CHALLENGES FOR SMALL AND MEDIUM ENTREPRISES’ DEVELOPMENT IN RWANDA

(A CASE STUDY OF NYARUGENGE DISTRICT)

BY: LUTAAYA ELIJAH

SUPERVISOR: DR. GASHEJA FAUSTIN

THIS THESIS IS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DEGREE OF MASTERS IN BUSINESS ADMINISTRATION

(MBA)

UNIVERSITY OF RWANDA

COLLEGE OF BUSINESS AND ECONOMICS

P.O.BOX 1514, GIKONDO, MBURABUTORO

KIGALI - RWANDA

DECEMBER 2018
COLLEGE OF BUSINESS AND ECONOMICS

APPROVAL SHEET

This thesis entitled, financial challenges for SME’s development in Rwanda (A case study of Nyarugenge District), written and submitted by LUTAAYA Elijah in partial fulfilment of the requirements for the degree of Master of Business Administration (MBA Finance), is hereby accepted and approved.

Dr. Faustin GASHEJA
Supervisor

Date

The thesis is accepted in partial fulfilment of the requirements for the degree of Master of Business Administration.

Dr. Clement B.BASUAYI
Member of the Jury

Date

Dr. Moise BIGIRIMANA
Member of the Jury

Date

Dr. Phillipe NDIKUBWIMANA
Director of Graduate Studies

Date
DECLARATION

This research dissertation is my original work and has not been presented to any other institution for examination.

Signed………………………………… Date
DEDICATION

To my family, my friends and other relatives
ACKNOWLEDGEMENTS

The success of this research was a shared effort; whether materially or morally attributed to many persons who I sincerely acknowledge for having considerably supported me during my study.

First and foremost, I thank the Almighty God for his abundant blessings and protection during my studies. I thank God for seeing me through the time of admission to completion of my course. I am grateful to my family for both the moral and financial support given to me during the time of my study. Their contribution made towards my expenses in pursuit of this program, without which I would not be able to complete. I would also like to express my indebtedness to my supervisor who provided limitless guidance to me prior to and during the entire duration of my thesis writing and defense.

Special thanks to my wife who encouraged, supported me emotionally and linked me with some of the respondents in the field.

Lastly, I wish to acknowledge my classmates for their academic and moral support we shared during the time we studied together doing this course.

God bless you all.
ABSTRACT

The main purpose of this study was to examine challenges affecting SMEs development in Rwanda. The study objectives were; determination of whether SMEs face challenges related to finance in their activities, identification of the level of challenges encountered by SMEs in their development in Rwanda and assessment of the impact of the challenges faced by SMEs in their development in Rwanda. The statement of the problem is that, in Rwanda, SMEs are estimated to contribute a lot to GDP and reduce the level of unemployment and could have the greatest potential for further employment generation. However, this potential has been supported with limited impact which has made it difficult to exploit the existing potential to accelerate SMEs growth. SMEs contribute to the economic and social development of Rwanda and yet they lack adequate support from both the government and financial lending institutions. The undertaken study considered 90 people including SME owners or operators or managers and purposively 10 people from Banks and Microfinance Managers. The study showed that financial challenges related to SMEs financing were classified into two main categories; challenges related to financial lending institutions and challenges related to SMEs in terms of accessing finance. These challenges affect negatively the development of SMEs. Challenges related to access to finance on the side of SMEs are more harmful as indicated by the results of the regression model with the statistically significant effect (P-value<5%). The undertaken study ended by concluding that, although challenges are being encountered, SMEs are being developed but in a starved way. Therefore, the study concludes by suggesting some subsequent recommendations to financial lending institutions and to SMEs in general to ensure successful cooperation, respecting rules and regulations while considering facilitation on both sides.

Key words: Financial, Challenges, SMEs’development
# TABLE OF CONTENTS

**APPROVAL SHEET** ........................................................................................................................................ ii

**DECLARATION** ........................................................................................................................................ ii

**DEDICATION** ........................................................................................................................................ iii

**ACKNOWLEDGEMENTS** ........................................................................................................................ iv

**ABSTRACT** ............................................................................................................................................... v

**TABLE OF CONTENTS** .......................................................................................................................... vi

**LIST OF TABLES** ................................................................................................................................... ix

**LIST OF FIGURE** ................................................................................................................................... x

**ACRONONYMS** ..................................................................................................................................... xi

**CHAPTER ONE: INTRODUCTION** .......................................................................................................... 1

1.1 **Introduction** ................................................................................................................................... 1

1.2 **Background to the study** ................................................................................................................ 1

1.3 **Problem Statement** ...................................................................................................................... 3

1.4 **Research Objectives** ..................................................................................................................... 4

1.5 **Research Questions** ....................................................................................................................... 4

1.6 **Justification of the Study** ............................................................................................................. 4

1.7 **Significance of the study** ............................................................................................................... 5

1.8 **Scope of the Study** ....................................................................................................................... 5

1.9 **Organization of the study** ............................................................................................................ 6

**CHAPTER TWO: LITERATURE REVIEW** ............................................................................................ 7

2.1 **Introduction** ................................................................................................................................... 7

2.2 **Definition of Key terms** ............................................................................................................... 7

2.1.1 **Small and Medium Enterprise (SME)** ..................................................................................... 7

2.1.1.1 SMEs in Rwandan context ....................................................................................................... 8

2.1.1.2 SMEs’ features in Rwanda .................................................................................................... 9

2.3 **SMEs in Economic Development** ................................................................................................ 11

2.3.1 SMEs contribution to Economic Development and Growth ..................................................... 11

2.3.2 Challenges affecting SMEs in their Development ................................................................. 11
4.1.2 Respondents ‘Levels of education ................................................................. 30

4.2 Financial challenges for SMEs development in Rwanda ........................................ 31
   4.2.1 Financial challenges related to institutions in lending to SMEs .................................. 31
   4.2.2 Financial challenges related to SMEs access to finance ........................................... 33

4.3 SMEs’ Development ........................................................................................................ 34

4.4 Effect of financial challenges versus SMEs development .......................................... 34

4.5 Discussion of the findings .............................................................................................. 38

CHAPTER FIVE : SUMMARY, CONCLUSION, RECOMMENDATIONS ......................... 40

5.1 Summary of the findings ............................................................................................... 40

5.2 Conclusion ...................................................................................................................... 41

5.3 Recommendations ........................................................................................................ 41
   5.3.1 To Managerial staff of SMEs and Institutional lending ................................................. 42
   5.3.2 Suggestions for further research .................................................................................. 42

REFERENCES ..................................................................................................................... 43

APPENDIX .......................................................................................................................... 48
LIST OF TABLES

Table 1: SMEs Classification in Rwanda according to Rwanda’SMEs Policy

Table 2: Relationship between variables (Conceptualization)

Table 3: Reliability Test of Constructs

Table 4: Evaluation of mean

Table 5: Evaluation Standard Deviation

Table 6: Identification of correlation coefficient

Table 7: Respondents Distribution

Table 8: Educational Status

Table 9: Perception about challenges faced by financial institutions in lending to SMEs

Table 10: Perception of respondents about challenges related to access to finance

Table 11: Perception of respondents about SMEs’ development indicators

Table 12: Association between financial challenges and SMEs development

Table 13: Model Summary of the effect by considering independent variables regression model

Table 14: ANOVA Test

Table 15: Effect of financial challenges on SMEs development
LIST OF FIGURE

Figure 1: Conceptual Framework

20
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCF</td>
<td>Agricultural Credit Guarantee Fund</td>
</tr>
<tr>
<td>BDF</td>
<td>Business Development Fund</td>
</tr>
<tr>
<td>BNR</td>
<td>Banque Nationale du Rwanda</td>
</tr>
<tr>
<td>CMAC</td>
<td>Capital Market Advisory Council</td>
</tr>
<tr>
<td>EC</td>
<td>Economic Commission</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GNP</td>
<td>Gross National Product</td>
</tr>
<tr>
<td>GoR</td>
<td>Government of Rwanda</td>
</tr>
<tr>
<td>MINICOFIN</td>
<td>Ministry of Finance and Economic Planning</td>
</tr>
<tr>
<td>MINICOM</td>
<td>Ministry of Trade and Industries</td>
</tr>
<tr>
<td>MSEs</td>
<td>Micro Small Enterprises</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization of Economic Cooperation and Development</td>
</tr>
<tr>
<td>OIF</td>
<td>Organization Internationale de la Francophonie</td>
</tr>
<tr>
<td>SACCO</td>
<td>Savings and Credit Cooperative Organization</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Scientists</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollars</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
</tbody>
</table>
CHAPTER ONE: INTRODUCTION

1.1 Introduction
This chapter aimed at presenting the background to the undertaken study, explains the motivation of the study (problem statement), study objectives, research questions, scope of the study and finally the significance of the study.

1.2 Background to the study
Cook and Nixson (2000) stressed that the development of SMEs is seen as accelerating the achievement of wider economic and socio-economic objectives, including poverty alleviation. In accordance with an OECD (1997) report, SMEs produce about 25% of OECD exports and 35% of Asia’s exports. SMEs represent over 90% of private business and contribute to more than 50% of employment and of GDP in most African countries (UNIDO, 1999). Ahmed (2006) explains that (SMEs) are now seen as a sub-sector of the industrial sector which is playing crucial roles in industrial development. This suggests that Small and Medium Scale Enterprises are very crucial in shaping the growth agenda of countries.

Fisher and Reuber (2000) said: “promoting SMEs is a sure approach to achieving the Millennium Development Goals (MDGs) and in the construction of world monetary schemes that meet the needs of the productive poor.”

“Rwanda’s vision 2020 is founded upon six main pillars, one of which is a private sector led economic growth. The appearance of a viable private sector that can serve as the principle engine of the economy is paramount to Rwanda’s development and a key to this will be fostering an environment conducive to SME growth and development” (Ministry of Trade and Industry, 2011).

The Government of Rwanda (GoR) agreed to the Small and Medium Enterprise (SME) policy aimed at guiding the completion of a consistent and corresponding policy structure to generate an enabling environment for the development of the SME sector. It is envisaged that the growth of the SME sector will augment non-farm employment, expand business and methodological skills in the Rwandan labor force, support targeted value-added clusters, grow the tax base, and spur industrial growth (African Development Bank Group, 2013).
Small and Medium Enterprises (SMEs) and micro enterprises in organization for Economic Cooperation and Development (OECD) countries account for over 95% of all firms, 60-70% of employment and 55% of GDP and create majority of new jobs, indicating the impact SMEs have on employment. In contrast, currently over 80% of Rwandans are engaged in agricultural production. The SME sector, including formal and informal businesses, comprises 98% of the businesses in Rwanda and 41% of the private employment. Though not formalized, the sector has much growth potential with only 300,000 currently employed. Most micro and small enterprises employ up to four people, showing that growth in the sector would create significant private sector non-agricultural employment opportunities (Ministry of Trade and Industry, 2010).

According to the country’s policy of empowering SMEs, which is observed as the key catalyst for GDP growth and employment creation, BNR has taken proactive steps in this regard. Between March and May 2012, BNR in partnership with the World Bank conducted a supply SME financing survey to assess the obstacles of financing to SMEs in Rwanda and thereafter propose appropriate policies. The preliminary findings indicate positive outlook: on average, SMEs constitute 17% of overall lending portfolio in Rwanda, which is higher compared to 5% in Nigeria, about 8% in South Africa and 16% across developing economies.

In terms of distribution by sector of activities, commerce and hotels, mortgage industry has 41% and 22% respectively. Other economic activities are manufacturing activities (9%), agricultural, fishery and livestock (9%), transport and warehousing insurance (4%), service sector (4%), water and energy activities (4%), non-classified activities (4%) and OIF and insurance (2%). In addition, BNR has undertaken appropriate measures to break the traditional norms of over-reliance on real estate and land as prime collateral by introducing the enforcement of movable collateral supplemented by better credit information provided through the new private credit reference bureau (Nyandwi, 2013). The Rwandan Government continued with ambitious financial inclusion which targets are propelled by innovative policy and regulatory approaches. In 2008, Finscope revealed that more than half (52%) of Rwandan adults (18 years and older) were financially excluded, with only 21% adults using formal financial products or services (Access to Finance Rwanda, 2008).
These findings led to more focused financial sector interventions and as a result, the 2012 Finscope survey showed that formal financial inclusion doubled from 21% to 42%. The Finscope 2016 iteration was expected to show continued progress as the sector continued with ambitious targets aimed at achieving 80% of the financial inclusion by 2017 and 90% by 2020 (Access to Finance Rwanda, 2016). Despite the above, there is still needing to unlock the potential of the SME sector in Rwanda and the core problem, which needs to be addressed, is creation of an enabling environment for the growth of SMEs especially by easing SMEs access to business financing.

1.3 Problem Statement

Despite Rwanda’s economic growth in the past years, SMEs still face financial challenges, which is why the unemployment rate in Rwanda is still high. In Rwanda, SMEs are estimated to generate a third of GDP, employs 20% of the Rwandan Labor force, and could have the greatest potential for further employment generation. However, this potential has been supported with limited impact, which has made it difficult to exploit the existing potential to accelerate SMEs growth. SMEs contribute to the economic and social development of Rwanda and yet they lack adequate support from both the government and the financial lending institutions. The sector, creates employment, utilizes low, readily available inputs and produces goods and services consumed by low-income groups (Beck, T. & Hamilton, K, 2016). The sector also contributes positively towards the GNP and produces inputs consumed by large industries.

The lending terms prearranged by financial lending institutions too are not favorable to the sector. The criteria used to lend to SMEs are still the same as for the large companies (OECD, 2012). The situation has persisted to date, causing perpetual outcry from small firms to the government and the lending institutions to soften lending terms to SMEs. SMEs are facing major financial constraints, which have caused some to collapse, others selling off their assets, some being acquired by others whereas some have grown to big companies. The financial challenges faced by SMEs in Rwanda include inadequate capital base to meet the requirement of collateral for them to be able access financing.
Where capital is provided, it is considered inadequate compared to the amount needed for the business or project. The assets of SMEs are most of the time a hindering factor when it comes to the point of requesting for financing, this is confirmed by the fact that collaterals are often considered as worthless for safeguarding the receipt of a loan. Sometimes SMEs fall into default due to uncertainty related to the durability and development or growth of the business. The inadequacy of assets for SMEs is accompanied by quality of financial reports which are not following the standards for some of the SMEs regardless of their size. Consequently, the absence of required credentials put the lender in a position of denying credit to SMEs. (Ackah, J., & Vvor, S., 2011).

1.4 Research Objectives
The main objective of this study was to examine financial challenges affecting SMEs development in Rwanda.

The specific objectives were:

1) To determine challenges encountered by SMEs while accessing finance in Rwanda.
2) To identify the level of the challenges encountered by SMEs in their development in Rwanda,
3) To assess the impact of the challenges encountered by SMEs in their development in Rwanda,

1.5 Research Questions

4) What are the challenges related to finance encountered by SMEs?
5) What is the level of challenges encountered by SMEs in their development in Rwanda?
6) What is the impact of challenges encountered by SMEs in their development in Rwanda?

1.6 Justification of the Study

The study focused on financial challenges faced by SMEs in Nyarugenge District. The current unemployment rate in Rwanda is 57.2% due to limited jobs and production in the country. It is known that SMEs employ a big percentage of a country’s population; majority of them are in the informal sector and agriculture.
They contribute significantly to the economic development of the country and it’s for this reason that, investigating financial challenges faced by SMEs in Rwanda is important to come up with recommendations of how SMEs can be financially supported to boost their activities thus achieving economic development of the Country.

In addition, due to unemployment levels in the country, the population is sensitized on job creation and not job seeking. This means that people should start their own small and medium enterprises to survive. However, starting a business requires capital which comes with some constraints, which is the subject of the study. It is known that unemployment in any country comes as a source of insecurity, so a thoughtful policy from the Government and its partners to fund the SME sector can help reduce unemployment and insecurity in the country.

1.7 Significance of the study

The findings of the study will be of great benefit to SMEs and financial lending institutions and other stakeholders. It highlights financial challenges faced by SMEs as they try to access financing from financial lending institutions for their business operations and how they can overcome such constraints. The study will also benefit financial lending institutions to understand the challenges for SMEs to access financing from them and hence it will enable the financial institutions to design their lending system and products that will be suitable to SMEs to accelerate their growth given their contribution to economic development of the country. The study will also help Government and other partners to once again refocus on the SME sector by reviewing policies, which facilitate continuous support to the sector especially easing the process of accessing finance for them. The research findings will also add to the body of knowledge on what is known about the SME sector in Rwanda.

1.8 Scope of the Study

The study examines financial challenges for SMEs development in Rwanda considering a case study of Nyarugenge district in Kigali City. Nyarugenge District is around the city Centre of Kigali (which is towards the west of the urban area in the City), and contains most of the city's businesses. Most of the lending institutions have their head offices in Nyarugenge District which is an
opportunity for business operators in Nyarugenge District. The Study will involve owners and managers of SMEs and officials in financial lending institutions; with an accessible population of approximately 1,066 registered trading SMEs as per the establishment census of 2011. A samples size of 100 SMEs was selected for the study. Financial lending institutions in Nyarugenge district are also included in the study.

1.9 Organization of the study

Chapter one of this thesis contains the background which introduces the SMEs sector in Rwanda and its contribution to the economy of the Country. It also briefly explains the objectives, significance and scope of the study. Chapter two reviews the literature and the theoretical frame work. Chapter three explains the research methodology presenting the methods used in gathering the data. Chapter four presents data analysis, presentation and discussions of the findings. The last chapter presents the conclusion and recommendations
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter is about reviewing the existing literatures in relation to the undertaken study. Examine literature as presented in textbooks, journals, magazines, newspapers, articles and information from the Internet. The literature is thematically arranged under the following sub themes; theoretical review, the meaning of SMEs and their characteristics, their role to the economic development of Rwanda and their structure.

2.2 Definition of Key terms

2.1.1 Small and Medium Enterprise (SME)

Various economic activities are performed in different categories of agents and the common name for these categories is commonly known as enterprise. This category of economic agents does businesses at their own or family businesses, corporation or partnership. The use of the expression SME depicts business on the side of private agents. This means that, the size of employees counts for identification and classification of SMEs regardless of diverse businesses that are being undertaken. “A small business is regarded as one whose scale of operation is less than the industry average” (Quaye, Abrokwa, Sarbah, Osei (2014) cited by Avevor (2016).

The first institution which made an effort to release the meaning of SME was a Bolton Committee in 1971 as identified by Avevor, E. (2016). In its definition, the Bolton committee identified SMEs through the following two main perspectives; Statistical and economic perspectives. In the economic perspective, an SME is a small size of enterprise compared to the existing enterprise on the market, with ownership in terms of management but no well-organized structure in terms of administration and lastly it counts its independency. On the other hand, in statistical perspectives, SMEs are counted based on their contribution to Gross Domestic Product (GDP), reduction of unemployment, etc...

When defining SMEs, it is hard to do away with classifying them in a heterogeneity category. They are observed in a broad range of business activities, from single artisan in agricultural activities for the local market and other individual business in the village or small cities. Concerning the wealth of
the owner, he or she may be poor or not, but the business is operating, regarding the location, either in rural or urban, internal or external, in informal or formal economy.

The acronym “SME” has been used by different communities and organizations such as European Union, United States, China, Germany and other nations. The European Union Commission tried to define SMEs in 2012 through three main aspects based on employees’ number as follows: business by means of 10 employees are called micro-sized enterprises, businesses which employ up to 50 workers are called small-sized enterprises and the one with up to 250 employees with a yearly turnover of 50 million euro are named as medium enterprises.

In USA, the decisive factor for defining SMEs was based on the industry, structure of ownership, number of employees as well as level of revenue. But both USA and EU by and large make use of the similar verge of less than 10 as the number of employees for small enterprises. On the other hand, in Canada the definition of SMEs especially for small ones was given an account to have less than 100 employees if the business is in production of goods, less than 50 employees if enterprises are working in the service industry. The definition of SMEs also is generally based on the number of employees in China; in this country, the number of employees less than 500 classifies business as small and medium enterprise. Therefore, small and medium business enterprises can be defined as small and medium where the entrepreneur is involved in the production process as well as the administrative and commercial aspects of the business. One of its features is that, most at times, family members are involved. In the case of large business organizations, the entrepreneur may head the administration but not involved in production.

2.1.1.1 SMEs in Rwandan context
Several definitions of SMEs across the world are being developed. In the same perspective, the policy regarding SMEs in Rwanda as developed in 2010 defines SMEs based on the following conditions (in line with the World Bank report of 2004) where two of the three conditions must be met. The term “SME” in Rwanda is taken to include micro enterprises as well as small and medium enterprises (Rwanda SME policy 2010, page 7). There are several definitions of SMEs across the globe. For the purposes of this study, the definition of SMEs is adopted from the SME Policy document of the Government of Rwanda as illustrated in Table 2. Note that, the definition takes into
account the following: (i) Two of the three conditions i.e. net capital investments, annual turnover, and number of employees should be met.

Rwanda Revenue Authority (RRA) has a different definition of SMEs for tax purposes; and informal companies are defined as those not registered in accordance with the Companies Act or other legislation related to SMEs and cooperatives.

Table 1: SMEs Classification in Rwanda according to Rwanda’SMEs Policy

<table>
<thead>
<tr>
<th>Size of SMEs</th>
<th>Investment (net capital)</th>
<th>Turnover (Annual in million Rwandan Francs)</th>
<th>Size of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>&lt; 0.5</td>
<td>&lt; 0.3</td>
<td>1-3</td>
</tr>
<tr>
<td>Small</td>
<td>0.5- 15</td>
<td>0.3 - 12</td>
<td>4 - 30</td>
</tr>
<tr>
<td>Medium</td>
<td>15 - 75</td>
<td>12 - 50</td>
<td>31 - 100</td>
</tr>
<tr>
<td>Large Enterprises</td>
<td>&gt; 75</td>
<td>&gt; 50</td>
<td>&gt; 100</td>
</tr>
</tbody>
</table>

Source: Ministry of Trade and Industry, SME Policy, 2010

2.1.1.2 SMEs’ features in Rwanda

To understand the features and characteristics of small enterprise in Rwanda, it is important to consider the following aspects; location, classification, legal status, ownership, and other (Senoga E., 2012). The recent establishment census conducted in Rwanda revealed that majority of enterprises put Kigali City to be at the first place, this is followed by northern province (Rwanda Establishment census, 2012). The Census identified approximately 14% of establishments are concentrated in market places. The development of competent private sector was crucial. In this perspective, SMEs encompasses 98% of all the businesses (employing between 1 and 3 people) account for 92.6% of all businesses while enterprises with only one employee account for 72% for businesses.

The Government of Rwanda (GoR) put in place a blueprint regarding SMEs’ Policy skeleton with the purpose of directing the process of putting into practice a consistent and harmonized policy of creating a favorable atmosphere intended for the development of the SME sector. It is predicted that expansion of the SMEs sector will augment other forms of employment rather than farming, expand business and methodological ability in the workforce of Rwanda. This policy is supported by the establishment of other government institutions aimed at creating the environment favorable for the
development of SMEs as for example RCA, National Policy on the Promotion of Cooperatives (2006).

The Government of Rwanda (GoR) envisages reducing its dependence on external grants and loans, which contributed over 50 percent of the budget in FY 2011/12. Reducing the fiscal deficit could be achieved by tapping into SMEs as a source of tax revenues. Out of the 123,526 SMEs, only 25,000 (20%) were registered, of which 24% pay taxes regularly. Registration of more SMEs and drawing them into the tax net can therefore contribute to the expansion of the tax base and tax revenues.

Rwanda Revenue Authority (RRA) has a different definition of SMEs for tax purposes. RRA classifies SMEs as enterprises with annual turnover in the range of US$35,087 and US$350,877, while medium enterprise with annual turnover of US$350,877 and US$877,192 (East Africa Business Week, 3rd November 2018).

About 11.2 percent of SMEs are registered with Rwanda Revenue Authority (RRA) and 4.8 percent with Rwanda Development Board (RDB). However, 87 percent are registered at the local government level. Some enterprises are also registered with the Rwanda Social Security Board (RSSB) and Private Sector Federation (PSF). Most of the SMEs are not incorporated. According to the laws governing capital markets in Rwanda, one of the basic requirements for an enterprise to list on the capital markets is incorporation. The findings of the study conducted by African Development Bank known as leveraging capital markets for SME financing in Rwanda published on September 28th, 2012. This report examined in the detailed manner SMEs and their characteristics in the following dimensions: Number of SMEs and employment, Size of Capital, Sectoral composition and turnover, business registration and others.

As it has been reported by AFDB (2012) micro-sized establishments -those employing between 1 and 3 people -account for 92.6% of all establishments with 89,219 (72%) having just one worker.

In terms of employment, micro enterprises employ 51.3% of the 281,946 persons employed in all the establishments, further underscoring the importance of the SMEs with respect to employment generation. In addition, a total of 90,388 (71%) enterprises are categorized as micro establishments compared to the 1,095 (less than 1%) that fall in the large category.

The average value of capital employed by an establishment in Rwanda is RWF 16.3 million (US$26,080), which is relatively small compared to US$35,087 lower end turnover of a small enterprise as defined by the RRA. Rwanda being a low-income country, it is not surprising to find
over 70% of the establishments being micro-enterprises because of the low level of capital required to set up a micro-enterprise and a large subsistence agriculture.

2.3 SMEs in Economic Development

2.3.1 SMEs contribution to Economic Development and Growth
SMEs in Rwanda contribute potential tax revenue. The government of Rwanda has reduced its dependency on foreign aid and debt by increasing internal tax revenue. Per the Rwanda Revenue Annual report 2015/2016, tax revenues increased by 14.8% compared to the previous year, largely from the collection of Value Added Tax (VAT). In addition to expanding the export sector, SMEs also represent a potential source of tax revenue, thus reducing Rwanda’s dependence on foreign assistance (Rwanda SME policy, 2010).

2.3.2 Challenges affecting SMEs in their Development
The fact that SMEs have not made the desired impact on the Rwandan Economy despite all the efforts and support of succeeding administrations and governments gives a cause for concern. It underscores the conviction that there are fundamental issues or problems, which SMEs face but which up till now have either not been addressed at all or have not been wholesomely tackled. Among the encountered challenges there are Stringent conditions, Short period of repayment, Nature of the company, Limited capital Instruments, Risk associated with the agricultural sector, Limited capacity of Umurenge Sacco, Limited levels of financial inclusion in Rwanda

2.3.2.1 Strigent Circumstance
In several cases, the inability of SMEs to get financial assistance from financial institutions is due to absence of existing needed prerequisites. Financial institutions refuse to lend to some small enterprises because they do not have acceptable collateral. Collateral in the form of assets is only a way for financial institutions to recover their money in event of default. Financial institutions demand collateral to mitigate the risk associated with the loans and financial institutions always insist that this collateral requirement is fulfilled.

2.3.2.2 Short repayment period
SMEs owners are given Short period of repayment which mainly less than five years. In that short period, it is difficult for SME to pay both a principal amount and interest.
2.3.2.3 Nature of the company
Small companies in their nature of SMEs hinders them to have access on financing, there are various factors that are attached to this case; absence of strong financial systems, the way they are managed (unofficial and lack of good reputation). These two associated factors have been identified as factors that cannot ensure the assurance of giving back the given loan. Not only that but also it cannot succeed in the process of risk analysis of credit as it is the main obligation when offering credit. (World Bank report, 2014)

2.3.2.4 Limited capital Instruments
The issue of missing enough capital that allows SMEs to gain loans that can permit them to compete market is seen also as a main barrier in accessing finance. This is witnessed when they collapse at the start up step. Not only that but also some of the SMEs cannot survive in the existing competition due to lack of enough funds.

2.4 Financing SMEs
Financing of SMEs is crucial to their success. Any business enterprise, no matter how well managed they may be, at one point or the other, will require financial assistance. The financial assistance may come from external sources in form of debt or equity. The insufficient funds for starting businesses are the primary constraint for SMEs to survive and consequently some SMEs experience an unexpected breakdown Sara & Jones (2009). Financial institutions such as bank, microfinance are the known institutions in charge of delivering funds for all business categories. Banking agents in their industry are looking for adequate respect of regulations both own regulations and environmental regulations (government regulations). Account held on business type and category and own capital, the financial means can be borrowed from banks (Acs & Audretsch, 2003)

2.4.1 Equity financing
Equity is the owner’s share of the firm’s assets; the nature of this claim depends on the legal form of ownership. For proprietorships and partnerships, the claims on the assets of the firm are the same as owner’s personal assets. Shares of common stock and preference stock evidence equity financing in large firms.

Equity refers to funds contributed by entrepreneurs or investors whose return is primarily. This means if business fails to make profits, owners do not get any returns. The effect of owners’ equity is
to act as shock absorber the SMEs which requested loan from defeat in paying back money due unexpected situation of financial complexity.

2.4.2 Debt financing
Debt financing is another method of financing a business. Having a loan and resist on tenure is the meaning of debit financing. It appears with harsh obligations or agreement added to commitment to reimburse interest and main before due date. Disappointment to the respect of money owing necessity will result a huge consequence for SMEs (Megginson, 2004).

2.5 Sources of Financing SMEs in Rwanda
The source of finance for SMEs in Rwanda can be viewed in two perspectives intrinsic or extrinsic. The intrinsic values are owners ‘equity or own capital while extrinsic are considered as funds from external especially in financial institutions as of course the core of this undertaken research.

Internal sources of finance include current assets such as reducing receivables and inventory, extended payment terms and collecting cash. On the other hand, external sources of finance include bank loans, leasing, trade credit, grants and other forms of credit.

2.5.1 Personal Resources
According to Megginson and Byrd (2003), owners of small firms rely more on their capital and less on external debt capital than owners of large firms. Also, small firms are more dependent on short – term debt than on long – term debt.

People who start small business must therefore invest in substantial amount of their own funds in it before seeking outside funding. Personal capital also helps small firms to raise additional funds from investors. Significant financial commitments made by the owners of the business tend to build a lot of confidence among potential investors. In addition, many owners prefer using their own funds because they feel uncomfortable risking other people’s money or because they don’t want to share control of the firm. In summary, for the smallest firms, owner capital is the most important source of financing.
2.5.2 Private Equity

The most source of capital through equity financing is retained profits. Businesses that are already ongoing may fund their operations from retained profits. These profits if well utilized can provide reasonable financing for most SMEs. The major drawback with the small – scale enterprises is that the business owners tend to “eat – up” all the profits instead of reinvesting them into the business. According to Count (2008) at least 50 percent of the profits before tax should be ploughed back into the business. The diversion of profits to other usage could be attributed to lack of knowledge and business acumen from most entrepreneurs. It is therefore important that entrepreneurs are enlightened on the utilization of profits. This could be achieved through business seminars and education (Acs & Audretsch, 2003). Retained earnings also provide the opportunity of strengthening the company’s equity ratio. In Rwanda, most SMEs are financed by private equity from retained earnings because they are individually owned.

2.5.3 Venture Capital firms

Apart from the provision of capital for very promising business ventures, venture capital firms also provide useful advice to these young enterprises, having acquired much more experience in business. They also provide additional financial assistance in the future if the firm they have invested in runs into financial difficulties (Ackah & Vuvor, 2011). Venture capital is available to SMEs but is less appealing to Small businesses due to its conditions. The sector is discouraged from accessing financing from this source because they perceive it as giving up their companies for capital.

In developing countries including Rwanda, this modal is not popular with small – scale entrepreneurs because it is also not well understood. Venture capitalists may also not be interested in small businesses due to low returns from business operations (Acs and Audretsc, 2003). In Rwanda, there are very few venture capital firms like Business Partners International (BPI), Grofin and Fusion Finance. These also finance SMEs, but SMEs have limited information about them.

2.5.4 Capital Markets

Traditionally, SMEs access to finance through capital markets is complicated since they do not have direct access to capital markets and so they should go public which requires a change of the legal form of the company. In Rwanda, the capital market is relatively new in the country but there is hope that awareness will continue to increase with experience. The CMAC has been organizing
campaigns to reach out to different groups in society through radios and on Televisions as well as campaigns conducted all over the Country.

Currently, there are four companies whose shares are sold on the Rwanda Stock Exchange: Bralirwa, KCB, BK National Media Group, Crystal telecom and I &M Bank. Although this is one of the sources of finance in most developed nations, the Rwanda Capital Market is not considered as a source of finance for Rwandan SMEs.

2.5.5 Bank loans
Traditional financial institutions may provide the small business owner with borrowed funds. The proportion of funds such institutions make available range from 25 to 60 percent of the value of the total assets of the firm. Usually the cost of such financing is higher than that of other alternatives, but such funds may be the most accessible. Commercial banks are the most dominant supplier of external financings to small firms. In fact, a few years ago, an exhaustive study found that 90 percent of SMEs identified their local bank as their primary financial institution for banking and other financial services. Although banks realize that SMEs are a strong market, with strong demand, they also know they do not provide return sought by banks.

In other words, “Small business loans are regarded as expensive to service and marginally profitable (Mason, 2006). There are several types of bank loans available. To ensure a reasonable expectation of repayment, these loans are based on the assets or the cash flow of the venture. The asset bases for loans include accounts receivable, inventory, equipment or real estate. The other type of debt financing frequently provided by commercial banks and other financial institutions is cash flow financing. These include lines of credit, installment loans, long-term loans and personal loans. Lines of credit financing are perhaps the form of cash flow financing most frequently used by entrepreneurs.

2.5.6 Equipment loans and Leases
Many SMEs find it difficult to raise funds for outright purchase of certain equipment and machinery. They resort to purchasing such equipment on installment basis. Millinga, A. L., (2014) noted that down payment of about 25 to 30 percent of the price of the respective equipment are usually made initially. The remainder may be amortized over 3 to 5 years. This practice is referred to as equipment
loans. An alternative to this is equipment leasing. This arrangement allows firms greater investment flexibility; and the firm requires smaller amounts of capital at any given time.

However, the total cost involved in equipment leasing is usually higher than the cost of outright purchase. On the other hand, in a situation where continuous specialized maintenance and protection against obsolescence are required, leasing may be more suitable (Ackah & Vvor, 2011). Leasing is a financing mechanism that allows a business to use an asset owned by a leasing company (the lesser) in exchange for specified periodic payments, without necessarily assuming ownership of the asset. Leasing in Rwanda began in February 2006 with only two players; Commercial bank of Rwanda and FINA Bank.

Within the first year of their operations, they had transacted a total of 43 leases worth 7 Million USD and by December 2008, the players had increased to 469 leases and combined portfolio of 30 million USD. Leasing in Rwanda is still considered a new product on the market and still a large section of its population have never heard of it or sought it out as an alternative form to access finance. The potential for growth underlines the need to grow and develop leasing as a viable financing alternative in order to realize its full potential especially to SMEs (International Finance Corporation, Rwanda Leasing Investment Guide, and May 2009).

2.6 Challenges of financial institutions in lending to SMEs

SMEs in Rwanda face many macro level challenge faced by large companies, including limited transport and energy, lack of strong insurance industry, limited financial outreach, difficulty with contract enforcement and weak education system. SMEs also face huge burdens in regulatory compliance costs that can be better absorbed by large firms (SME policy, 2010). Key challenges include:

2.6.1 Transaction Costs

Like all other businesses, banks bring upon self costs to do a business; they acquire cost to access credit, process and keep an eye on loans. Transaction costs directly related to fruitlessness. The higher the cost of processing a transaction implies the lower the return. Loans to SMEs often consume time to assess, monitor and deal with. It is in this regard that, financial institutions charge transaction costs to process and advance credit to SMEs. Such costs are seen to increase the cost of doing business which hinders SMEs development.
2.6.2 Lack of access to market information
SMEs face difficulties accessing and utilizing information regarding market opportunities especially local, regional and international information related with the cost of financing available to SMEs. Pricing, major constraints to business planning as well as about regulatory environment in Rwanda and regionally. Among SMEs, there are poor interventions designed to assist them. SMEs have inadequate access to market information that could benefit their businesses as well as inadequate knowledge about marketing their products both nationally and internationally.

2.6.3 Lack of adequate financial statements
Most SMEs do not put in order financial statements. SMEs are not requiring by law to prepare financial statements. Smooth in highly developed economies, such as those in the European Union, SMEs are not required to report on their financial performance in a standardized manner if they do not reach a significant threshold in total assets, turnover and or number of employees. This means that many SMEs in developed and developing countries do not produce reliable financial information, which could be used by creditors or investors (Ricupero, 2002).

2.7 Empirical Review
Access to external sources of finance may increase growth possibilities since it facilitates the development and improvement of firm’s products and services or hire new employees. In transition economies, the development that financial markets experience may create barriers linked to access to finance. Hence, academic research considers financial constraints as an important obstacle for entrepreneurship and firm growth. Empirical evidence supporting the of firm growth determinants (Njeru& Tirimba, 2014). Conversely, institutional reforms in five Eastern European countries (including Romania), and they conclude that access to bank finance does not prevent business growth but Lack of access to credit facilities is almost universally indicated as a key problem for small and micro enterprises (Simon et al, 2002).

In most cases, even where credit is available mainly through banks, the entrepreneurs may lack freedom of choice because the banks’ lending conditions may force the purchase of heavy, immovable equipment that can serve as collateral for the bank. Credit constraints operate in a variety of ways in Rwanda where undeveloped capital market forces entrepreneurs to rely on self-financing
or borrowing from friends and relatives. Lack of access to long-term credit for micro, small and medium enterprise forces them to rely on high cost short term finance (Wanjohi & Mugure 2008)

Ackah & Vuvor (2011) conducted a study; “challenges faced by Small & Medium Enterprises (SMEs) in Obtaining Credit in Ghana”. It was undertaken to highlight the issues facing SMEs in Ghana in their quest to accessing bank credit (loans) from financial institutions (banks & non-banks) to undertake various activities; be it general business operations or carrying out expansion project all in the name of fulfilling the objectives as being job creators and helping to reduce poverty. In tackling this topic, the quantitative approach was adopted. Questionnaires were circulated to 80 SMEs in the Accra and Tema metropolis selected through a technique of convenience sampling. Based on the responses received through these questionnaires, the following major findings came to the fore.

There are institutions such as bank and non-bank financial institutions that would provide financial means to SMEs, but SMEs would not meet the requirements of these financial institutions. Chief among these requirements is the issue of collateral, which most SMEs cannot provide. Aside this is the other issue of small equity base of these SMEs among others. Secondly, those who are able to access this credit are also faced with high interest rates and short repayment periods making it very difficult to embark on any developmental or expansion projects.

Another interesting revelation with regards to the high rate of defaults in repayment of loans contracted, relates to the tight Cash flow situations of these SMEs that is mostly due to difficulties in the management of the account receivables of the respective SMEs surveyed. Lee (2014) conducted a study about assessment of the challenges and opportunities for small and medium enterprises (SMEs) in the Vietnamese apparel retail market. In his study, qualitative phase, interpretive analyses revealed overarching themes, including (1) resources generated for domestic Vietnamese small business owners in the apparel retail market, (2) limited access to financial resources, (3) lack of reliable human resources, (4) need for further development of transportation infrastructure, (5) use of retail technology, (6) economic conditions’ influence on apparel consumption, (7) facing other difficulties in retail operation. The study on challenges facing SMEs in accessing finance from financial institutions: The case of Belaway, Zimbabwe found out that SMEs fail to secure loans because of restrictive requirements of the financial institutions, top among them being collateral
security. Among their recommendations is that the government should play its role of enabling SMEs to obtain finance from financial institutions to enable them to develop (Matavire et al., 2013).

“The problems of financing SMEs in Ghana” Prempeh (2018); this was a study conducted with the most important center of attention of exploring the temperament and the distinctiveness of SMEs collectively with the financial constrictions in front of the SMEs. Furthermore, the research utilized both qualitative and quantitative data. The main finding revealed that lack of access to finance for starting, working and escalating businesses are the core holding back challenges. But among the consulted SMEs, accessing finance is the principal challenge and it has effect on their survival.

Orinda (2014) conducted a study about financial challenges facing small and medium enterprises in Kisumu city, Kenya and their financial performance implications. The results of his study showed that lack of finance and inadequacy in accessing to credit, the high level of interest rates and some new laws and regulations were major financial challenges facing SMEs. Consequently, these challenges affect the working procedure of SMEs in terms of innovations, profits and growth (performance). The same findings also have been remarked by Lyimo (2014) in his doctoral dissertation about the Challenges and Prospects of Small and Medium Enterprises (SMEs) in admittance of credit facility where he concluded that the limitation encountered in accessing credit from financial institutions hamper the growth of SMEs.

2.8 Research Gap
In the review of literatures, numerous challenges faced by SMEs have been reviewed. It is noteworthy that most scholars particularly addressed challenges in general perception. It is also distinguished that most of the cited literatures are not field visit related studies. As a substitute of looking at the general challenges faced by SMEs, this research took emphasis on the challenges related to SMEs financial credit accessibility but on both sides (Financial institutional lenders and SMEs as service consumers or credit requestors). Furthermore, it went more to explore the level of impact of those challenges on each side.

2.9 Conceptual Framework
Within this section, there is a clarification of a coherent link between the taken financial challenges and the indicators of project performance. The conceptual framework reveals the existing independent (financial challenges) and dependent variable (SMEs development).
Figure 1: Conceptual Framework

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Challenges of financial Institutions in lending to SMES</strong></td>
<td><strong>SMEs’ development</strong></td>
</tr>
<tr>
<td>• Lack of adequate collateral</td>
<td>• Business growth,</td>
</tr>
<tr>
<td>• High transaction costs</td>
<td>• Access to credit facilities,</td>
</tr>
<tr>
<td>• Interest rates</td>
<td>• Employment,</td>
</tr>
<tr>
<td>• Lack of accurate documentation</td>
<td>• Absence of Marketing Challenges,</td>
</tr>
<tr>
<td>• Absence of justified business or Progress records</td>
<td>• Attitude toward risk,</td>
</tr>
<tr>
<td>• Absence of adequate business plans and the need to show good sales turnover</td>
<td>• Availability of improved managerial skills,</td>
</tr>
<tr>
<td><strong>Challenges related to access to Finance</strong></td>
<td></td>
</tr>
<tr>
<td>• Stringent conditions</td>
<td></td>
</tr>
<tr>
<td>• Short repayment period</td>
<td></td>
</tr>
<tr>
<td>• Nature of the company</td>
<td></td>
</tr>
<tr>
<td>• Limited capital Instruments</td>
<td></td>
</tr>
</tbody>
</table>

### Intervening variables

- Legal System
- Level of economy in the country
- Knowledge of SMEs’ Products or services in the society
- Bad reputation of some failed SMEs

Source: Authors’ Compilation based on Literature review
The conceptualization of these variables highlights independent variables like; collateral requirements, cost of credit, availability of information on finance, business risks and the dependent variable; Access to credit facilities by SMEs development in Nyarugenge District Rwanda.

Table 2: Relationship between variables (Conceptualization)

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Intervening (moderator)</th>
<th>Dependent variable</th>
<th>Expected results</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Challenges of financial Institutions in lending to SMEs</td>
<td>• Legal System.</td>
<td>SMEs’development</td>
<td>• Slow business growth</td>
</tr>
<tr>
<td></td>
<td>• SMEs recognitions.</td>
<td></td>
<td>• Inaccessibility to credit facilities</td>
</tr>
<tr>
<td></td>
<td>• Level of economy in the country.</td>
<td></td>
<td>• Unsuitable toward risk</td>
</tr>
<tr>
<td></td>
<td>• Knowledge of SMEs’ products or services in the society.</td>
<td></td>
<td>• Bad reputation due to absence satisfaction for clients</td>
</tr>
<tr>
<td></td>
<td>• Bad reputation of some failed SMEs.</td>
<td></td>
<td>• Delays in operations</td>
</tr>
<tr>
<td>➢ Challenges related to access to Finance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Correlation coefficient between factors of independent variable and factors of dependent variables were assessed in order to find out the level of association, this would allow us to test the effect of independent variables on dependent variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The test of effect was used to determine the factor with most pertinent effect</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Designed by the researcher based on the topic, December 2018
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction
This chapter focuses on the following section: research design, target population, sample size calculation, sampling techniques and procedure, data acquisition (collection) methods and tools, validity and reliability, and data analysis methods. The purpose of this method of research is to investigate financial challenges affecting SMEs development in Rwanda.

3.2 Research Design
Research design refers to the plan, structure and strategy of research. The research design for this study is based on the cross – sectional and descriptive survey design, which is used for the collection of data through the construction, distribution and collection of questionnaires data forms as well as the examination and analysis while taking into consideration some of related literature. The study preferred descriptive design because the investigator attempts to describe a group of individuals on a set of variables or characteristics. Similarly, the undertaken study would describe the financial challenges for SMEs development. Cross-sectional research design was used because the undertaken research did not do cohort follow up in research which is most of the time called longitudinal design.

To achieve the research objectives, Nyarugenge district was taken as case study. This is due to the fact most of the banks are in Nyarugenge district in Kigali City and have branches in other regions of the country. According to Fisher (2007:59), case studies enable the researcher to give a holistic account of the subject of your research. They help the researcher to focus on the interrelationships between all the factors such as people, groups, policies and technology that make up the case studies.

3.3 Population and Sample Size
The population is the total collection of elements about which the study wishes to make some inferences (Cooper et al, 2003). SMEs in Rwanda are scattered across the Country with most of them located in urban areas mainly in Kigali City Province. Majority of SMEs in Kigali City are in Nyarugenge District, followed by Gasabo district and Kicukiro District. When selecting a case study in a research, it is important to have a selection of the research site and for this research; SMEs in Nyarugenge district were selected due to the following reasons.
Most of the financial institutions which were involved in the study were Coopedu, Bank of Kigali, BPR, Unguka Micro Finance, Letsego Micro finance and SMEs were Clecam Ejo Heza, Magasin Safir Ltd, Amani restaurant, to mention a few. Regarding the sample size determination, the study used Krejcie and Morgan (1970) formula also confirming the existence table for determining sample size, a sample of 100 respondents were selected from the available financial and SMEs, which had a total staff of about 200 respondents. This was according to information obtained in their Human Resource manual and was supported by Krejcie and Morgan (1970) sampling procedure.

\[ S = \frac{x^2NP(1-P)}{d^2(N-1) + x^2P(1-P)} \]

\(s=\) Sample size.
\(x^2=\) the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).
\(N=\) the population size.
\(P=\) the population proportion (assumed to be .50 since this would provide the maximum sample size).
\(d=\) the degree of accuracy expressed as a proportion (.05).

\[ S = \frac{1.96^2 \times 118 \times .50(1-.50)}{0.05^2(118-1) + 1.96^2 \times 2 \times 0.50(1-0.50)} \]

\(S=90.45\approx90,\) therefore, the undertaken study considered 90 people including SME owners/operators /managers. Despite the selection of sample size among SMEs owners/operators /managers through the formula of Krejcie and Morgan (1970). The study also selected purposively 10 people in the categories of Bank/Microfinance managers; this was done due the fact that their availability was not easy during the time of survey.

### 3.4 Sampling Techniques

The main function of the sampling is to allow the researchers to conduct the research to individuals from the population so that the results of the study may be generalized to the entire population. Among the types of sampling techniques, the researcher used three types of sampling as follows: Stratified sampling and Purposive Sampling. Among those sampling techniques stratified sampling consisted of division of the entire population into different subgroups or strata.
The reasons for using stratified sampling rather than other one else include the following: Stratification produce a smaller error of estimation even the estimates of population parameters may be desired for subgroups of the population; these subgroups should be then identified. For the undertaken research, the stratification process consisted of grouping Nyarugenge district into four sub regions (North, South, East and West).

The second phase of sampling within this research was based on systematic sampling where the selection had pillar of considering sampling interval and consider each person at K\textsuperscript{th} position within each strata. The K\textsuperscript{th} position is found by adding the ratio between the numbers of target population by the sample size. The first number to start at was based on the available ascending alphabetical list of the sampling frame. The third sampling technique was judgmental purposive sampling which was used to reach at the bank managers. The use of the three sampling techniques enabled every Nyarugenge District SMEs to have a chance of being represented in the sample.

### 3.5 Study tools

The methods adopted for the collection of indispensable and valuable data for this study are mainly careworn based on the two main types of data (primary Data and Secondary Data).

#### 3.5.1 Primary Data

The researcher used questionnaire as the main type of instrument in the collection of primary data. According to Amin (2005:296), a questionnaire is a self-report instrument used for gathering information about variables of interest in an investigation. This instrument was given priority since the respondents were free to give answers to the questions. Also, is encourages respondents to give open and straight answers to sensitive questions thus helping the researcher to acquire important information. The questionnaire was developed based on likert levels of measurement; this permitted the participants to raise their perception in terms of the challenges affecting the development. The questionnaire was mainly made up of three sections; Respondents ‘profile; perception of the respondents about financial challenges and perception of respondents about SMEs in development. Prior to issuing of questionnaire to a respondent, the researcher took time to explain the questionnaire and its intention.

The meaning of the scaling was explained to the respondents as follow; 1 for Strongly Disagree (SD), 2 for Disagree (D), 3 for Undecided, 4 for Agree (A) and 5 for Strongly Agree (SA). Sensitive
questions could as well be answered at ease since names were not required (anonymity was observed) and in most cases the researcher was absent.

3.5.2 Secondary data

The existing source of data for the undertaken research was mainly referred to data which had been collected by the other researchers in line with this research. This process was done through reviewing different sources of information about the financial challenges that can affect SMEs in their development journey. Here, the researcher used reports related to financial inclusion, journals, and internet.

3.6 Validity and Reliability of Instrument

Validity concerns the degree to which a question measures what it was intended to measure. It is the degree to which results obtained from the analysis of data represent the phenomenon under study. Generally, there are three main types of validity related to the use of questionnaires in terms of content validity where the researcher put forward and emphasizes on opinions of experts such as the research supervisors.

Again, for empirical validity, the researcher also used coefficient alpha derived from the application of Cronbach test after doing a pilot study where 15 SMEs and 5 financial institutions were taken into consideration through Stratified sampling and Purposive Sampling. This test was developed by Cronbach (1951). Alpha is the usual correlations of all the potential ways of dividing the test into two sets. Cronbach Alpha Coefficient was used to ascertain the reliability of the instrument. Should Cronbach Alpha coefficient be ≥0.70, then the instrument would be reliable as recommended by Farided (2007) to test the reliability of questionnaire that was used in the study. To calculate this alpha, the researcher used SPSS software.
Table 3: Reliability Test of Constructs

<table>
<thead>
<tr>
<th>Financing Status</th>
<th>Reliability Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the side of financial lending institutions</td>
<td>0.804</td>
</tr>
<tr>
<td>On the side of SMEs when accessing finance</td>
<td>0.732</td>
</tr>
</tbody>
</table>

Source: SPSS generated output

3.7 Data gathering procedures

Prior to the administration of the research instrument to the sample under study, the researcher obtained permission from University of Rwanda which enabled the researcher to present his research instruments to SME owners/operators /managers in their respective businesses. The researcher collected data from primary and secondary sources. A researcher took three weeks on the course of distribution of questionnaires and retrieving relevant information from the selected study participants.

3.8 Statistical Treatment of Data

The analysis of the received data from the field was done by way of admiration of the research objectives. As far as this research is concerned, it involved quantitative and qualitative data. It was given an important consideration through use of the statistical software which is known as Statistical package for Social Science (SPSS). The presentations of findings have been given in the form of frequency tables for the case of describing the data to pick out the relevant information. Furthermore, the use of linear regression model was considered for expressing the effect of financial challenges on SMEs development in Rwanda. The following central tendency measure were used

- Mean(X-Bar)

The most common expression for the mean of a statistical distribution with a discrete random variable is the mathematical average of all the terms. To calculate it, add up the values of all the terms and then divide by the number of terms. This expression is also called the arithmetic mean. The mean of a statistical distribution with a continuous random variable, also called the expected value, is obtained by integrating the product of the variable with its probability as defined by the distribution (Aggresssti & Franklin, 2000). It is important to note that the mean results indicate the
centers of the distribution of the data, on the other hand, it is considered as the average of respondents ‘perceptions regarding variables of interest.

Table 4:. Evaluation of mean

<table>
<thead>
<tr>
<th>Mean</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 - 2.50</td>
<td>Very weak</td>
</tr>
<tr>
<td>2.50 - 3.50</td>
<td>Moderate</td>
</tr>
<tr>
<td>3.50 - 4.50</td>
<td>Strong</td>
</tr>
<tr>
<td>4.50 - 5.00</td>
<td>Very Strong</td>
</tr>
</tbody>
</table>

Source: Aggresti (2009)

iii. The standard deviation (σ)

It is the measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation. Standard deviation is calculated as the square root of the variance. The standard deviation was used to measure the degree of dispersion (homogeneity if is less than 0.5 or heterogeneity if is great than 0.5 of responses collected.

Table 5: Evaluation Standard Deviation

<table>
<thead>
<tr>
<th>Standard deviation</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>σ &gt; 0.5</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>σ =0.5</td>
<td>Moderate</td>
</tr>
<tr>
<td>σ &lt; 0.5</td>
<td>Homogeneity</td>
</tr>
</tbody>
</table>

Source: (Aggresti & Franklin, 2000)

iii. Correlation

The meaning of correlation in statistical terms reflects the level and direction of relationship (direct or inverse) between two variables under consideration.
Table 6: Identification of correlation coefficient

<table>
<thead>
<tr>
<th>Status of correlation coefficient</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>r=1</td>
<td>Perfect linear correlation</td>
</tr>
<tr>
<td>Between 0.9 - 1</td>
<td>Positive strong correlation</td>
</tr>
<tr>
<td>Between 0.7 - 0.9</td>
<td>Positive high correlation</td>
</tr>
<tr>
<td>Between 0.5 - 0.7</td>
<td>Positive moderate correlation</td>
</tr>
<tr>
<td>Between 0- 0.5</td>
<td>Weak correlation</td>
</tr>
<tr>
<td>r=0</td>
<td>No relationship</td>
</tr>
<tr>
<td>Between -1- &lt; 0</td>
<td>Negative relationship</td>
</tr>
</tbody>
</table>

Source: (Saunders & Pascal, 1999).

Analytical Model

There is a need to specify the regression function, the model specifying the relationship between independent variables (Xi) and dependent variable (Y).

\[ Y = \beta_0 + \beta_1 X_i + u \]

Y is an observed random variable (also called the response variable or the left-hand side variable), X is an observed non-random or conditioning variable (also called the predictor or right-hand side variable), \( \beta_1 \) is an unknown population parameter, known as the coefficient or slope parameter and u is an unobserved random variable, known as the error or disturbance term.

The regression model summary, containing analysis of variance (ANOVA) and regression coefficients tables was used within this research; within the regression model summary, Ghauri & Gronhaug (2010) explain that the R square tells us how much of the variance in Y is accounted for by the regression model from the sample and then the adjusted value tells us how much variance in Y is accounted for if the model had been derived from the population from which the sample would be taken. If the number (or numbers) found in the column is (are) less than the critical value of alpha set by the experimenter, then the effect is said to be significant (P-value < \( \alpha \)).

Since this value is usually set at 0.05 or 5%, any value less than this would result in significant effects, while any value greater than this value would result in non-significant effects. The significance level helped in rejecting or maintaining our hypotheses.
Finally, by inspecting the regression coefficients as stated by Ghauri P. & Gronhaug K. (2010), the standardized regression coefficients will show the explanatory power of independent variables. Regression analysis is a statistical technique for studying linear relationships. It begins by supposing a general form for the relationship, known as the regression model:

\[ Y = \alpha + \beta_1 X_1 + \ldots + \beta_k X_k + \varepsilon. \]

As stated in the conceptual framework of this research, the dependent variables (Y) represents how independent variables affect it. On the other side, this variable is called explanatory variable. It shows a discrepancy from individual responses to the then \( \alpha \) also called intercept indicated the level of dependent variable at the case when all independent variable is not there (Considered as absent).

The coefficients \( \beta_k \) also called slope indicated the level of effect of independent variable on dependent. This means that the effect is seen by taking the ratio between derivative of independent variable and the derivative of independent variable. Regression analysis generates an equation to describe the statistical relationship between one or more predictor variables and the response variable. After using Statistical Software to fit a regression model and verify the fit by checking the residual plots, the results would be interpreted. At this case, the analysis would interpret the p values and coefficients that appear in the output of linear regression analysis. The p-value for each term tests the null hypothesis that the coefficient is equal to zero (no effect). A low p-value (< 0.05) indicates that the treatment under concern is significant. In other words, a predictor that has a low p-value is likely to be a meaningful to the model because changes in the predictor's value are related to changes in the response variable.

**3.9 Ethical Consideration**

The researcher started doing the research by a self-introduction. This was followed by the explanations about the reason why this research is carried out and where the research report would be submitted (University of Rwanda). Before addressing the questions to the study participants, the researcher asked participants if they were in agreement with him. Concerning confidentiality, the respondents were assured that data provided will be handed with confidentiality.
CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analysis and interpretation of the data to examine the financial challenges affecting SMEs development in Rwanda. The findings of the study and analysis from data collected from SMEs managers and operators. The following three main objectives were taken as the basis during the study results assessments: determine whether SMEs face financial challenges in financing their activities, to identify the level of challenges in their development in Rwanda and assessing the impact of the challenges faced by SMEs in their development in Rwanda. Data was presented in form of statistical tables, percentages and other forms of statistical analysis (SPSS).

4.1. Demographic Characteristics of Respondents

This section discusses the identification of the respondents and is important because it gives a detailed background of the respondents, concerning their sex, education and even functions in their daily life.

4.1.1 Respondents Distribution

A selection of a hundred (100) respondents made up of 10 (20%) bank/microfinance managers and ninety 90 (80%) SME owners or SMEs operators was considered for this study. These responded to questionnaires administered to them.

Table 7: Respondents Distribution

<table>
<thead>
<tr>
<th>Details</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>(%)</td>
<td>Frequency</td>
<td>(%)</td>
<td>Counts</td>
</tr>
<tr>
<td>Bank/Microfinance managers</td>
<td>6</td>
<td>12%</td>
<td>4</td>
<td>8%</td>
<td>10</td>
</tr>
<tr>
<td>SME owners/operators/managers</td>
<td>68</td>
<td>58%</td>
<td>22</td>
<td>22%</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>70%</td>
<td>26</td>
<td>30%</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, December 2018

4.1.2 Respondents ‘Levels of education

The finding of the study indicated that the majority (44%) of the respondents have attained a Bachelor's degree; 44% hold an ordinary and advanced level certificate and the remaining 12% have a Higher National Diploma. None of the respondents hold a Masters Degree certificate. Table 7
shows details. The information regarding the education level of the surveyed respondents give us clear idea of the fact that SMEs operators are mainly educated people from at least secondary school. The undertaken research did not attempt to look at the education level of workers on the side of financial institutions since they are expected to have at least completed secondary school.

**Table 8: Educational Status**

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>O and A level</td>
<td>40</td>
<td>44%</td>
</tr>
<tr>
<td>Higher National Diploma</td>
<td>10</td>
<td>12%</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>40</td>
<td>44%</td>
</tr>
<tr>
<td>Masters</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: Field Survey, July 2018*

4.2 Financial challenges for SMEs development in Rwanda

This research assessed financial challenges for SMEs development; it is in this regard the two types of challenges were classified according to their indicators. The first one was about the challenges related to institutional lending for SMEs and the second one is about the challenges related to access to finance on the side of SMEs.

4.2.1 Financial challenges related to institutions in lending to SMEs

The challenges related to institutional lending for SMEs include the following indicators: Lack of adequate collateral, High transaction costs, Interest rates, Lack of accurate documentation, Lack of proven track records and Lack of proper business plans and the need to show good sales turnover. High default rate of SMEs was also a challenge faced by lending institutions when financing SMEs. As it has been mentioned in the previous paragraph where the results showed the existence of challenges, the assessment of the perception of respondents about challenges of financial institutions in lending to SMEs as depicted by table 8 indicated mainly the “agreed” perception regarding the availability of challenges related to financial institutional lending for SMEs.

The results of Likert scale measurement showed mainly the positive perception by agreeing to the fact that there are challenges of financial institutions lending to SMEs. This is seen when comparing
data between those who agreed and those who disagreed. Majority of respondents agreed to the position of existence of challenges in financing SMEs.

The assessment also indicated lack of adequate business track records, lack of adequate business plans and the need to show good sales turnover were rated as having very weak effect but in heterogeneity. It implies that, these two aspects are observed not to be often encountered as hindrances when lending to SMEs. On the other hand, lack of adequate collateral, high transaction costs, interest rates and lack of accurate documentation were at a moderate level with heterogeneity the quality or state of being diverse about the content in terms of standard deviation. For the analysis of the mean; the results of the study indicated that the greater the mean, the more people in this research having the same perception and consequently there is no greater diversification of responses (standard deviation). This case occurs at almost all categories of challenges faced by financial institutional lending to SMEs.

Table 9: Perception about challenges faced by financial institutions in lending to SMEs

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Mean</th>
<th>Interpretation</th>
<th>St. dev.</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate collateral</td>
<td>2.58</td>
<td>Moderate</td>
<td>1.30</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>High transaction costs</td>
<td>2.78</td>
<td>Moderate</td>
<td>1.47</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Interest rates</td>
<td>2.43</td>
<td>Moderate</td>
<td>2.16</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Lack of accurate documentation</td>
<td>3.44</td>
<td>Moderate</td>
<td>1.2</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Lack of adequate business track records</td>
<td>1.82</td>
<td>Very weak</td>
<td>1.62</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Lack of adequate business plans and the need to show good sales turnover</td>
<td>1.78</td>
<td>Very weak</td>
<td>1.58</td>
<td>Heterogeneity</td>
</tr>
</tbody>
</table>

Source: Field Survey, December 2018
4.2.2 Financial challenges related to SMEs access to finance

The challenges related to access to finance for SMEs include; stringent conditions, short repayment period, nature of the company, limited capital instruments and limited levels of financial inclusion. According to the research findings, every challenge has been identified based on respondent’s perception as explained in the paragraph below. Regarding, the perception of respondents about challenges related to access to finance, the study considered the following indicators and stringent conditions, short repayment period, nature of the company, limited capital instruments and limited levels of financial inclusion were observed as “agreed to” by the respondent’s perception. Limited levels of financial inclusion were observed to be at very weak level as indicated in table 9 confirmed by the evaluation of the mean.

On the other side, the remaining challenges were evaluated at a moderate position based on the mean. The evaluation of the deviation around the mean indicated the heterogeneity for all challenges. Generally, the assessment of likert scale depicted by table 10 indicated with naked eyes that, most of the surveyed SMEs representatives agree to the existence of challenges of SMEs accessing financing for their business.

Similarly, to table 9, analyzing the mean and standard deviation; the results of the study indicated that the greater the mean number, the more people in this research having the same perception and consequently there is no greater diversification of responses (standard deviation). This case occurs at almost all categories of challenges faced by SMEs when accessing finance.

Table 10: Perception of respondents about challenges related to access to finance

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Mean</th>
<th>Interpretation</th>
<th>St. dev.</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stringent conditions</td>
<td>2.58</td>
<td>Moderate</td>
<td>1.89</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Short repayment period</td>
<td>2.78</td>
<td>Moderate</td>
<td>1.12</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Nature of the company</td>
<td>2.43</td>
<td>Very weak</td>
<td>2.16</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Limited capital Instruments</td>
<td>3.44</td>
<td>Moderate</td>
<td>2.06</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Limited levels of financial inclusion</td>
<td>1.78</td>
<td>Very weak</td>
<td>1.58</td>
<td>Heterogeneity</td>
</tr>
</tbody>
</table>

Source: Field Survey, December 2018
4.3 SMEs’ Development

The illustration in table 11 indicates the availability of the agreed position with regards to the respondent’s perception about the SMEs development indicators. The results of the evaluation of the mean indicated very weak for absence of marketing challenges, attitude toward risk and employment but their deviation around the mean showed heterogeneity. On account held on the other indicators of SMEs development, the evaluation of the mean indicates moderate with heterogeneity. As it has been said earlier in the above paragraph, the respondents confirmed the existence of tremendous development in the daily processes of SMEs. Otherwise, almost all SMEs could close during their start up stage.

As it has been mentioned in the previous paragraphs, the analysis of the mean and standard deviation; the results of the study indicated that, the greater the mean number, the more people in this research having the same perception and consequently there is no greater diversification of responses (standard deviation). This case occurs at almost all indicators of economic development on the side of SMEs.

Table 11: Perception of respondents about SMEs’ development indicators

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Mean</th>
<th>Interpretation</th>
<th>St. dev.</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business growth</td>
<td>2.58</td>
<td>Moderate</td>
<td>1.80</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Access to credit facilities</td>
<td>2.78</td>
<td>Moderate</td>
<td>1.12</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Employment</td>
<td>2.43</td>
<td>Moderate</td>
<td>2.16</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Availability of improved managerial skills</td>
<td>3.44</td>
<td>Moderate</td>
<td>1.06</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Absence of Marketing Challenges</td>
<td>1.82</td>
<td>Very weak</td>
<td>1.67</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Attitude toward risk</td>
<td>1.78</td>
<td>Very weak</td>
<td>1.58</td>
<td>Heterogeneity</td>
</tr>
</tbody>
</table>

Source: Field Survey, December 2018

4.4 Effect of financial challenges versus SMEs development

The research considered two main types of financial challenge in order to test whether the development of the surveyed SMEs is frustrated by the encountered challenges. Those two main challenges are the challenges related to institutional lending to SMEs and challenges related to access to finance on the side of SMEs.
Through the process of testing the relationship between SMEs indicators of SMEs development and the attributed challenges, the acute analysis of the data considered Spearman's rho correlation coefficient. The test (Spearman rho) for testing the correlation showed that, there was positive moderate correlation between the development of the surveyed SMEs and financial challenges related to institutional lending to SMEs. Although this positive moderate correlation is available, it is obviously difficult to accept it or reject it since the results of p-value compared to the standard level of significance (α=5%) indicated indifferent case ( p-value=0.0501, α=5%). Similarly to the results about institutional lending versus SMEs development, the Spearman rho correlation coefficient indicates also positive moderate correlation but almost statistically significant since the p-value observed is near to the standard level of significance ( p-value=0.0491 ≈5% of the standard level of significance).

**Table 12: Association between financial challenges and SMEs development**

<table>
<thead>
<tr>
<th>Financial Challenges</th>
<th>Financial Challenges</th>
<th>SMEs development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Related to Institutional lending for SMEs</td>
<td>Related to access to finance</td>
</tr>
<tr>
<td>Spearman's rho</td>
<td>Correlation</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td>Related to access to finance</td>
<td>Coefficient</td>
<td>0.159**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.0612</td>
</tr>
<tr>
<td>SMEs development</td>
<td>Coefficient</td>
<td>0.611**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.0501</td>
</tr>
</tbody>
</table>

*Significant correlation

Source: *Researcher’s generation from study data, December 2018*
Model Summary

As far as every situation needs to influence the expected different outcomes, it is in this context the undertaken research took emphasis on the assessment of the effect of the two types of challenges on the development of SMEs. During the assessment, the use of Multiple Linear Regression Model (MLRM) has been taken into consideration and the following results in tables reveals the outputs.

Table 13: Model Summary of the effect by considering independent variables regression model

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.322^a</td>
<td>.104</td>
<td>.074</td>
<td>1.695</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Challenges related to institutional lending, and challenges related to access to finance on the side of SMEs

The Model Summary part of the output is most useful when you are performing multiple linear regressions. Capital R is the multiple correlation coefficient that tells us how strongly the multiple independent variables are related to the dependent variable, for this case the coefficient is .322 which is at a low level of correlation (weak correlation). R square is useful as it gives us the coefficient of determination (it shows the variability of predictors of independent variables in dependent variables) for this case is .104 (10.4%) which is associated with the adjusted R Square of .074 (7.4%). Based on this observation, it is obviously clear that the way the two types of challenges do not highly interfere in the SMEs journey of development. The meaning of talking about R square and Adjusted R Square reside on the fact that the R square as indicator of determination has default of increasing as the number of predictors increase.

Table 14: ANOVA Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>19.658</td>
<td>2</td>
<td>9.829</td>
<td>3.421</td>
<td>.039a</td>
</tr>
<tr>
<td>Residual</td>
<td>169.519</td>
<td>59</td>
<td>2.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>189.177</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), challenges related to institutional lending, challenges related to access to finance on the side of SMEs
b. Dependent Variable: SMEs development

36
The findings of the model as it is shown by the table 14 have the implication on the assessment of significance of the model. The significance of the model (Simplification of reality) in this study is shown by F-test of 3.421 which is associated by sig. or p-value of .039 (3.9%) which is less than the normal significance of 5% (P-vale of 3.9% < 5%). Therefore, the model is significant so that it can be used for the assessment of predictors ‘effect on the dependent variable of the development of SMEs.

Table 15: Effect of financial challenges on SMEs development

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges related to institutional lending SMEs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges related to access to finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Dependent Variable: SMEs development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Again the findings of the study as revealed by table 13 is intended to show which type of challenge that has a considerable negative influence on SMEs development. The regression model here as it is evidently seen in the output of regression on the side of Unstandardized coefficients shows that constant or intercept is .900, challenges related to institutional lending of SMEs has .230 and challenges related to access to finance also has 1.199.

Based on those coefficients, it is merely observable that the coefficient of challenges related to access to finance is higher than the coefficient of challenges related to institutional lending of SMEs, this implies that, an additional increase in the challenge related to access to finance affect more negatively the development of SMEs. This can be mathematically expressed in the following way:

**SMEs development = 0.900 + 0.230 Challenges related to institutional lending of SMEs + 1.199 Challenges related to access to finance on the side of SMEs**

The inference drawn here is that the SMEs have a major challenges related to access on finance in terms of fulfilling the requirements although Challenges related to institutional lending of SMEs have also been remarkable a problem.
4.5 Discussion of the findings

There is growing recognition of the important role played by small and medium enterprises (SMEs) in economic development. The undertaken study was aimed at examining financial challenges affecting SMEs development of a country.

In order to assess thoroughly the intention of the undertaken study, it was considered as important to assess the specific objectives as follows; to determine challenges encountered by SMEs while accessing finance, to identify the level of the challenges encountered by SMEs in their development and to assess the impact of the challenges encountered by SMEs in their development in Rwanda.

The assessment indicated that there are challenges of two categories that affect SMEs in their tremendous journey of development. Those two challenges are; challenges related to institutional lending and challenges related to access to finance on the side of SMEs. The assessment of the challenges related to institutional lending were composed of the following constraints: lack of adequate collateral, high transaction costs, interest rates, lack of accurate documentation, lack of adequate business track records, lack of adequate business plans and the need to show good sales turnover. These results do not contradict the findings of Orinda, R. (2014) and Lyimo, S. E. (2014) where it has been shown that lack of finance and inadequacy in accessing to credit, the high level of interest rates were some of the major financial challenges facing SMEs and consequently hamper the development of SMEs.

The inference drawn here is that irrespective of the size and nature of the business, they all face some sort of challenge in soliciting for funds to run their business. Though the challenges may differ, the impulse is that all SMEs do face difficulties when accessing credit from financial institutions. Similarly, the same findings were found by Ackah and Vvor (2011) in their study about Challenges faced by Small & Medium Enterprises (SMEs) in Obtaining Credit in Ghana. Those findings indicated that there are institutions such as bank and non-bank financial institutions that are willing to provide funds to SMEs but Ghanaian SMEs are not able to meet the requirements of these financial institutions. Topmost among these requirements is the issue of collateral, which most SMEs cannot provide. Aside this is the other issue of small equity base of these SMEs among others.
Secondly, those who are able to access this credit are also faced with high interest rates and short repayment periods making it very difficult to embark on any developmental or expansion projects. The findings of this research supported by the findings of the other mentioned researchers indicated that the development of SMEs are being frustrated by the common barrier of high interest rate which is not adequate compared to their startup capital. The results of assessment of the perception of respondents about challenges faced by financial institutions in lending to SMEs indicated that, the evaluation of the mean of respondents’ perceptions (average perception) was mainly moderate (neither on the extreme side but in the middle), this means that most of the surveyed respondents have almost the same understanding with regards to the challenges related to institutional lending. This is confirmed by the evaluation of how respondents’ perceptions are spread around the mean or average, for this case all the surveyed respondents’ views showed diversity in terms of understanding where heterogeneity was taken into consideration.

On the other side, talking about the challenges faced by SMEs to acquire funding from financial institutions, the assessment revealed that, stringent conditions of inflexible condition, short repayment period, nature of the company, limited capital instruments and limited levels of financial inclusion are the major challenges. The results confirmed that there were almost moderate perceptions with regard to the central tendency of their views but the spread of the respondents’ views indicated the diversification without outliers. The revealed challenges have been also found by Avevor (2016) found the similar results when assessing the challenges related to institutional lending and some of the challenges observed were improper record keeping, information asymmetry, weak internal controls, diversification of cash and cash management problems.
CHAPTER FIVE : SUMMARY, CONCLUSION, RECOMMENDATIONS

The fifth chapter of this study is about the summary of the study, the conclusion, in which the research objectives have been achieved, and recommendations with regards to the findings. To achieve specific objectives, a questionnaire was used to provide information for answering the research questions and achieving the objectives of the present research.

5.1 Summary of the findings

The main objective of this study was to examine financial challenges affecting SMEs development in Rwanda. The specific objectives were; to determine whether SMEs face challenges related to finance in their activities, to identify the level of challenges faced by SMEs in their development in Rwanda, and finally to assess the impact of challenges faced by SMEs in their development in Rwanda.

This study was quantitative and data analysis was done using the Statistical Package for Social Science. The study population was 100 including 90 people who are SME owners/operators/managers and 10 people selected from Banks/Microfinance managers. The findings showed that both sides of the impact of challenges encountered in financing SMEs for their development in Rwanda exist (positive and negative). Although they are controversial, by focusing on the negative impact, the study put emphasis on the challenges that can be encountered during the development of SMEs.

Those challenges have been grouped into two main categories as follows: challenges related to institutional lending to SMEs and challenges related to access to finance on the side of SMEs. The first category of challenges related to institutional lending to SMEs include the following indicators; lack of adequate collateral, high transaction costs, interest rates, lack of accurate documentation, lack of proven track records, lack of proper business plans and the need to show good sales turnover.

Beside the former challenges, the second category is about challenges related to access to finance on the side of SMEs. These included existences of stringent conditions when applying for financing, short repayment period, nature of the company, limited capital instruments and limited levels of financial inclusion.
Regarding the level of the impact of these challenges to SMEs, challenges related with access to finance have been observed to be very high compared to challenges related to institutional lending of SMEs. But the positive impact reduces the existence of the revealed challenges that have been seen to be affecting SMEs negatively and this responds to the second objective of the study about verifying the factors that influence financing of SMEs development in Rwanda by commercial Banks and other lending institutions in Rwanda.

5.2. Conclusion

In conclusion, for SMEs to be successful, financial lending institutions and agencies must develop and implement a business environment for SMEs to overcome the revealed challenges. The challenges related to access to finance have been remarked as the main factor that can hinder the tremendous development of the SMEs. Limited levels of financial inclusion are a major challenge and so, commercial banks, micro finance institutions and other lending institutions must be innovative and come up with products which are attractive to SMEs. Also, increase in awareness of products available for SMEs would also solve the challenge of financial inclusion.

Although challenges related with SMEs access to finance are rated high compared to challenges related to institutional lending to SMEs, challenges related with institutional lending are also seen as negatively affecting the development of SMEs in Rwanda. Therefore, the study concludes that, the positive impact of financing SMEs can be observed if and only if requirements set by financial lending institutions for SMES financing such as availability of adequate collateral, high interest rates, transaction costs should be reviewed and minimized to allow SMEs to access financing and grow their businesses.

5.3 Recommendations

After carrying out the study and understanding the findings, the research is ended by revealing some important suggestions or recommendations to ensure the growth SMEs into much bigger industries. Based on findings and conclusion, several recommendations can be suggested to ensure better performance of SMEs while ensuring the process of their financing situations. The recommendations were oriented to financial lending institutions that set requirements for lending and SMEs in need of access to financing and finally the researcher provides recommendations for further research.
5.3.1 To Managerial staff of SMEs and Institutional lending

- The results of the research indicated that the following observations are barriers for SMEs financing: limited level of financial inclusion, short repayment, stringent condition, nature of the company and limited capital investment instruments. Therefore, the study recommends SMEs to take time and plan when requesting for financing.

- The research also highlighted that, lack of adequate collateral, high transaction costs, interest rates, lack of accurate documentation, etc. are the main challenges faced by SMEs which require additional finance from financial lending institutions. Therefore, the researcher recommends that, financial lending institutions should provide perfectly adequate information about how SMEs can meet all requirements for accessing finance.

5.3.2 Suggestions for further research

The study took place in the city as part of a country, the research recommends other researchers to conduct another deep research about the effect of financial challenges on SMEs development in both parties of the country (Rural and Urban area)
REFERENCES


Avevor, E. (2016). Challenges faced by SMEs when accessing fund from financial institutions in Ghana.


APPENDIX
APPENDIX 1

QUESTIONNAIRE FOR BANK/MICRO FINANCE MANAGERS

The financial challenges for SMEs development in Rwanda a case study of Nyarugenge district. The main intention of this research is to fulfill the requirement for the degree of Masters in business administration (MBA). Based on the intention and respect of ethical consideration, the answers of respondents will be treated with confidentiality and the researcher will not use them for the other purposes except the academic purpose.

1. How long have you been in SME banking? ...........years

2. Which financial services do you offer your SME customers?

3. Apart from the provision of financial assistance to the SMEs, what other service do you render to them?

4. Have you encountered the following challenges when financing SMEs?

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate collateral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High transaction costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of accurate documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of adequate business track records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of adequate business plans and the need to show good sales turnover</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Use the following scales where:

5 = Strongly Agree  4 = Agree, 3 Undecided, 2= Disagree, 1 = Strongly Disagree

Please, tick the most harmful perceived challenge for SMEs when they wish to request for funding from lending institutions.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate collateral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High transaction costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High interest rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of accurate documentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of adequate business track record</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of convincing business plans and the need to show good sales turnover</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Have you ever faced the following challenges from SMEs when they request for financing?

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short repayment period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of the company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited capital Instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited levels of financial inclusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stringent conditions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. What can you recommend as a better solution to overcome the financing challenges which you face when financing SMEs?

................................................................................................................................................
................................................................................................................................................
APPENDIX 2

QUESTIONNAIRE FOR SME OWNERS/MANAGERS

Financial challenges for SMEs development in Rwanda a case study of Nyarugenge district. This research is taking place in partial fulfillment of the requirement for the award of a Masters in business administration (MBA). You are invited to tick in the place provided for your response.

1. Among the following sectors of activities, classify your own business?

Post harvest value chain (food processing) [ ] Electronics [ ] Supermarkets [ ] Furniture works [ ] Metal works [ ] Restaurants [ ]

2. Business registration status Yes [ ] No [ ]

3. What is experience of your business?

   2 years or less [ ]    3 and 5 years [ ]    6 and 10 years [ ]    11 years and above [ ]

4. What form of ownership of the business do you operate?

   a) Individual or family owned [ ]

   b) Collectively owned/Partnership [ ]

   c) Limited Liability Company [ ]

   d) Limited Shares [ ]

5. How did the company request for financing for the first time from commercial bank in Rwanda?

   [ ] Completing application at institution

   [ ] Completing application via phone

   [ ] Completing application via internet

   [ ] Others (please specify) ..........................................................
7. Use the following scales scale where:

5 = Strongly Agree, 4=Agree ,3=Undecided , 2=Disagree, 1=Strongly Disagree

Please, tick the most perceived challenges for SMEs when they wish to request for financing from financial institutions.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short repayment period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited capital Instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited levels of financial inclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stringent conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. What can you recommend as a better solution to overcome the financing challenges facing SMEs.

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

52