusses theories concerning the factors that influence access to credit for SMEs.

2.1.1 Definitions of Key Terms

The following are the definitions of key terms related with this study which can be a good help when one is reading this study.

2.1.1.1 Small and Medium Enterprise

SMEs are defined as non-subsidiary, independent firms which employ fewer than a given number of employees (OECD 2000). A table below provides more definitions of SMEs

Table 2.1. Other definitions of SMEs

Definition	Reference	Description
A	Ayyagari, et al (2003)	SMEs are formal enterprises which have a cut-off range of 0-250 employees.
B	Cronje *et al.* (2001)	An SME in South Africa is any business with fewer than 200 employees, an annual turnover of less than R5 million, capital assets of less than R2 million, and the owners are directly involved in the management of the business.
C	Quartey (2001)	In developing countries a small firms employs between 5 and 9 employees, whilst a medium firms employs between 20 and 90 employees.
D	United States of America Small Business Administration (2004)	An SME is an entity that is independently owned and operated, and is not dominant in its field of operation.
E	European Union (2004)	A small firm employs fewer than 50 employees and a medium firm has fewer than 250 employees.

2.1.1.2. Business

A business (also known as enterprise or firm) is an organization engaged in the trade of goods, services, or both to consumers. Businesses are predominant in capitalist economies, where most of them are privately owned and administered to earn profit to increase the wealth of their owners. Businesses may also be not-for-profit or state-owned. (Ayyagari, et al 2003)

2.1.1.3 Gender

Gender is a range of characteristics of femininity and masculinity. Depending on the context, the term may refer to such concepts as sex (i.e. the state of being male or female),social roles (as in gender roles) or gender identity (Quartey 2001)

2.1.1.4 Microcredit

Microcredit is the extension of very small loans (microloans) to SMEs borrowers who typically lack collateral, steady employment and a verifiable credit history. It is designed not only to support entrepreneurship and alleviate poverty, but also in many cases to empower business owners and uplift entire communities by extension. In many communities worldwide, women lack highly stable employment histories that traditional lenders tend to require. This reality might result from factors such as leaving the paid workforce to care for children and elderly relatives (Ospina 1998)

2.1.1.5. Entrepreneurship.

The term entrepreneur is a borrowed word from French and was first defined by the Irish-French economist Richard Cantillon as the person who pays a certain price for a product to resell it at an uncertain price, thereby making decisions about obtaining and using the resources while consequently admitting the risk of enterprise. The term first appeared in the French Dictionary "Dictionnaire Universel de Commerce" of Jacques des Bruslons published in 1723 (David 2004).

Over time, scholars have defined the term in different ways. Here below are some of prominent definitions from different scholars.

- Baptiste (1803): An entrepreneur is an economic agent who unites all means of production- land of one, the labour of another and the capital of yet another and thus produces a product. By selling the product in the market he pays rent of land, wages to labour, interest on capital and what remains is his profit. He shifts economic resources out of an area of lower and into an area of higher productivity and greater yield.
- Schumpeter (1934): Entrepreneurs are innovators who use a process of shattering the status quo of the existing products and services, to set up new products, new services.
- McClleland (1961): An entrepreneur is a person with a high need for achievement [N-Ach]. He is energetic and a moderate risk taker.
- Drucker (1964): An entrepreneur searches for change, responds to it and exploits opportunities. Innovation is a specific tool of an entrepreneur hence an effective entrepreneur converts a source into a resource.
- Kilby (1971): Emphasizes the role of an imitator entrepreneur who does not innovate but imitates technologies innovated by others. Are very important in developing economies.

- Shapero (1975): Entrepreneurs take initiative, accept risk of failure and have an internal locus of control.
- Stevenson (1975): Entrepreneurship is "the pursuit of opportunity without regard to resources currently controlled."
- Gartner (1985): Entrepreneur is a person who started a new business where there was none before.

2.2 Empirical literature review

Empirical literature review explains the studies conducted by other scholars/researchers related to the determinants of credit access to the SMEs. This literature has been collected from various scholars as explained below.

2.1.1. Determinants of credit access

Credit access in this study refers to the possibility that individuals or enterprises can access/secure credit/loan from financial institution like commercial banks, and non-bank financial institutions.

Some literature refers to credit access as the possibility that individuals or enterprises can access financial services, including credit, deposit, payment, insurance, and other risk management services (Honohan 2008). Though there are several financial providers in Tanzania, credit access by some firms can be difficult. According to the literature, there are several factors that may influence access to credit by SMEs in Tanzania.

2.1.1.1 Gender differences

'Gender' refers to the socially constructed roles of and relations between men and women[2], gender is also defined by FAO as ‘the relations between men and women, both perceptual and material. Gender is not determined biologically, as a result of sexual characteristics of either women or men, but is constructed socially.

Even though millions of women throughout the world contribute to Gross Domestic Product and family food security, detailed studies from Latin America, South Asia, and Sub-Saharan Africa consistently indicate that rural women are more likely to be credit constrained than men of equivalent socio-economic conditions (Fletschner, 2009, Diagne et al., 2000).

Seventy percent of the world’s poor are women. Yet traditionally women have been disadvantaged in access to credit and other financial services. Commercial banks often focus on men and formal businesses neglect women who make up a large and growing segment of the informal economy (IFLIP 2001)

Well-designed products that enable women to adequately save, borrow and insure against unexpected shocks are therefore essential in any efforts to strengthen women’s role as producers and expand the set of economic activities they can undertake, the scale at which they can operate and their ability to benefit from economic opportunities. Yet, with notable exception of a number of prominent microfinance programmes, the vast majority of rural and urban credit, savings and insurance programmes do not take into account that women’s legal, social and economic position which differs from that of men (Parada 2008)

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[2]http://www.eldis.org/go/topics/resource-guides/gender/key-issues/trade-and-gender/what-is-gender#.UZou4WXfrIU

Financial markets are also not gender neutral:- To explain how commercial banks, cooperatives, traders and processors can improve their outreach to women, it is fundamental to identify how context-specific legal rights, social norms, family responsibilities and women's access to and control over other resources shape their need for capital and their ability to obtain it. (Ospina 1998)

Property rights and control over assets, legal regulations and customary rules often restrict women's access to and control over assets that can be accepted as collateral such as land, livestock, car etc. Women are much less likely to have land titled under their name, even when their families own land, and are less likely than men to have control over land, even when they do formally own it. Biased inheritance rights often bestow land to male relatives, leaving both widows and daughters at a disadvantage (Agarwal, 2003).

Neither the state mandated agrarian reforms of past decades that granted much of the land to "household heads," who were typically men, nor the more recent market-assisted land reforms have led to significant improvements in women's access to and control over land (Kerr, 2008). Even in countries where laws do protect women's land rights, these laws tend to be loosely regulated and implemented (Parada, 2008).

Women's control over their families' livestock varies by culture (Tipilda and Kristjanson, 2008). Yet, typically, men are responsible for the purchase, sale or place as collateral of large animals, such as cows, horses and oxen, while women tend to claim control over small animals such as goats, sheep, poultry and pigs (World Bank, 2008b).
Finally, in settings where men are portrayed and perceived as the main breadwinner, women's ability to offer family assets as collateral and their incentives to invest in productive activities are influenced by family dynamics that are likely to prioritize men's investments (Ospina, 1998).

Cultural norms and family responsibilities affect men and women differently, socially accepted norms of behaviour and the roles women play in their families can have profound effects on the type of economic activities in which women can engage, the technologies available to them, the people and agencies with whom they can interact, the places they can visit, the time they have available and the control they can exert over their own capital (Esenu et al 2005).

In settings where sociocultural norms restrict women's mobility, their interactions with members of the opposite sex and their ability to attend trainings or receive formal education, women's access to information, institutions and markets is compromised. This is the case when women are not allowed to use public transportation, when they cannot afford to pay for it or when they cannot get away from their household responsibilities (Primo, 2003).

It is also the case when women are prevented from interacting directly with men other than close relatives, or when they feel awkward doing so, limiting their participation in agricultural or financial training and their ability to benefit from working with extension agents and veterinarians, most of whom are male and primarily address other men (Aina, 2006 and Esenu et al., 2005).

As a result of these constraints, women tend to get their information from informal networks of women other, reinforcing the gender gap in access to information. The gap can be substantial: recent work to quantify it using data from Paraguay compares husbands' and wives' knowledge of financial markets and finds that women are 15 to 21 percent less likely than men to have basic information about the financial institutions in their communities (Fletschner and Mesbah, 2010).

Even when they have access to information on the financial services and market opportunities available to them, women may be less equipped to process it. Their lower levels of literacy and lack of exposure to other languages, especially relative to male family members, hampers women's ability to benefit directly from information that is provided in writing or in languages other than those they speak at home (UNDP, 2007 and Ngimwa et al., 1997) and to fully understand the conditions of complex financial products available to them (Brown, 2001). This matters as demonstrated by Cole et al.'s (2009) experimental work in India and Indonesia that finds financial literacy is a strong predictor of demand for financial services.

Social norms also define the type of economic activities in which women can engage, the amount of time they can invest in them and the markets they can access. Finally, social traditions can leave women in a particularly vulnerable position since, in addition to the risks associated with pregnancy and childbearing, women are more likely to experience domestic violence, to experience greater hardships in case of divorce and to lose their assets when their spouses die (Banthia et al., 2009).

Behavioral differences, whether a result of innate psychological characteristics or of attitudes influenced by social conditions, men and women tend to exhibit systematic differences in their behaviour. Of particular importance when assessing the adequacy of financial products available women is how men and women differ in their willingness to take risks.

Studies in psychology and economics found that, on average, women tend to be more averse to risk than men and that, other things being equal, women are more likely to forego activities that offer higher returns if these opportunities require them to bear too much risk (Fletschner et al., 2010;).

Producers who are more risk averse (like most women) are less likely to adopt new technologies, to undertake projects that are expected to offer higher profits but expose them to more risk, or to apply for loans that may cause them to lose the collateral they own (Boucher et al., 2008, and; Fletschner et al 2009).

In other words, compared with men, and without adequate insurance, women are more likely to consider borrowing against collateral as a risky transaction and might be less interested in taking out loans even when credit is available to them. The finding that women are, on average, more risk averse than men suggests that women will have a stronger preference for financial products tailored to help them save in a secure environment, insure against risks or borrow without risking losing their assets.

Institutional Discrimination, rural women's access to financial resources is also limited by biased lending practices that emerge when financial institutions in the area consider them when compared to men, smaller, less experienced and therefore less attractive clients, or when institutions lack the knowledge to offer products tailored to women's preferences and constraints (Fletschner, 2009).

The extent to which institutions reach out to women and men and the conditions under which they do vary noticeably, but women are at a disadvantage when an institution does not fund the type of activities typically run by women, when it does not accept female guarantors, when its requirements are not clear or widely known or when, as it is typically the case, loans to women are smaller than those granted to men for similar activities (Fletschner, 2008a; World Bank, 2008b; Ospina, 1998, and; Baydas et al., 1994).

Combining these elements and acknowledging that, compared with men, women tend to have more limited control over resources accepted as collateral, less access to information, to be more risk averse and face a different set of activity-regulating social norms and family rights. Different from men, Women often have less voice and control over resources including on their own income, which may act as a disincentive to business expansion. Among married women, 34 percent in Malawi, 28 percent in the Democratic Republic of Congo, 18 percent in India, and 14 percent in Nepal report that they are not involved in decisions about spending their earnings (GPFI 2011)

The women sometimes have no voice even over the income for which they provided labour. This being the case, sometimes discourage them from seeking start up loan/credit for business even when they have qualification to secure a loan[3].

Restrictions on mobility also limit women's ability to start and grow businesses by impacting both demand and supply. In highly restrictive societies, women may not be allowed to talk to strangers or go out alone as men do, both of which are necessary to start and grow a business (Field et al 2010). One of the requirements to secure the loan/credit is to own the business or to have prepared good business plan so as to convince financial institutions to grant a loan. However since traditions and customs in some societies restrict women from owning property, sharing ideas with strangers and even sometimes going out alone, it is unlikely for them to start businesses.

Norms around mobility may be particularly restrictive for women entrepreneurs in remote rural areas. However not many studies have looked at the link between mobility restrictions and business start-up or productivity. The relationship can be a complex one, however. On the one hand, increased demand for female labor may cause a loosening of mobility restrictions (Bardhan, 1974)

Human capital is a strong predictor of entrepreneurial activity, but women still have lower measures of human capital as compared to men. Among older generations, the gender gap in years of schooling is significant. However, in recent years, formal education is one area where tremendous progress has been made in closing gender gaps. Primary school enrollment rates are close in the vast majority of countries, although not all. Indeed, in some locations, including the Middle East and North Africa, more women than men are enrolled in tertiary education.

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[3] World Bank. 2005a. Uganda - From Periphery to Center: A Strategic Country Gender Assessment. Washington, DC

However, in other measures of human capital such as literacy, financial literacy, and management skills, gaps persist (GPFI 2011)

Male entrepreneurs often have more prior work experience to bring to their business than women. Men are more likely than women to have been employed prior to starting a business and have more wage sector experience. Women also generally lack vocational/technical training and experience compared to their male counterparts (PPFI 2011). By having prior working experience can help in selecting a particular business to start which is profitable, manageable, can attract large market share and which attract the attention of financial institutions to grant the credit.

Not only prior working experience but also level of education and professional education can affect the way one run the business. Women especially in developing countries lack professional education which is likely to negatively affect them in the process of running the business and leading to the low turnover, where by the higher sales/turnover of a business is among attractive factors for one to secure the loan from the financial institutions.

Preparations and keeping proper business records is another important factor in securing the loan/credit because the financial institutions need to proof beyond doubt the ability of the customer to repay the loan. However to prepare and keep proper financial records of the business need Accounting and Financial Management knowledge to acquire knowledge one need to be capable of mathematical calculations which for many women is a problem.

Similarly, the fact that SMEs' accounting and financial statements are often not transparent makes them risky borrowers and thus less attractive to lenders. Women in many informal businesses may lack financial statements and properly maintained books of accounts, putting them at a disadvantage (GPFI 2011)

Better time allocation would allow women to capitalize on inputs such as business training. looking at the impact of business training in Pakistan found that business training leads to increased business knowledge, lower business attrition, better business practices, and improvements in several household and member outcomes. However, these effects are mainly concentrated among male clients. A possible reason why women failed to capitalize on the training is that they have less time available to devote to the business or that their schedule is dictated by household chores and is thus inflexible (Mansuri et al 2011)

Training is very important to the business especially for business persons who have a far reaching vision, this is for simple reason that technology changes with time, methods of production change with time, as well as marketing, sales and others.

If there are many changes within the business environment and women entrepreneurs have less access to training it possible likely to put their business in a risk poor/limited flourishing and hence less ability to access credit compared to the male entrepreneurs who have time and other facilities to access credit.

Regulatory requirements that discourage formalization disproportionately impact women entrepreneurs than men entrepreneurs. Formalization is known to increase access to finance. However, many women may choose to stay informal due to a number of constraints. A number of studies show that economies with higher business entry costs are associated with a larger informal sector and smaller number of legally registered firms (GPFI 2011). Given the nature of business run by women i.e. some are small, they don't find it important to register/formalize them .

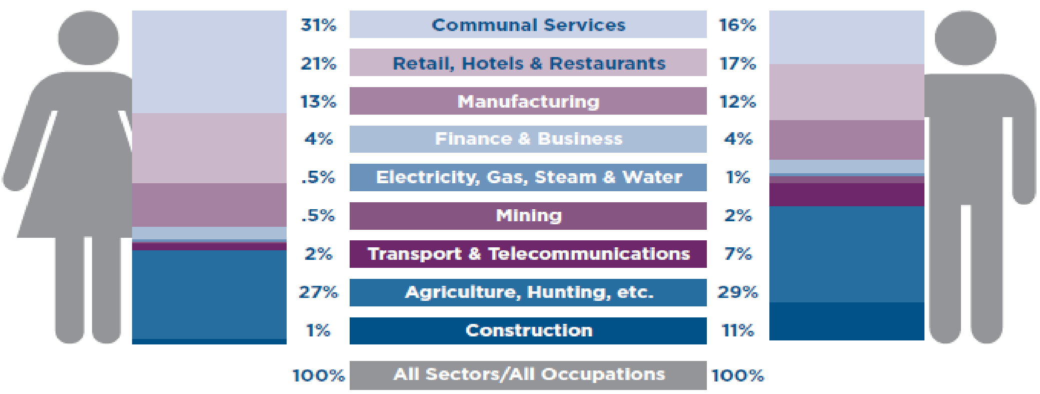
Gender and investment climate assessments undertaken by IFC in Africa and the Pacific, for example, show that while both men and women face constraints in registering businesses, women are further disadvantaged due to their overall lower skill, experience, and ability to navigate the system. Cultural restrictions are also a factor, such as those dictating mobility and interacting with male officials, as well as greater domestic responsibilities (GPFI 2011)

Having a registered business in addition to business license are among factors which can smoothen the process of securing loan/credit. This is mainly because by having a business license and one's business being registered can increase the trustworthiness of loan applicant.

Women-owned SMEs tend to be concentrated in less profitable and less risk industries than those owned by men Globally, the largest share of women entrepreneurs both in nascent and established businesses are active in consumer-oriented activities, while men entrepreneurs are found in extractive industries such as mining, oil and gas (Minniti, 2009).

Women mostly work in the service and traditional lower value-added sectors such as garments, food processing, restaurants, wholesale and retail trade. These jobs/ sectors generally tend to be less profitable compared to extractive, manufacturing or metal industries which tend to employ more men. With profitability (having a profitable business) being one of the important factors considered for securing a loan/credit from financial institutions, women find themselves being systematically excluded from accessing credit and business development services.

Figure 2.1. Women and Men Work in Different Sectors: Distribution of female/ male employment across sectors



Source: WDR 2012 team estimates based on International Labor Organization (2010) (77 countries).

The impact of gender on credit access can also be seen in the fact that women are more likely to be home-based and operate within the household leaving men to work in enterprises. Also in many developing countries, more women than men are starting businesses out of necessity..

2.1.1.2. Business ownership.

Business ownership is another factor considered in securing a loan, different forms of business ownership like partnership, family owned business, sole trade and joint venture face difficulty at different level. The following are reasons which causes differences in accessing credit by different forms of business ownership.

Complex loan administration systems by financial institutions. Manu (1998) explains that the shortage of fund is not a problem but the complex loan administration systems by financial institutions. The process to get loan long such that many intended beneficiaries give up before they get the loans. (Blanchard, 2000) considers the following credit characteristics as key during credit standard assessment process these are:- Type of entity, Profit range, Years in business exist, Building owned or rent, credit reference from bank and Payment history. Bukaliya R et al

(2012) argues that it is much better to deal with a registered company, the sole trade is much more risky and a client who is consistently profitable and has been in business for a longtime is less risky to loan funds.

Availability of timely, accurate and complete information. In the process of obtaining or looking for a credit /loan one is required to supply complete and accurate information in a timely manner. Delaying response to requests of information by an applicant further slows down the entire process. The problem faced by SMEs applicants is that they fail to provide sufficient information during the process of loan applications (Blanchard; 2000). The problem will be severe with sole proprietorship and family owned business than registered partnership and limited companies. Osius and Putnam (1992) observed that borrowers in developing nations are able to obtain loans on the basis of their creditworthiness so well established. They wrote the basic canon of lending as follows:-

- Character:- willingness of the customer to pay (as supported by reference)
- Capacity:- the ability to pay (supported by projected incomes and cash flows)
- Conditions:- prevailing economic conditions and conditions of potential customers (supported by analysis)
- Capital :- availability of funds/customers net worth (supported by statement of comprehensive income where applicable)
- Collateral :- value and nature of security (supported by value of security)

Sounders (2000) observed that most small and medium enterprises in developing countries fail to meet the requirements of 5cs listed above. Reputations of financial indiscipline and abuse of resources given. Sole proprietors, family owned business and sometimes partnerships and joint venture face the problem of credit access because of poor financial discipline. After submitting an appetizing project proposal and granted a loan the operators of SMEs divert the funds to other personal expenditures like buying luxury cars, gold and foreign currency in the black market (Bukaliya R. et al 2012)

Poor repayment record, SMEs operators have a record of poor loan repayment (Helmising 1993). This is another reason/factor which discourages formal financial institutions from lending SMEs money for business. Several measures have been suggested by Harper (1984) which can help to solve the problem of credit defaulters some are aggressive measures such as adverting auctions sales of the property seized from defaulters by government, this can be done to encourage lenders to remind other borrowers to repay their loans.

However there can be some less aggressive measures such as SMEs operators forming groups so that financial institutions will be offering loans/credits to the groups. By doing so, each member of the group will be encouraging each other to repay the loan on time thereby establishing a group accountability.

A lack of proper financial records is another factor that can prevent SMEs from accessing credit. According to Harper (1984), in addition to their responsibilities for planning, directing, controlling and organizing the operations of the business, SME owners/managers are also responsible for managing the finances of their businesses and ensuring their books are in order.

However, this added responsibility is often seen by managers as cumbersome and tedious and therefore neglected. In the end, SMEs fail to secure credit from financial institutions that require sound financial records as prerequisite for extending credit. In addition, some SMEs operate without strategic business plans to help guide their effective and efficient use of available resources. This also prevents them from accessing credit. (Siddiqui et al 1993).

Harper (1984) also sees the lack of proper systems of financial records significantly affects the chances of most SMEs accessing credit. In proving data keeping problem by SMEs, Herper (1984) argues that the owners of SMEs business is a specialist worker for example carpentry and metal worker and performs various management tasks of planning, directing, controlling, leading and organizing the operations of a business. With number of responsibilities faced SMEs owner, Herper (1984) explained further that the SMEs operator would not require cumbersome, time consuming bookkeeping systems maintained by large enterprise. By not preparing proper financial records (which for them they regard them as tiresome and cumbersome exercise) put them in a lower possibility of accessing loan/credit when compared to large enterprises.

The concept of business entity, in accounting an organization and its owners are treated as two separately identifiable parties. That means personal transactions or owners transactions are treated different from those of the business. The simple example could be when the owners take some money or some goods from the business they should be regarded as debtor and not just taking because is the owner.

Many business especially in less developed countries do not practice the concept of business entity and hence making them less credit worth. The records that a business should maintain involve the following:-

- Sales day book
- Purchases day book
- Cash book
- The ledger
- Statement of comprehensive income
- Statement of financial position and
- Statement of cash flow.

Banks require audited financial statements so that they give loans to business, audited statements are preferred since they are accredited by a third party being and independent expert (Puttick and Esch, 1990)

Lack of collateral securities, in lending agreements, collateral is borrower's pledge of specific property to a lender, to secure repayment of a loan. The collateral serves as a protections for a lender against a borrower's default that is any borrowers failing to pay the principal and interest under the terms of a loan obligation. (Van 1990)

SMEs are usually small growing business with high labour to capital ratio and lack of access to infrastructure and land (Nyoni. 2008) with few or lacking collateral security at all hinders SMEs to access credit easily as limited company can access.

Inadequate management and entrepreneurship skills, lack of enough management skills and entrepreneurial skills is also among the major obstacles delaying the growth of SMEs operators. Entrepreneurs put low priority to training and sometimes they are unwilling to participate in programs which require them to finance even small share of total training cost.

The major area of weakness ranges from cash management to marketing strategies and finance (Nyoni 2008). Some fails even to have enough capital because of poor management skills. This was explained farther by Gross and case (1999) when they conducted a research on small business failure. They found out that most small and medium enterprises fail because of the following reasons

- Starting business with too little capital
- Starting with too much capital and being careless in its use.
- Borrowing money without planning how much is enough to borrow and when to pay it back.
- Doing too much business with too little capital.
- Ignoring taxes, insurance and other costs of running a business.

Given the above problems and others it is obvious that SMEs access to credit in the financial institutions will be limited when compared to big registered companies which have well skilled employees who can plan well, advise the owners on the best ways of running the company and hence putting them in a better position to access credit.

Lack of legal supporting framework, most SMEs like sole trade, family owned business, partnership and joint venture are not must be registered. Since they are not registered, they don't possess important documents which can assist them to process loans.

Registration is important because it enables business operators to access working capital. Registration is an important infrastructure that provides SMEs with borrowing powers. The responsible organizations for registering business organizations should put affordable fees and environment to attract SMEs operators to register their business.

In ability to defend a proposal, SMEs face the problem of management skills and well skilled employees, this problem causes failure to prepare business proposal at all or preparing business proposals which are of low standard to compete with big companies. Even when they manage to prepare business proposals which are likely to be of low standard they fail to defend them. Normally business operators hire consultant to develop their project proposals, and in the end fail to defend their proposal because it is prepared by someone else (Bukaliya . et al 2013)

2.1.1.3. Age.

Kimuyu and Omiti (2000) demonstrate that age is associated with access to credit. That is, older entrepreneurs are more likely to seek credit. Also in a study conducted in Kenya, Lore (2007) found that younger entrepreneurs were less likely to apply for loans from banks than their older counterparts.. This can partly be explained by the fact that older entrepreneurs tend to possess more work experience, higher levels of education, wealth, social capital and more experience with the credit market (Lore 2007).

2.1.1.4. Level of education.

Researchers do not have a common agreement on the effect of the entrepreneur's level of education on access to credit (Kimuyu and Omiti 2000). Some have argued that education hinders attainment of entrepreneurial outcomes by reducing interest, vision and the willingness to take risks. Formal education is said to prepare the subject to focus more on white collar jobs than the development of entrepreneurial skills and self-employment. Yet others have argued that education helps to distinguish entrepreneurs who access credit and those who do not (Lore, 2007). In this respect, education increases a person's ability to access information and skills which in turn helps in formulating projects that can attract credit from financial institutions.

Enterprises with more educated owners can be expected to have more access to institutional credit than enterprises with less educated owners. This is because less educated owners tend to have difficulty with application procedures and expect to be rejected. Furthermore, better educated managers are more likely to have managerial skills in finance, marketing production, and international business that would lead to the firm's growth (Kumar 2005).

2.1.1.5. Collateral security.

In lending agreements, collateral is a borrower's pledge of specific property to a lender, to secure repayment of a loan (Joan 1995). The collateral serves as protection for a lender against a borrower's default - that is, any borrower failing to pay the principal and interest under the terms of a loan obligation. If a borrower does default on a loan (due to insolvency or other event), that borrower forfeits (gives up) the property pledged as collateral - and the lender then becomes the owner of the collateral.

The study conducted by Wanjiru (2000), discovered, that collateral is a major determinant to access of credit by SMEs from the MFIs in Nairobi Business district. This is because majority of the respondents found the requirements of qualifying for credit in terms of collateral as being unattainable .

2.1.1.6. The size of business.

The size of business can be explained in terms of number of employees, annual sales (turnover), value of assets and net profit (David 1987). The size of the business also is another challenge to access of credit from the MFIs. There is high risk involved because small firms have high failure rate compare to large firms hence reduced access to credit. According to Tendulker and Bhavani (1997), small enterprises do not own sufficient assets for collateral. If any, because pledged collateral is often of a personal nature, some costs may be present in arranging and excluding such collateral. Reliance on such personal assets may discourage a lender's investment (Bink and Ennew, 1996).

In accessing credit Lenders may also utilize financial statements and enterprises' performance such as sales and profits to assess repayment prospects. Yet small enterprises in developing countries may not have complete financial statements and more time is therefore required to evaluate their creditability. Earlier studies on Indian small enterprises have found that a large number of owners do not maintain formal accounts. Moreover, in a number of cases, there is no clear separation between the account of the owner's household and that of the manufacturing enterprise (Pais, 2004).

In addition, small enterprises may show relatively more volatility in the face of economic slowdown because they have less diversified products (Saito et al 1981). These factors when considered together can cause a big barrier to the small businesses in accessing credit in comparison larger businesses.

Not only causing barriers but also they can increase even the lending cost. Saito et al (1981) estimate the real cost of lending to small enterprises is approximately twice that of lending to large enterprises in the Philippines. Besides the above hard information, some studies argue that lenders may use alternative soft information such as the age of a firm, the relationship with banks, past communication with contractors, and other sources of finance in the case of absence of other factors to facilitate credit worthiness to small enterprises (Petersen et al 2006)

2.1.1.7. Location of the business.

Location of the business here refers to either the business is situated in the urban area or in the rural areas. Businesses rural areas are more likely to be financially excluded than urban areas in India as in other developing countries like Tanzania. Enterprises belonging to regions with a high density of banking branches will have easier access to banking services (Pais 2004).

2.2 Determinants of credit/loan size,

The credit/loan size refers to the amount of loan which can be provided to the deficit spending unit by the surplus spending unit. The following are the determinants of the credit/loan size.

2.2.1 The educational level.

The level of the loan/credit seekers or the level of education of the organization management determines the amount of loan which can be secured, this is because loan seekers with higher educational level can access loan/credit easily than less educated ones. Onyeagocha (2002) explains that as level of education increases leads to improved information procurement, increased level of business profit and the capacity to increase the level of funding.

2.2.2. Business size

The size of the business is expected to influence the size of loan one can access because if the business is big one can secure comparatively large amount of loan as they can be in a position to repay the loan. Business size has been identified as an important factor in several studies involving financial functions relating to business income, repayment rate, etc, (Henri-Ukoha et al., 2011; Onyeagocha et al., 2007).

2.2.3 Enterprise type/Riskiness of the business.

Although from the financial point of view the higher the risk the higher the return and the vice versa but in providing loan/ credit the business with higher risk is expected to secure small amount of loan. Onyeagocha (2002) sites risk and uncertainty for example farming is affected by unreliable rainfall, pests, unstable price etc, and therefore affect the amount of loan farmers can secure.

2.2.4. Business experience.

The amount of loan/credit also varies with experience possessed by business managers/owners or the number of years the business has operated., This can partly be explained by the fact that experience can serve as a proximate indicator of the business' ability to achieve desired goals using the previous history as a benchmark to set the direction of the future operations of the business. For instance Ohajianya, (2003), explains that the years of experience in farming is a persuasive factor in considering the amount of loan given to the beneficiaries.

2.4 The conceptual framework

A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to an idea or thought (Kothari 2004). The conceptual framework for this study is described in section 2.4.2. below.

2.4.1 Research variables and their measurement

In order to assess determinant of credit access and determining factors that influences the size of credit offered to SMEs, researcher adopted the following proxies from the study of various authors to measure several variables as explained in section 2.4.1.1 and section 2.4.1.2 below.

2.4.1.1. Dependent Variables

Access to credit serve as dependent variable in the first research objective. Various scholars such as Mahemba (2003) have used binary variables to measure credit access. This implies researcher used binary variable 1 if SME secured credit, and binary variable 0 if SME did not secure credit. Moreover, with regards to the second research objective, size of the credit secured serves as dependent variable and was measured by using absolute figures. Natural logarithm was applied to absolute figures in order to mitigate the problem on non-stationarity of data used in analysis (Koop, 2005)

2.4.1.2 Independent Variables

In order to explain the effect of explanatory variables over dependent variables, researcher measured independent variables by using various scales adopted from the study conducted by previous scholars as explained here under

.

The first independent variable used was the gender of SME owner. In this end, gender was measured by using binary variable whereby 1 denote female owner and 0 denote male owner.

Business ownership was the second variable used by the researcher. According to Nyoni (2008) and Bukaliya et al, (2013), business ownership was categorized into three categories, whereby family owned SME was referred as business ownership_1. In this end, 1 denote family owned SME whereas 0 for otherwise. Sole trade was referred to as business ownership_2, whereby 1 denote sole trade and 0 for otherwise. SMEs under partnership mode was referred as business ownership_3, whereby 1 denote partnership owned SME and 0 for otherwise.

Age was the third independent variable used by the researcher. According to Kimiyu et al 2000 and Lore 2007 age can be measured by using absolute figures.

Level of education of SME owner/management was the fourth independent variable used in the research. According to Lore (2007) level of education can be grouped into educated (secondary school and above) and non-educated (primary school and non-school). In this study level of education of management was measured by using binary variable whereby 1 denote educated SME owner/management and 0 denote un-educated SME owner/management

The fifth independent variable was collateral security, this variable was measured by using absolute value of collateral. The same variable was measured by using absolute value of collateral by Wanjiru, (2000).

Size of the business was the sixth independent variable used by the researcher. The researcher used natural logarithm of asset (lnAsset) to measure size of business. The method was used also by Deloof (2003).

The seventh independent variable was location of business, according to Pais (2004) location of business can either be in the urban or in the rural area. The researcher used binary variables to measure location of the business where 1 denotes urban location and 0 rural.

Riskiness of the business was the eighth independent variable, the researcher used standard deviation of sales to measure riskiness of the business.

The last independent variable was business experience. According to Ohajianya (2003) business experience can be grouped into less experience that is a business with less than one year , moderate experience is a business with greater than two years but less or equal three years , and experienced which is a business with three years and above. The researcher measured business experience as follows:-1 denotes less experience, 2 denotes moderate experience and 3 denotes experienced.

2.4.2. Operationalisation of research variables

In this end, variables were operationalised through the use of research models. A model is a physical, conceptual, or mathematical representation of a real phenomenon that is difficult to observe directly. Models are used to explain and predict the behaviour of real objects or systems and are used in a variety of scientific disciplines[4]. In this study researcher was guided two research objectives which are; to determine determinants of credit access and the second objective was to determine factors that influences credit size offered to an applicant. In respect to the above mentioned objectives of the study, credit access serves as a dependent variable with regard to the first research objective, and credit size serve as dependent variable with respect to the second research objective.

In order to explain determinants of credit access to SMEs, researcher specified research model in figure 2.1 below. The model is made up of dependent variable (credit access) and explanatory variables which are; collateral security (CLTS), size of business (SOB), location of business (LOB), level of education (LOE), Duration (Dur), gender (Gender) and business ownership (BOS). Therefore researcher used the variables outlined above to construct an estimation model as follows:-

$$CRA = \alpha + \beta_1 Gender + \beta_2 BOS + \beta_3 CLTS + \beta_4 SOB + \beta_5 LOB + \beta_6 LOE + \beta_7 Duration + \varepsilon_0 ....(1)$$

Whereby;

α = Is a constant term

β_1 β_2 + .+ β_7 = Are coefficient of explanatory variables

ε = Is an error term to explain variations due to unobserved independent variable

[4] http://www.britannica.com/EBchecked/topic/387006/scientific-modeling (accessed on 25th may 2013)

With regard to the second research objective which aimed to determine factors that influence size of the credit that a firm (SME) can obtain, literature mentioned the following factors namely; collateral security (CLTS), size of business (SOB), location of business (LOB), level of education (LOE), Duration (Dur), gender (Gender) and business ownership (BOS) as the main determinant of the size of credit offered to loan applicant. In that end, researcher adopt those factors as explanatory variables to explain the size of the credit herewith referred as dependent variable. Therefore, above mentioned variables are being summarized in the model below as follows;

$$\text{AOC} = \alpha + \beta_1 CLTS + \beta_2 SOB + \beta_3 LOB + \beta_4 LOE + \beta_5 Dur + \beta_6 Gender + \beta_7 BOC + \beta_8 BE + \beta_9 ROB + \varepsilon_0$$

Whereby;

α = Is a constant term

β_1 β_2 . . . β_9 = Are coefficient of explanatory variables

ε = Is an error term to explain variations due to unobserved independent variable

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction.

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically (Kothari 2004). this chapter among other things it will be comprised of definition of key terms, area of the study, types of data, data collection methods, methods of data analysis, population of the study and sampling method.

3.1. Research Design

In theory there are several research design that can be used to carry out a particular study however the type of approach to use depend for the most part on the purpose of the study and the nature of data available (Ndunguru 2007). In this study researcher adopted survey research design.

3.2. Area of the study

The area of the study was Mbeya urban. Mbeya urban was selected because having many entrepreneurs organized into SMEs and who undertake diverse activities in the region. By having SMEs engaging in various activities, researcher was motivated to choose the area expecting to get useful information that can be generalized to explain factors that determine access of credit and amount that can be offered to SMEs.

3.3. Study Population

Population is a full set of cases from which a sample is taken (Saunder 2007). The population for this study includes all SMEs registered to operate within Mbeya urban area, financial institutions operating within Mbeya City Council as well as non-financial institution operating in the area. A total of 545 units comprised the total population of the study.

3.4. Unit of Analysis

Unit of analysis refers to a point or unit at which researcher's concentration will be geared (Kothari, 2004). In this particular study SMEs was a unit of analysis to assess factors that determine access of credit and amount of credit offered to SMEs.

3.5. Sample size and Sampling technique.

Sampling is the process of selecting few items out of larger group of items (population) in order to simplify analysis. Ssampling enable researcher to obtain fairly and accurately the characteristic of the population. Also sampling enable researcher to make an inference about unknown parameters from a measurable sample statistics (Krishnaswami 2002).

For the purpose of this study, both random and non-random sampling methods were used to obtain the required sample size. Non-random sampling was employed to select respondents from financial institutions as well as non-financial institution. Moreover, researcher used random sampling technique to select SMEs from the list of registered SMEs obtained from the office of trade officer in Mbeya City Council.

For the purpose of this study, both random and non-random sampling method that was used to obtain a required number of sample. Non-random sampling which was about value judgement sampling was employed to select respondents from financial institutions as well as non-financial institution. Moreover, researcher used random sampling technique to select SMEs from the list of registered SMEs obtained from the office of trade officer in Mbeya city council.

3.6. Types of the data

The study used a combination of primary and secondary data. Primary data are data that are collected for the first time by the researcher, These type of data are preferred as they are unbiased, original data, they are direct from population. The primary was obtained by using questionnaires and interview guide. In this study, primary data were data set about business ownership, level of education, gender, age of respondent, and business experience.

Secondary data are data that have already been collected by other researchers. These type of data are economical as the researcher does not need to go to the field hence he/she can serve costs also saves time because it takes shorter period to get secondary data than to get primary data. Secondary data will be obtained by using documentary review. In this end, secondary data collected by researcher were; amount of loan applied, amount of loan secured and size of the business.

3.7. Methods of Data Collection

Primary data was collected using a combination of questionnaires and interviews methods. Secondary data was collected from published and unpublished SMEs documents in both private and public institutions (documentary review).

3.7.1 Questionnaire

This method of data collection is quite popular, particularly in case of big enquiries. It is being adopted by private individuals, research workers, private and public organisations and even by governments. In this method a questionnaire is sent (usually by post) to the persons concerned with a request to answer the questions and return the questionnaire. (Kothari. 2004)
The questionnaire was selected due to the following advantages:- There is low cost even when the universe is large and is widely spread geographically, It is free from the bias of the

interviewer; answers are in respondents' own words, Respondents have adequate time to give well thought out answers (Kothari 2004).

3.7.2. Interview.

The interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. This method can be used through personal interviews and, if possible through telephone interviews. (Kothari 2004)

An interview was selected due the following advantages:- More information and that which are too in greater depth can be obtained, Interviewer by his own skill can overcome the resistance, if any, of the respondents, The interview method can be made to yield an almost perfect sample of the general population, There is greater flexibility under this method as the opportunity to restructure questions is always there, especially in case of unstructured interviews.

3.8. Data analysis procedure.

Data analysis refers to the process of synthesizing raw information collected by the researcher into more meaningful state. The researcher used Stata version 12 (Sata Corporation 2012) software to analyse data so as to assess the determinants of credit access and amount of credit (credit size) SMEs.

CHAPTER FOUR

PRESENTATION OF RESEACH FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents research findings of the study that aimed to determine the determinants of credit access to SMEs as well as determinants of size of the credit in Tanzania. This chapter is organized into two main sections. Section 4.1 presents descriptive statistics for main variables of interest organized into two subsections. Section 4.2 presents the results of the empirical model as specified in section 2.4. 2.

4.1. Descriptive Statistics

This section covers the descriptive statistics of the variables used in achieving specific objectives of the study. Those variables are; collateral security; size of business; level of education; riskiness of the business; business ownership; location of business; and age of the business. Descriptive analysis also shows the other general variables which explains the characteristics of the studied population.

In this study there are two specific objectives which are the determinants of the credit access to SMEs in Tanzania and the determinants of credit size that SMEs can obtain. According to the literature, both two specific objectives are being explained by the same independent variables. Apart from explaining the variables of interest (independent variables) researcher also explained explanatory variables in relation to the dependent variable. These variable are hereby explained below;

Gender of respondent:- A total of one hundred and five (105) took part in the study, Table no 4.1 presents data about the sex of the respondent, findings shows that 54.3% (n = 57) SMEs are owned by male entrepreneurs, while 45.7% (n = 48) SMEs are owned by female. This results has provided the same results with the study conducted by Carter et al (2001) and Carter and Shaw

(2006), which provided that levels of women starting businesses is less than men. These findings can further be illustrated by the table no 4.1:-

Table 4.1. Sex of the Respondents

Sex of respondent	Frequency	Percent	Number of observations
Male	57	54.3	105
Female	48	45.7	105
Total	105	100.0	

Source: Field data, 2013.

Marital status was another variable which was used by the researcher for the sake of getting the general characteristics of the SMEs studied. Scholars such as Diagne (1999) argues that, married entrepreneur are more trust worthy than un married ones because they are perceived to be less risky and not easy to default as compared to un married ones. Findings revealed that among 105 SMEs studied, 66.7% (n = 70) SMES owners are married, 26.7% (n = 28) SMEs owners are single and 6.7% (n = 7) SMEs owners are divorced. Marital status can be shown more meaningfully by using the table no 4.2

Table 4.2. Marital Status

Marital status	Frequency	Percent	Number of observations
Married	70	66.7	105
Single	28	26.7	105
Divorced	7	6.7	105
Total	105	100.0	

Source: Field data 2013

Professional level:- In line with the same argument, researcher explained another general characteristic of the respondents which is the level of profession possessed by the SME owners.

Kimuyu and Omit (2000) argues that, professional level possessed by entrepreneur affect his / her conduct of business and therefore influences access to credit to a particular entrepreneur. From the 105 respondents studied, 11.4% (n = 12) SMEs owners were certificate level, 8.6% (n = 9) were diploma level while 21.9% (n = 23) were first degree level. In professional level the researcher was interested also to identify others if any, therefore among the studied SME owners possessed other level of professions as presented by the table no 4.3 were 30.5% (n = 32) possessed other level of profession.

Table 4.3 Professional level

Professional level	Frequency	Percent	Number of observations
Certificate	12	11.4	105
Diploma	9	8.6	105
First degree	23	21.9	105
Second degree	29	27.6	105
Others	32	30.5	105
Total	105	100.0	

Source: Field data 2013

Form of business ownership:- Form of business ownership was another variable of interest in this study. A study conducted by Bukaliya (2012) indicates that the form of business has a considerable impact on credit access. Registered businesses, access credit more easily than unregistered ones. In this study 17.1% (n = 18) of SMEs were partnership, 38.1% (n = 40) were sole trade and 44.8% (n = 47) were family owned SMEs. The table no 4.4 gives a better picture of SMEs frequency and their percentage.

Table 4.4. Form of business ownership

Form of business ownership	Frequency	Percent	Number of observations
Partnership	18	17.1	105
Sole trade	40	38.1	105
Family owned	47	44.8	105
Total	105	100	

Source: Field data 2013

Loan secured:- In term of loan secured, amount of loan secured by SMEs owner who requested for loan, among one hindered and five respondents studied, 10.4% (n = 11) respondents secured less than Tshs 100,000, 17.1% (n = 180 secured credit ranging from Tshs 110,000 and Tshs 500,000), 18.1% (n = 19) secured credit ranging from Tshs 510,000,000 and 1,000,000, 19.1% (n = 20) secured credit ranging from Tshs 1,100,000 and 5,000,000, 25.7% (n = 27) secured credit ranging from Tshs 5,100,000 and 10,000,000, 9.6% (n = 10) secured credit of more than Tshs 10,000,000 and above. The analysis here shows that comparably large number of SMES secured credit ranging from one 5,100,000 and 10,000,000. This analysis is shown clearly by the table no 4.5

Table 4.5 Amount of loan secured by SMEs

Amount of loan secured by SME	Frequency	Percent	Number of observations
less than Tshs. 100,000	11	10.4	105
Tshs. 110,000 to Tshs. 500,000	18	17.1	105
Tshs. 510,000 to Tshs. 1,000,000	19	18.1	105
Tshs. 1,100,000 to Tshs. 5,000,000	20	19.1	105
Tshs. 5,100,000 to Tshs 10,000,000	27	25.7	105
More than Tshs. 10,000,000	10	9.6	105
Total	105	100.0	

Source: Field data 2013

The influence of gender on access to credit was of interest in this study. Diagne (2000) and Fletchiner (2009) argued that gender has an impact on credit access as men are in a better position to secure credit than female this is because unlike female entrepreneurs, male entrepreneurs own assets which can be used as a collateral security. The findings in this study reveals that 31% (n = 33) of the respondents accept that gender influences access to credit while 69% (n = 72) think that gender does not influence access to credit. This is concurrent with responses from loan officers who also see that gender does not influence access to credit for SMEs. Loan officers explained that the main determinant of access to credit is SME's turnover whereby those SMEs with high turnover also have higher chances of accessing credit. The table no 4.6 provides more illustrations for the influence of gender on access to credit.

Table 4.6 Influence of Gender on Credit access.

Does gender influence credit access?	Frequency	Percent	Number of observations
Yes	33	31.4	105
No	72	68.6	105
Total	105	100.0	

Source field data 2013

Level of education:- Scholars such as Kimuyu and Omit (2000) argues that, as the level of education of entrepreneur increases, the chances to secure credit increases as well. Scholars argue that, as the level of education increases, the ability to prepare and maintain financial records increases and hence increases chances to secure credit. Level of education was also a variable of interest to the researcher. From all SMEs owners studied 10.5% (n = 11) were uneducated, 89.5% (n = 94) were educated. Table no 4.7 be gives more details. By having 89.5% of respondent being educated ones, it implies that, most SMEs are owned by educated owners and therefore are more likely to secure credit.

Table 4.7 Level of Education

Level of education	Frequency	Percent	Number of observation
Otherwise	11	10.5	105
Educated	94	89.5	105
Total	105	100.0	

Source: Field data 2013

Amount of collateral:- The study conducted by Wanjiru (2000), discovered, that collateral is a major determinant to access of credit by SMEs from the MFIs, in this study SMEs with a collateral security valued at Tshs 50,000) were 23.8% (n = 25), collateral security of Tshs 100,000 were 18.2% (n = 19), collateral security of Tshs 500,000 were 14.2% (n = 15), collateral security of Tshs 1,000,000 were 15.1% (n 16), collateral security of Tshs 5,000,000 were 13.4%

(n = 14), collateral security of Tshs 10,000,000 were 11.5% (n = 12) lastly SMEs with collateral security of Tshs 15,000,000 were 3.8% (n = 4). In this study large number of SMEs are confined to a collateral security of one million and lower, the fact that the study concentrated on SMEs, large number of SMEs studied are small enterprises and small number of medium enterprises.

Table 4.8. Value of Collateral Used by Different SMEs to Obtain Credit .

Value of collateral	Frequency	Percent	Number of observations
50,000	25	23.8	105
100,000	19	18.2	105
500,000	15	14.2	105
1,000,000	16	15.1	105
5,000,000	14	13.4	105
10,000,000	12	11.5	105
15,000,000	4	3.8	105
Total	105	100.0	

Source: Field data 2013

Business experience:- In addition to above variables business experience was another variable of interest which the researcher used to measure credit access and amount of credit that a business can obtain. Ohajianya, (2003) clarifies that the years of experience in business is a persuasive factor in considering the amount of loan to be given to the beneficiaries. The researcher in this study classified the level of experience as less experienced, moderate experienced and experienced. Results from the analysis indicates that among SMEs studied, 19% (n = 20) were less experienced, 36.2% (n = 38) were moderate experienced and 44.8% (n = 47) were experienced, table below gives more detail.

Table 4.9 Business Experience.

Level of business experience	**Frequency**	**Percent**	**Number of observation**
Less experience	20	19.0	105
Moderate experience	38	36.2	105
Experienced	47	44.8	105
Total	105	100	

Source Field data 2013

4.2. Estimation results

In this section researcher present the findings of estimation results with regards to the first and second specific research objectives which aimed at determining the determinants of access to credit and the size of credit secured by SMEs. Both dependent variables are treated as dichotomous and independent variables are a mix of dichotomous and continuous variables. According to Gujarati (2000) probability models are appropriate models to be employed when regressand is dichotomous. Therefore, the researcher used logistic probability models to run statistical tests. The researcher was interested in the probability of assessing credit given the presence of some predictor variables The results of the model are interpreted using odds ratios which are obtained by taking the antilog of the various slope coefficients.

4.2.1. Estimation results on determinants of credit access

The first research objective was to assess the determinants of access to credit by SMEs. The results of the regression model used to estimate the results are as presented in table no 4.10.

According to the model, the level of education, collateral security, SME size, and level of experience, significantly influence the chances for SMEs to secure credit. The gender of SMEs owner/manager was not significant.(it is enough to say gender is not significant that implies something else is predictive)

Table 4.10: Logistic regression on determinants of credit access

Variables	**[1]**	**[2]**	**[3]**
Gender	1.0064 (0.3503)		
Level of education	0.2033 (0.857)	0.3281 (0.7741)	1.4316 (0.0177)**
Sole trade	0.7163 (0.5652)	0.7586 (0.1054)	
Family owned business	0.9719 (0.109)	0.5712 (0.2701)	1.1123 (0.0817)*
Collateral	3.362 (0.0174)**	5.4601 (0.03)**	2.6512 (0.0112)**
Size (lnSales)	2.1055 (0.0000)***	1.8674 (0.0000)***	1.5746 (0.0056)***
Less experience	3.7631 (0.2325)	3.2656 (0.277)	2.2763 (0.221)
Moderate experience	10.9475 (0.0000)***	9.3652 (0.001)***	1.5634 (0.001)***
Experienced	11.5354 (0.0000)***	9.9844 (0.0000)***	
_ Constant	-35.6793 (0.0000)***	-32.0805 (0.0000)***	1.0774 (0.096)*
R^2	73.48%	75.09%	81.6%
No. Observations	105	105	105

Logistic regression was used. P-values are in parentheses below the coefficients. *, **, and *** indicate the level of significance at 10 percent, 5 percent and 1 percent respectively.

The level of education of SME manager/owner was found to have significant influence on access to credit. Logistic regression results shows that, Educated SME manager/owner are four times more likely to access credit compared to un educated SME manager/owners (OR = 4.19, P< 05). This may be due to fact that educated managers of SMEs have better ability and capability to prepare feasible business plan, and they can manage to keep and maintain proper books of accounts that can serve as the basis for evaluation of their credit worthiness by loan providers. These findings are consist with findings obtained by Mandira, Pais and Nikaido (2012) who carried a study on determinants of access to institutional credit for SMEs in India using panel data. Mandira et al found that educated SMEs manager/owner in India have higher chances of securing credit compared to managers of SMEs who are un educated.

This implies that, education helps to distinguish entrepreneurs who access credit and those who do not (Lore, 2007). In this respect, education increases a person's ability to access information and skills. The information and skills are important in formulating projects which can attract credit from financial institutions. Enterprises with more educated owners can be expected to have more access to institutional credit than enterprises with less educated owners. This is because less educated owners tend to have difficulty with application procedures and expect to be rejected. Furthermore, better educated managers are more likely to have managerial skills in finance, marketing, production and international business that would lead to the firm's growth (Kumar et al 2005).

Prior research conducted also found a positive relationship between higher educational qualifications, business growth and access to credit (Dunkelberg and Cooper, 1982; Johnson, 1993; Kozan, Oksoy, and Ozsoy, 2006). Education affects entrepreneurs motivation (Smallbone and Wyer, 2000). Furthermore, education helps to enhance the exploratory skills, improves communication abilities and foresight (Dobbs and Hamilton, 2007).These enhanced skills are positively related to present a plausible case for a loan to a banker at the time of preparing a loan proposal and the convincing the banker during the client interview. Especially for the managers of SMEs education about how to run an enterprise is very crucial so as to get returns which can enable SME to service the loan/credit. The managerial education affects the access to credit. For example, Kumar and Fransico (2005), found a strong education effect in explaining access to financial services in Brazil.

Nature of ownership of SMEs was argued to be one among factors that influences credit access applied for by SMEs. In this end, three forms of ownership was analysed namely; sole proprietorship, partnership and family owned SMEs. Results of data analysis shows that, form of ownership of SMEs have significant influence on access credit at 10% level of significance (*p-value = 0.0817*). This implies that, forms of ownership, particularly family owned has more than

3.0 times ($\tilde{e}$ 1.1123) chance to secure credit applied compared to other forms of ownership of SMEs namely sole proprietorship and partnership.

These findings are in line with findings obtained by Aaroson et al (2004) and Fafchamps (2000) who consider ethnic ties as an important factor that facilitates information flow and encourages trade credit provision by the supplier. The central point is that it is easy to acquire/trace required information if the customer is married than if the customer is unmarried. For the purpose of loan/credit default risk it is very important for financial institutions to obtain correct information of their customers which is easier for family-owned businesses.

The, size of collateral owned by SMEs was also found to have significant influence on chances to secure credit/loan applied for by SMEs at 10% level of significance (*p-values = 0.0112*). Analysis shows that, when the size of the collateral increases by 1 unit, chances to secure loan applied increases at the tune of 14 2 times ($\tilde{e}$ 2.6512). These results are consistent with results obtained by Joan (1995). In her study Joan (1995) points out that collateral serves as protection for a lender against a borrower's default. This implies that, any borrower failing to pay the principal and interest under the terms of a loan obligation then his /her collateral will be taken to compensate for the amount of loan defaulted. If a borrower does default on a loan (due to insolvency or other event), that borrower forfeits (gives up) the property pledged as collateral and the lender then becomes the owner of the collateral and therefore it become easier for SMEs with collateral security to access credit than SME without collateral security.

A study conducted by Wanjiru (2000), shows that, collateral is a major determinant to access credit by SMEs from the MFIs in Nairobi Business district. This is because majority of the respondents found the requirements of qualifying for credit in terms of collateral. Moreover, Bessis (2003) said that, collateral security and loan contracts serve to control borrowers risk taking propensity and increases chances of recovery under default. Bessis (2003) mentioned the fact that collateral is one way of mitigating risk of loss since it provides the bank with safety net which provides a cushion against losses in the event of primary repayment fail to perform. Banks need this to offer loans with certainty.

Size of sales was another factor said to influence credit access. The findings in this study shows that the size of sales a is significant by 1% level of significance (*p-values = 0.0056*) more results from the analysis displays that, when the size of sales increases by 1 unit, chances to secure loan applied increases at the tune of 4.8 times ($\approx e$ 1.5746). This can be explained by the fact that when SMEs sales increase financial institutions will be ready to grant credit/loan because there are sure of the ability to recoup their money.

These findings are parallel with the study conducted by Bigsten et al., (2000) and Topalova, (2004). who found that higher sales and profits were associated with greater access to credit. The European Commission (2003) has also identified poor business performance as one of the reasons for SMEs failure to access Credit.

Experience of the owner / manager of SMEs was also found to be a significant determinant of access to credit. Results from the analysis tells that, at 1% level of significance (*p-values = 0.001*) managers / owners of SMEs who have experience have got more than 4.8 times more chances to access credit compared to owners / managers who do not have experience of more than one year in business. This implies that, managers who have experience in business of more than one year, have acquired good knowledge on how they should keep their books of accounts in such a away their records will suit the need of credit providers as compared to those owners of SMEs who do not have experience in business.

The above results from the findings obtained from the logistic regression performed by researcher, analysis as it can be seen from the table 4.11 above discloses that, R^2 which depict the goodness of fit of the model is 81.6%. This implies that, the model can explain the likelihood of occurrence of dependent variable given the independent variables employed in the model by 81.6% leaving the remained 18.4% being explained by the error term.

4.2.2. Determinant of the size of credit secured by SMEs

The second research objective was to assess determinants of size credit secured by SMEs. Researcher performed logistic-model regression and results of estimation are hereby presented in table no 4.11.

In the second logistic regression model, level of education, collateral security, and level of experience remained significant determinants of access to credit for SMEs . Analysis shows that, gender of SMEs owner/manager do not have significant influence on chances to secure credit by SMEs. This means, likelihood of securing loan by SMEs depends on other factors apart from the gender of the SME owner / manager.

Table 4.11. Logistic regression on determinants of size of the loan/credit secured

Variables	**[1]**	**[2]**	**[3]**
Gender	-2.5207 (0.2015)		
Level of education	2.7318 (0.0000)***	1.7006 (0.013)**	1.6881 (0.0125)**
Sole trade	1.3874 (0.0900)*	0.6049 (0.0856)*	0.5731 (0.0336)**
Partnership	-0.6870 (0.3240)	0.7841 (0.0952)*	
Collateral	1.3236 (0.007)***	1.1217 (0.0000)***	1.0627 (0.0000)***
Less experienced	2.2613 (0.8231)	1.8503 (0.346)	1.8456 (0.351)
Moderate experienced	1.4688 (0.0033)***	1.1782 (0.0424)**	1.1681 (0.0253)**
_ Constant	0.4216 (0.693)	2.4949 (0.0078)***	1.4949 (0.0018)***
R^2	65.14%	75.6%	79.6%
No. Observations	105	105	105

Logistic regression was used. P-values are in parentheses below the coefficients. *, **, and *** indicate the level of significance at 10 percent, 5 percent and 1 percent respectively.

Level of education attained by SME owner / manager was found to have very significant influence on amount of loan/credit SME can obtain. Analysis shows that, owners / managers of SMEs who are educated, have 15.36 times (≈e2.7318) more chance to secure credit worth more than Tshs 500,000 compared to owners / managers of SMEs who are un educated. This implies that, level of education of SME manager / owner add more value on the amount of credit SME can obtain.

Nature of ownership of SMEs was argued to be one among factors that influences credit size that SME can obtain. In this end, three forms of ownership was analysed namely; sole proprietorship, partnership and family owned SMEs. Analysis shows form of ownership of SMEs have significant influence on credit size at 10% level of significance (*p-value = 0.09*). This implies that, forms of ownership, particularly family owned has more than 4.0 times (≈e 1.3874) chance to secure large amount of credit compared to other forms of ownership of SMEs

Furthermore, size of the collateral owned by SMEs was found to have significant influence on chances to secure high amount of credit/loan at 1% level of significance (*p-values = 0.007*). Analysis shows that, when the size of the collateral increases by 1 unit, chances to secure large amount of credit worth more than five million (Tshs 5,000,000) tend to increase by 3.76 times (˜e 1.3236)

Experience of the owner / manager of SMEs was argued to be a factor which influence chances of SMEs to secure large amount of credit. Analysis reveals that, at 1% level of significance (*p-values = 0.0033*) managers / owners of SMEs who have experience have got more than 4.34 times more chances to secure credit worth more than five million (Tshs 5,000,000) compared to owners / managers who do not have experience of more than one year in business. This implies that, managers who have experience in business of more than one year, have acquired good knowledge on how they should keep their books of accounts in such a away their records will suffice the need of credit providers as compared to those owners of SMEs who do not have experience in business.

In line with above argument regarding findings obtained from the logistic regression performed by researcher, analysis also reveals that, R^2 which depict the goodness of fit of the model is 65.14%. This implies that, the model can explain the likelihood of occurrence of dependent variable given the independent variables employed in the model by 65.14% leaving the remained 34.86% being explained by the error term.

Furthermore, results of the second logistic regression after omission of the variable gender of SMEs manager/ owner (Gender) reveals that:-

The level of education achieved by the SME owner/manager disclosed a significant influence on amount of loan/credit SME can obtain. Results from the analysis reveals that, at 5% level of significance (*p-values = 0.013).* Analysis further shows that, owners / managers of SMEs who are educated, have 5.48 times (˜e1.7006) more chance to secure credit worth more than five million (Tshs 5,000,000) compared to owners / managers of SMEs who are un educated. This suggests that, level of education of SME manager/owner has an implication on the amount of credit SME can obtain.

In addition to above forms of ownership were also reexamined where by three forms of ownership was examined i.e.; sole proprietorship, partnership and family owned SMEs. Analysis displays that form of ownership of SMEs have significant influence on credit size at 10% level of significance (*p-value = 0.09*). This denotes that, form of ownership, particularly partnership has more than 2.0 times (≈e 0.7841) chance to secure large amount of credit compared to other forms of ownership of SMEs, while sole trade has more than 1.8 times ((≈e 0.6049) chance to secure credit worth more than five million (Tshs 5,000,000) in comparison to other forms of SMEs.

Likewise collateral size owned by SMEs was again found to have significant influence on chances to secure credit of above five million (Tshs 5,000,000) at 1% level of significance (*p-values = 0.000*). Analysis indicates that, when the size of the collateral increases by 1 unit, chances to secure large amount of credit worth more than five million (Tshs 5,000,000) tend to increase by 3.07 times (≈e 1.1217)

Lastly SMEs owner's / manager's had been said to be a factor which influence chances of SMEs to secure large amount of loan. Analysis tells that, at 5% level of significance (*p-values = 0.042*) managers / owners of SMEs who are experienced have got more than 3.25 times (≈e 1.1782) more chances to secure credit worth more than five million (Tshs 5,000,000) compared to owners / managers who do not have experience of more than one year in business. This infers that, managers who have experience in business for more than one year, can secure large amount of credit because among other things they know how to deal with risks which can face the company, whereby by controlling risks SMEs turnover will stabilize and ease to forecast which is in line with requirements to secure loan.

One can also comprehend that, R^2 which depict the goodness of fit of the model that has increased from 65.14%. to 75.6 This indicates that, the model can explain the likelihood of occurrence of dependent variable given the independent variables employed in the model by 75.6% leaving the remained 24.4%% to be described by the error term.

Likewise, results of the third logistic regression after omission of ownership 2 variable which is partnership shown the following :-

The level of education achieved by the SME owner/manager remained a significant factor to influence on amount of loan/credit SME can obtain. This is because according to the analysis owners / managers of SMEs who are educated, have 5.41 times ($\approx e^{1.6881}$) more chance to obtain credit worth more than five million (Tshs 5,000,000) compared to uneducated owners / managers of SMEs. By this results level of education of SME manager/owner affects the amount of loan SMEs can obtain.

This result is in line with the study conducted by Onyeagocha (2002) which explains that as level of education improves the beneficiaries ability to read and write and in the process, improved skill in business which concomitantly improve information procurement, profit and the capacity to increase the level of funding.

Another research done by Irwin and Scott (2010) using a telephone survey of 400 SMEs in the UK also found that graduates had the least difficulties raising finance from banks. The researchers in this study provided three interpretations for their finding. Firstly, more educated entrepreneurs had the ability to present positive financial information and strong business plans and they have the ability to maintain a better relationship with financial institutions compared to less educated entrepreneurs. Secondly, the educated managers/owners have the skills to manage the other functions of the business such as finance, marketing, human resources and these skills results to high performance of the business which whereby these characteristics suffice the requirements to secure large amount of credit/loan.

After the omission of ownership 2 (partnership) the level of significance of ownership 1 variable to affect credit size increased from 10% i.e. p-value = 0.09 to 5% i.e. p-value = 0.03. This means that, form of ownership, particularly ownership 1 (sole trade) has more than 2.0 times (≃e 0.5731) chance to secure credit worth more than five million (Tshs 5,000,000) in contrast to other forms of SMEs.

Size of the collateral owned by SMEs maintained very significant effect on chances to obtain credit/loan of more than five million (Tshs 5,000,000) at 1% level of significance (*p-values = 0.000*). Analysis displays that, when the size of the collateral increases by 1 unit, chances to obtain credit worth five million and above (Tshs ≥5,000,000) tend to increase by 2.9 times (≃e 1.0627)

Analysis disclosed that, at 5% level of significance (*p-values = 0.025*) managers / owners of SMEs who are experienced chances to secure credit worth more than five million (Tshs 5,000,000) is 5 times (≃e 1.681) compared to owners / managers who do not have experience of more than one year in business. This suggests that experienced business owners/managers are in a better position to prepare good business plans, keeping proper books of account and also how to reduce risks facing the company which are in line with requirements secure large amount of credit from financial institutions. need of credit providers as compared to those owners of SMEs who do not have experience in business.

This study has produced results which are consistent with results of the study conducted by Ohajianya, (2003). In his study, Ohajianya explains that the years of experience in business is a persuasive factor in considering the amount of loan given to the beneficiaries. This was because experience provided the compass with which the business owner navigated the turmoil business environment and was a veritable tool.

Dahlquist, Davidsson, and Wiklund, (1999) and Dobbs and Hamilton (2007) emphasized the positive effect of past experience on small business growth by proposing that owner/ managers with previous experience are more likely to avoid costly mistakes than those with no prior experience. Being in a position to avoid costly mistakes helps the SMEs to operate with known level of return other factors being constant which can attract financial institution to grant large amount of loan/credit.

The goodness of fit of the model which is shown by R^2 is 79.6% which is indicating that, the model can explain the likelihood of occurrence of dependent variable given the independent variables employed in the model by 79.6% and the remaining 20.4% been explained by the error term.

CHAPTER FIVE

SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

5.1. Summary of findings.

This study aimed at examining the determinants of access to credit for small and medium enterprises (SMEs) in Tanzania. The study was guided by two specific objectives namely:- to assess factors that determine credit access to SMEs and the second objective was to assess factors that determine size of credit secured by SMEs in Tanzania.

The first specific objective was to assess factors which determine access to credit for SMEs in Tanzania. In this objective, access to credit was the dependent variable. Gender, level of education, business ownership, collateral security, size of business, and the level of experience of the owner were used as independent variables.

The level of education, business ownership, collateral security, size of sales, and the level of experience were significant determinants of access to credit. The model's goodness of fit which is shown by the R^2 was 81.6% implying that the model was a good fit to explain the likelihood of occurrence of dependent variable given the independent variables employed.

The second specific objective was to assess the determinants of size of credit that can be obtained by SMEs. In this objective loan/credit size was the dependent variable while gender, level of education, and form of business ownership were treated as independent variables.

The second model omitted gender which was found to be a non-significant predictor of access to credit. In the second model, the level of education, form of business ownership, collateral security, and the level of experience were significant determinants of access to credit.

The goodness of fit of the model which is shown by the R^2 was 79.6% which means that the model can explain the likelihood of occurrence of dependent variable given the independent variables employed in the model by 79.6%, leaving the remained 20.4% being explained by the error terms.

5.2. Conclusion

The literature review revealed that there was consensus among researchers and policy makers that SMEs play a pivotal role in economic development through the creation of employment opportunities, generating higher levels of production, increasing levels of exports and promoting innovation and entrepreneurial skills. Despite their importance, SMEs face considerable challenges that inhibit their growth, which includes limited access to finance.

Therefore, it is high time for the government, development partners and all other stakeholders to resolve problems that inhibit growth and prosperity of SMEs in Tanzania. SMEs have also been touted as having immense potential to contribute to Tanzania's economic development and ultimate realization of the fourth millennium development goal of reducing income poverty by half by 2025.

Findings from this study shows that some of the independent variables were significant determinants of credit access and credit size while others were not significant. Level of education was found to be significant determinant of credit access, it is therefore very important to make sure all SMEs get access to credit by providing education in the form training and workshops to the un educated SMEs owners/managers so as to make them easily access credit.

Collateral security was also found to be significant determinant of credit access. However very few SMEs in Mbeya have bankable securities that can serve as collateral for securing credit. For those SMEs that own collateral securities such as houses and land, these securities are not formally registered to qualify for legal deeds. It is therefore important Mbeya City Council authorities to take initiate to raise awareness on the significance of business formalization, streamlining the registration process, reducing costs, and encouraging SMEs to operate formally.

Another independent variable which was found to be very significant was the sales size . SMEs owners/managers should make effort to increase and maintain their sales history, because other factors being constant the higher the sales the better position SMEs will be to repay the loan obtained other factors being constant. SMEs sales level should be well recorded and where possible kept through bank or non-bank financial institutions which in the future the given SMEs wish to apply for loan/credit. The flow of sales transaction shown in the SMEs bank account will be a good indicator of SMEs ability to repay the loan/credit they are applying. Revise.

The study faced some limitations due to the nature of the data used i.e. use of cross sectional data versa time series data. Limited resources was another limitation faced by the researcher during the period of conducting research.

5.3. Policy implication

The study was focused on examining the determinants of credit access to SMEs in Tanzania using cross sectional data methodology which treat all observations as having been collected at a single point in time. This design was preferred due to the problem of availability of enough data to meet the requirements for a panel design. future studies can employ panel data designs that can allow to control for unobservable heterogeneity of individual SMEs. (Hsiao, 1985).

Moreover the study suggest further research to examine with non-parametric statistical techniques, such as with neural networks, the relationships of all the variables that this study examined, as well as to run causality tests, in order to investigate which variable or SMEs characteristic causes the other. For instance, does gender influence ownership of assets whereby ownership in turn influence access to credit?.

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Appendix 1

INTERVIEW GUIDE

(FOR FINANCIAL INSTITUTION CUSTOMERS)

Dear respondent my name is Borish Sarikiael a student of masters of science Accounting and finance at Mzumbe university (Morogoro), this is a questionnaire for the purpose of collecting data and finally compiling report as an important requirement for an award of master's degree. Please I am looking forward for your cooperation. Data obtained shall be used for the academic purpose only.

Your name …………………………………………………………………. (Optional)

1. What is your marital status
2. What is your educational level?
3. What is your professional level?
4. Which form of business do you operate/own?
5. Have you ever applied for loan/credit from a bank or non-bank financial institution ?
6. If the answer for the question above is yes, which type of financial institution did you apply from?
7. Did you secure the loan?
8. If the answer for question 7 above is yes, how much did you secure?
9. If the answer for question 7 is no, what was the reason(s).
10. Does gender affect/influence the process of securing loan/credit?
11. If the answer for the question 10 above is yes please briefly explain……………………

……………………………………………………………………………………………………
……………………………………………………………………………………………………

13. What are other factors considered in applying/securing loan if any?

…………………………………………………………………….

……………………………………………………………………

………………………………………………………………………

…………………………………………………………………….

12. What do you suggest to be done by financial institutions so as to improve customers credit worthiness?

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Appendix 2

INTERVIEW GUIDE

(FOR COLLECTING DATA FROM FINANCIAL INSTITUTION STAFF)

Dear respondent my name is Borish Sarikiael a student of masters of science Accounting and finance at Mzumbe university (Morogoro), this is a questionnaire for the purpose of collecting data and finally compiling report as an important requirement for an award of master's degree. Please I am looking forward for your cooperation. Data obtained shall be used for academic purpose only.

1. Your name ………………………………………………………………. (Optional)

2. what is your age? ………………………..

3. What is your educational level?

4. What is your professional level?

5. What is the category of your financial institution?

6. In history of granting loans which form of business ownership leads in securing loans/credit?

8. Which forms of business ownership are least in securing loans/credits?

9. Does gender matter in providing loan?

10. If the answer for question 9 above is "yes" which gender leads in securing loan?

11. Briefly explain your answer for question 10 above
………………………………………………………………………………

……………………………………………………………………………………………

12. Does amount of loan granted to different business ownership (i.e Sole trade, partnership, family owned business, and joint venture) vary?

13. What range of loan can be secured by sole trade?............, family owned business?............, partnership?.........................., Joint venture?...................................

14. What can be done by financial institutions to improve the credit worthiness of customers?

Appendix 3

DOCUMENTARY REVIEW GUIDE

(FOR COLLECTING DATA FROM FINANCIAL INSTITUTION STAFF)

1. Status of business ownership (i.e. sole trade, family owned business, partnership and joint venture) access to credit.

2. Gender and access to credit.

3. Size of the loan/credit with business ownership.

4. Amount of the loan with Gender.

5. Ways which can be used to improve SMEs credit worthiness and better utilization of credit.

Appendix 4

QUESTIONNAIRE

(FOR FINANCIAL INSTITUTION CUSTOMERS)

Dear respondent my name is Borish Sarikiael a student of masters of science Accounting and finance at Mzumbe university (Morogoro), this is a questionnaire for the purpose of collecting data and finally compiling report as an important requirement for an award of master's degree. Please I am looking forward for your cooperation. Data obtained through this questionnaire shall be used for the purpose intended only.

Your name ………………………………………………………………. (Optional)

13. What is your sex?
    (a) Male
    (b) Female ( )

14. Marital status ( )
    (a) Married
    (b) Single
    (c) Others ………………………………………………………………. (specify)
15. What is your educational level?
    (a) Primary
    (b) Secondary (O-Level)
    (c) Secondary (A-Level) ( )
    (d) Others …………………………………………….(specify)

16. What is your professional level?
    (a) Certificate
    (b) Diploma
    (c) First degree
    (d) Second degree
    (e) PhD ( )

(f) Others
………………………………………………..(specify)

17. Which form of business do you operate/own?
    (a) Sole trade
    (b) Partnership
    (c) Joint venture
    (d) Family owned business. ( )
    (e) Other……………………………………………………. (specify)

18. Have you ever applied for loan/credit from a bank or non-bank financial institution ?
    (a) Yes
    (b) No

19. If the answer for the question above is yes, which type of financial institution did you apply from?
    (a) Bank
    (b) Microcredit institution
    (c) SACCOS
    (d) VICOBA

20. Did you secure the loan?
    (a) Yes
    (b) No

21. If the answer for question 8 above is yes, how much did you secure?
    (a) Less than Tshs. 100,000
    (b) Tshs. 110,000 to Tshs. 500,000
    (c) Tshs. 510,000 to Tshs. 1,000,000
    (d) Tshs. 1,100,000 to Tshs. 5,000,000
    (e) Tshs. 5,100,000 to Tshs. 10,000,000
    (f) More than Tshs. 10,000,000

22. If the answer for question 8 is no, what was the reason(s).
    i. Lack of collateral securities
    ii. Lack of guarantor
    iii. Others …………………………………………….. specify
23. Does gender affect/influence the process of securing loan/credit
    (a) Yes
    (b) No

24. If the answer for the question 11 above is yes please briefly explain………………………
    ………………………………………………………………………………
    ………………………………………………………………………………
    ………………………………………………………………………………
    ………………………………

25. What are other factors considered in applying/securing loan if any?
    ………………………………………………………………….
    …………………………………………………………………
    ……………………………………………………………………
    ………………………………………………………………….

26. What do you suggest to be done by financial institutions so as to improve customers credit worthiness?
    …………………………………………………………………………..
    ……………………………………………………………………………
    ……………………………………………………………………………

Appendix 5

QUESTIONNAIRE

(FOR COLLECTING DATA FROM FINANCIAL INSTITUTION STAFF)

Dear respondent my name is Borish Sarikiael a student of masters of science Accounting and finance at Mzumbe university (Morogoro), this is a questionnaire for the purpose of collecting data and finally compiling report as an important requirement for an award of master's degree. Please I am looking forward for your cooperation. Data obtained through this questionnaire shall be used for the purpose intended only.

Your name …………………………………………………………………. (Optional)

1. what is your sex?
   (a) Male
   (b) Female

2. what is your age? ………………………..
   (a) 18-25
   (b) 26-30
   (c) 31-35
   (d) 36-40
   (e) 41 and above. ( )

3. What is your educational level?
   (a) Primary
   (b) Secondary (O-Level)
   (c) Secondary (A-Level) ( )
   (d) Others ………………………………………………………… (specify)

4. What is the respondent professional level?
   (a) Certificate
   (b) Diploma
   (c) First degree

(d) Second degree
(e) PhD
(f) Others…………………………………..……..(specify) ( )

5. What is the category of your financial institution?

(a) Bank
(b) Microcredit institution
(c) VICOBA
(d) SACCOSS ( )
(e) Others…………………………………………………………(Specify)

6. In history of granting loans which among the following forms of business ownership leads in securing loans/credit? Write 1, 2, 3, 4, 5 in the brackets provided so as to rank them, where by 1 is a form of ownership leading and 5 is the least form of ownership in securing loan.

(a) Sole trade…………………………( )
(b) Family owned business……….…( )
(c) Partnership………………………..( )
(d) Joint venture…………….……...( )

7. Why do you think the form of ownership labeled 1 above leads in securing loan? Tick the appropriate reasons!

(a) Possess collateral security ( )
(b) Have the guarantors ( )
(c) Takes calculated risk ( )
(d) Prepares good business plan ( )
(e) Others ……………………………………………………… (specify)

8. Why do you think the form of business labeled 5 is the least in securing loan/credit? Tick in the brackets reasons you consider appropriate

(a) Lack of collateral security ( )
(b) Lack of guarantor ( )
(c) It is riskier ( )
(d) Lack of business plan ( )

(e) Poorly written business plan ( )
(f) Others ……………………………………………………………(specify)

9. Does gender matter in providing loan?

(a) Yes
(b) No ( )

10. If the answer for question 9 above is "yes" which gender leads in securing loan? Tick the appropriate

(a) Male ( )

(b) Female ( )

11. Briefly explain your answer for question 10 above

………………………………………………………………………………

……………………………………………………………………………………………

…………………………………………………………………………

12. Does amount of loan granted to different business ownership (i.e. Sole trade, partnership, family owned business, and joint venture) vary?

a. Yes
b. No

13. Indicate the range (write the letter of the range in the bracket provided) of loan which can! be secured by the following business ownership:-

(a) Sole trade…………………………( )
(b) Family owned business………….( )
(c) Partnership……………………....( )
(d) Joint venture……………………...( )

Ranges can be selected from the following list:-

(a) Less than Tshs. 100,000
(b) Tshs. 110,000 to Tshs. 500,000

(c) Tshs. 510,000 to Tshs. 1,000,000
(d) Tshs. 1,100,000 to Tshs. 5,000,000
(e) Tshs. 5,100,000 to Tshs. 10,000,000
(f) More than Tshs. 10,000,000

14. What can be done by financial institutions to improve the credit worthiness of customers?

(a) To possess appropriate collateral securities ( )
(b) To have guarantors ( )
(c) To possess permanent business premises ( )
(d) Others ………………………………………………… (Specify)