

**FINANCIAL ACCESSIBILITY AND GROWTH OF SMALL  
MEDIUM ENTERPRISES IN RWANDA: A SURVEY OF  
SELECTED SMES IN NYAGATARE DISTRICT**



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## Preface

The research project financial accessibility and growth of small and medium enterprises in Rwanda, a case of small and medium enterprises in Nyagatare District is conducted to achieve Masters in Business Administration in the option of Accounting and Finance. In conducting this research, researcher was inspired by different problems which continue to occur in the aspect of financial accessibility and growth of small and medium enterprises. These include lack of skills by business enterprises, poor managerial skills, lack of collateral requirement by small and medium enterprises. Financial institutions become reluctant in providing credit due to risks of SMEs and inability to pay back loan. The specific objectives undertook by researcher were to identify the collateral requirements of financial accessibility on the growth of small and medium enterprises in Nyagatare District, to determine the business support services that contribute on the growth of small and medium enterprises in Nyagatare District and to establish relationship between financial accessibility and growth of small and medium enterprises. This research project was more significant to the researcher, government, business owners and further researchers. Research used correlation research design and the target population was 753 from which a sample of 261 were selected. The technique was structured and unstructured and primary as well as secondary data were collected. In analyzing data, researcher used SPSS version 21. Linear regression was used to estimate the relationship using Ordinary Least Square techniques. The finding shows that Loan accessibility was very difficult for the applicants. There were several conditions that were placed on a loan applicant and high value collateral was just among the requirements. Majority of the recipients of the loans were those of less than 1 million and very few were able to more than 10 Million but with the support of business support services like financial literacy and grants/guarantees, investment advisory services, business management training and tax compliance loans and grants of up to and above 15 Million was accessible. The SMEs grew in their annual turnover, number of employees and assets after accessing finances. The extent to which financial accessibility contributes to the growth of small and medium enterprise has a coefficient of 0.350 with a square of 0.059. The relationship was positive implying improvement in financial accessibility also led to increase in the growth of SMEs sample. The relationship was significant at  $p = 0.005$  with a mean square of regression at 0.028 implying no difference in the square. In conclusion, research findings showed that there is a positive relationship between financial accessibility and SME growth in such a way that. SME growth depend on access to loans and grants, business support services as well as the ability to provide collateral requirements therefore it is highly recommended that government of Rwanda need to empower SMEs through financial facilities and protection against market changes.

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## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of the study**

A small firm is one of the categories of small and medium enterprises. Globally SMEs are defined as non-subsidary, independent firms which employ less than a given number of employees. In European Commission, the most frequent upper limit designating an SME is 250 employees while in United States SMEs have less than 500 employees (European Union, 2013). The most recent definition of small firms was given by European Union using three perspectives: employees, annual turnover and balance sheet. Small firms or small enterprises have between 10 and 49 employees, less than 10 million Euro of annual turnover and less than 10 million Euro of balance sheet (European Commission [EC], 2005).

In East Africa Community it has been reported that the small business firm play the significance role in the growth and development of the country more specifically in Kenya as these employ more than 5.1million people equivalent to 74%.As indicated, SMEs also contribute 24.5% of the total GDP IN Kenya and 75% of GDP in Uganda, 20% of the total labor force in Tanzania and 98% of the total private sector. In Burundi, SMEs have an important role in the informal economy (Reuben, 2013). In Rwanda, an SME is defined according to the World Bank report of 2004 basing on three aspects i.e. Net capital investment, annual turnover and number of employees. In Rwanda, a new report indicated that 64% of business owners are facing with problem due to limited source of finance. Business entrepreneurs in Rwanda have little skills in risks management, in information flow and business support services. A study done by Private Sector Federation revealed that small business firm fails to achieve growth due to shortage of loan or other form of assistance. In Nyagatare District, most of small and medium enterprises fail because shortage of financial supports services and non-financial means of support.

### **1.2 Statement of the problem**

In Rwanda, a new report indicated that 64% of business owners are facing with problem due to limited source of finance. Hence, their growth is limited due to poor collateral requirements, high interest rate and insufficient of maturity in business operations (Reuben, 2013). Business entrepreneurs in Rwanda have little skills in risks management, in information flow and business support services. A study done by Private Sector Federation

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revealed that small business firm fails to achieve growth due to shortage of loan or other form of assistance. In Nyagatare District, most of small and medium enterprises fail because shortage of financial supports services and non-financial means of support. Hence, this has led to poor business growth of small business enterprises.

### **1.3 Objectives of the Study**

This research project consists of general and specific objectives.

#### **1.3.1 General objective**

The overall objective of the study is to assess the financial accessibility and growth of small and medium enterprises in Rwanda. A case of selected small and medium enterprises in Nyagatare District

#### **1.3.2 Specific Objectives**

The specific objectives of the study were as follow

- i. To determine the collateral requirements of financial accessibility that contribute to the growth of small and medium enterprises in Nyagatare District
- ii. To identify the extent to which business support services that contribute to the growth of small and medium enterprises in Nyagatare District
- iii. To establish relationship between financial accessibility and growth of small and medium enterprise in Nyagatare District.

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## **CHAPTER TWO: REVIEW OF RELATED LITERATURE**

### **2.4 Theoretical framework**

The study used two theories that bring the implications to the current research. These theories include credit rationing theory and financial constraints theory.

#### **2.4.1 Credit rationing theory**

Credit rationing theory is the theory established by Stiglitz and Weiss (1981) and was further supported by different authors including Bester (1985), Cressy(1996), Bertensperger& Devinner,1985). This theory assumes that some borrowers receives loan while other do not receive due to some credit default payments, This situation is caused by market imperfection and information asymmetric. The credit rationing theory assumes that requesting financial support leads financial institutions to charge high interest rate (Stiglitz and Weiss, 1981).

#### **2.4.2 Financial constraints theory**

The theory of financial constraints is the theory established by Evans and Jovanovic (1989). Financial constraints theory assumes that all business whether small or big work towards comparative advantage to acquire or refuse to acquire external financial capital if they observe that there are some constraints in acquiring the borrowed loans. This theory was also supported by a number of authors including (Inessa & Mylenko,2003), Jappelli& Pegano, 2005). The implication of this theory in the current study is that the growth of small and medium enterprises depends or is determined by financial accessibility (loan) from any financial institutions, cooperative, family or friends.

### **2.5 Conceptual framework**

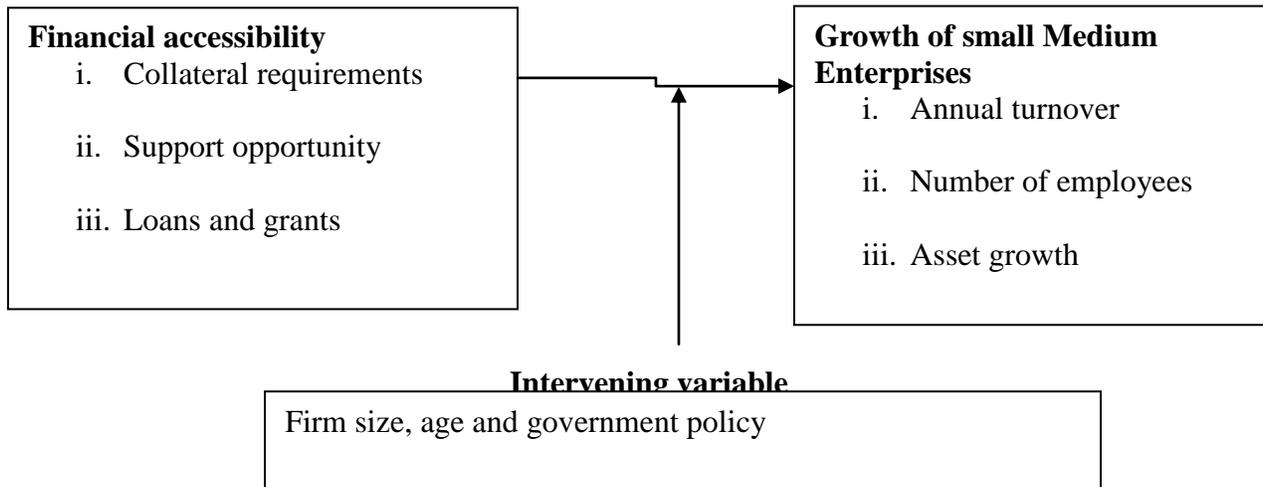
In this research, the study the independent variable is financial accessibility and has the main components such as collateral requirements, support opportunity and loan and grants. The dependent variable is growth of small and medium enterprises and is measured by annual sales/turnover, number of employees and assets growth. In regards, researcher established the intervening variables that may affect the study variables and they are treated as external factors which consist of the size of the firmware and government policies.

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**Independent variable**

**Dependent variable**



**Figure 2. 1: Conceptual framework**

**Source:** Research, 2020

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## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Research design

Correlation research design was used and was important as it indicates the predictive study where more than one variable affect other variable.

### 3.2 Target population

In this researcher project, researcher has chosen 753 small and medium enterprises in Nyagatare District as selected population. Therefor the selected sample was drawn from the total target population indicated.

### 3.3 Sample Design

#### 3.3.1 Sample Size

To get the sample size, researcher used Slovin's formula as presented as follow.  $n = \frac{N}{1+N\epsilon^2}$

As the total target population remains 753 small and medium enterprises, and the sampling error as 5%, researcher used Yamane formula to determine the sample size and is computed as follow.

$$n = \frac{753}{1+753(0.05)^2} = 261.2 \approx 261.$$

#### 3.3.2 Sampling Techniques

In this study, researcher used the simple random sampling technique to select the respondents among SMEs of Nyagatare District.

### 3.7 Data analysis

Data presentation was done through IBM to provide information in the form of percentages and frequency tables, charts and bar graph. The quantitative data was analyzed through IBM to present systematically meaningfully information. Researcher employed econometrics and the model assumed linear and expressed In the form,  $y = f(\beta_1x_1 + \delta\beta_2x_2 + \beta_3x_3 + \delta\beta_4x_4) + \epsilon$

In this research, the sampling error is indicated by  $y$  and is obtained through model. A multiple regression model for access effect on SME growth was represented as follows  $y = \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \epsilon$ . Where  $y$  is, the financial accessibility is,  $\beta_{1,2,3,4}$   $x_{1,2,3,4}$  are constants and variables (collateral requirements, loan and grants and support services respectively).

## CHAPTER FOUR: RESEARCH FINDINGS AND PRESENTATION

### 4.1 Personal characteristic of research participants

#### 4.1.1 Respondents 'Age

The information collected in terms of age of respondents is presented in table 4.1 below

**Table 4. 1 Age distribution among the respondents**

	<b>Age brackets</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	21-30	147	59.8
	31-40	64	26.0
	Above 40	35	14.2
	<b>Total</b>	<b>246</b>	<b>100.0</b>

**Source:** Primary Data

Table 4.1 indicates that 59.8% of respondents were between 21- 30 years. This shows that most small enterprises are established by young individuals who have cleared studies but due to high unemployment end up with small enterprises. Both 26 % and 14% represent business enterprises by older entrepreneurs between 31 to above 40.

#### 4.1.2 Gender of respondents

**Table 4. 2 Gender of respondents**

	<b>Gender</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	Male	74	30.1
	Female	172	69.9
	<b>Total</b>	<b>246</b>	<b>100.0</b>

**Source:** Primary Data

Table 4.2 reflects that 30.1% of the genders comprised of males while 69.9% comprised of women. This indicates that most of the small businesses are owned by women who represent a larger percentage. This is because most of these women are tired of sitting at home as house wives thus most of them start business as means of being productive and also independent.

**Table 4. 3 Education levels of respondents**

	<b>Education level</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	No education	25	10.2
	Primary	49	19.9
	Secondary	64	26.0
	Diploma	69	28.0
	Degree	39	15.9
	<b>Total</b>		<b>246</b>

**Source:** Primary Data

The information collected from respondents showed that 28% having business in Nyagatare District have completed diploma, 26% of respondents have completed secondary level of education, 10.2% had not any formal education but 15.9% have completed bachelor’s degree.

## **4.2 Presentation of research findings**

### **4.2.1 Financial accessibility**

Loan was a measure of financial accessibility and determining whether loan was a source of financing was used to determine how accessible loans are to the SMEs in this sample.

**Table 4. 4 Main source of finance**

	<b>Main sources of finance</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	Commercial bank	30	12.2
	Microfinance/Cooperative	57	23.2
	Friends	15	6.1
	Family	47	19.1
	Personal saving	97	39.4
	<b>Total</b>		<b>246</b>

**Source:** Primary Data

According to the findings as presented in Table 4.9, loans were provided by commercial Banks, microfinance and cooperatives, friends and families. According to 30(12.2%) the commercial

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Bank loan was the source of the startup, 57(23.2%) financed through Microfinance and cooperative loans, 15(6.1%) from friend provided loans, 47(19.1%) through family loans.

Research findings showed that 97(39.4%) of respondents were supported by their personal saving while 23% of respondents received credits from microfinance institutions or financial cooperatives. The expansion of small business firm depends of the extent level financial institution gets loan from different sources whether private or public Prasad et al (2000).

#### 4.2.2 Ever applied for loan

The information on whether small business firm have applied for loan are important. Following the response in Table 4.9 that showed a large percentage financing their business through personal savings, the question in Table 4.10 was to establish the motive for the low loan financing as startup methods.

**Table 4. 5 Ever applied for loan**

	<b>Ever applied for loan</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	Yes	185	75.2
	No	61	24.8
	<b>Total</b>	<b>246</b>	<b>100.0</b>

Source: Primary data

According to the findings in Table 4.10, 185(75%) had applied for a loan before the period 2011-2017. The remaining 61(25%) did not apply in the period quoted. The majority therefore had desired to startup using a Bank loan. The research findings discussed above is supported by Mitter and Kraus (2011) added that trade credit is an important aspect of internal source of finance which provides an assurance between suppliers and customers.

#### 4.2.3 Number of applications

To determine the availability of loan or the readiness of the loan provider to give loan, the respondents were asked how many times they had to apply for the loans.

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**Table 4. 6**Number of applications

	<b>Loan applications made</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	1	37	20.0
	2	24	13.0
	3	92	49.7
	4 and more	32	17.3
	<b>Total</b>	<b>185</b>	<b>100.0</b>

Source: Primary data

According to Table 4.11, of the 185 respondents who had ever applied for a loan, 37(20%) applied once, 24(13%) twice, 92(50%) thrice and the remaining 32(17%) for more than four times.

#### **4.2.4 Financial Accessibility conditions**

**Table 4. 7** Conditions to access bank loans?

What were the main conditions to access the bank loan?	<b>N</b>	<b>%</b>
High valued Collateral	173	94%
Solidarity group membership	51	28%
Business registration documents	185	100%
Banking period	180	97%
Having received a loan in the previous bank	177	96%
Bank statement or loan clearance certificate	185	100%
Having received loan, at least once, with the current bank	50	27%

Source: Primary data

According to the finding in Table 4.12, 173(94%) of the applicants were asked to provide high valued collateral, 51 (28%) were to belong to a solidarity group, 185(100%) were to have business registration and a bank statement or loan clearance certificate. A banking period was demanded by 180(97%), and period for loan received in previous bank was also required according to 177(96%). As indicated by the study done by Bester (1985), financial institutions usually refuse to provide financial loan to small and medium enterprises to the fact that these are more affected by market changes like interest rate, fluctuation in the price, competition and inflation.

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#### 4.2.5 Type of business support services

**Table 4. 8: Type of support received from BDF**

<b>Business support service</b>	<b>N</b>	<b>%</b>
Financial Literacy	214	100%
Investment advisory services	169	79%
Business Management training	197	92%
Tax compliance	102	48%
Grants and guarantee	214	100%

**Source:** Primary

According to Table 4.14, all had (100%) received financial literacy and grants/guarantees. Other support services included investment advisory services, 169(79%), business management training, 197(92%), and tax compliance, 102(48%).

#### 4.2.6 Amount of credits/loan received 7years before BDF

Table 4.15 determines access to credit by SMEs without the help of BDF while the next Table 4.16 determines access through BDF.

**Table 4. 9 Amount received in the past 7 years**

How much credit have receive in the past 7 years?						
Year	< 1 million	1-5 m	5-10m	10-15m	15 m and above	Total
2004	9	3	2	1	0	<b>15</b>
2005	11	2	1	0	0	<b>14</b>
2006	7	0	2	0	0	<b>9</b>
2007	3	2	1	0	1	<b>7</b>
2008	2	3	3	3	0	<b>11</b>
2009	4	3	1	1	1	<b>10</b>
2010	2	2	3	2	3	<b>12</b>
Totals	<b>38</b>	<b>15</b>	<b>13</b>	<b>7</b>	<b>5</b>	<b>78</b>

**Source:** Primary

According to the table 4.15, out of 78 who applied for credit in the preceding years to 2011, 38 of them received less than 1 million and at most 7 received 10-15 Million. In 2004, 15 received credit but 9 of them received less than 1 million and the maximum received was 10-15Million by

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only a single SME. In 2005, 2006 and 2007 again those who received less than 1M were 11 but the maximum was between 5-10 M. while in 2006 those who received loan were 9 but 7 received <than 1M and the maximum was 5-10M received by only two firms.

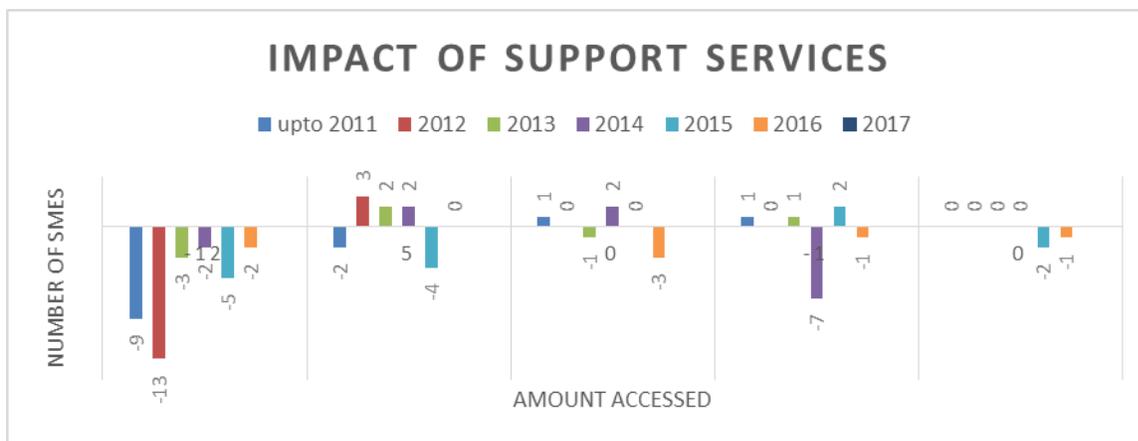
#### 4.2.7 Amount received with financial support from BDF

**Table 4. 10 Amount received with financial support from BDF**

Exactly how much were you able to receive with the support of BDF?						
Year	< 1 million	1-5 m	5-10m	10-15m	15 m and above	Total
2011	6	18	20	3	0	<b>47</b>
2012	3	24	2	1	0	<b>30</b>
2013	2	3	20	8	0	<b>33</b>
2014	4	8	2	1	1	<b>16</b>
2015	0	6	5	2	0	<b>13</b>
2016	2	3	3	4	4	<b>16</b>
2017	1	3	8	9	9	<b>30</b>
<b>Total</b>	<b>18</b>	<b>65</b>	<b>60</b>	<b>28</b>	<b>14</b>	<b>185</b>

Source: Primary data

According to the findings in Table 4.16 in 2011, 6, 18, 20 and 3 of 47 that received finances were given below million, 1-5million, 5-10 Million and 10-15 Million respectively. This was just soon after BDF was established and in 2012, 3 received less than 1 million out of 30 firms. In 2013, 2 out of 33 received less than 1 million and by 2017 out of 30 firms only 9 firms received 15 million and above. Figure 4.3 is a difference of access to finance with the help and without help of BDF. The impact was calculated as Access by Support with BDF – Access without financial support services



**Figure 4. 1 Effect of Business Support services**

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According to Figure 4.3, up to 2011, access to finances before the establishment of BDF was very low. It majority received less than 1 Million that even by 2011 BDF support was insignificant to make a difference. In 2012 soon after establishing BDF and 2013, 2014 more applicants received loans amounting from 1-5 Million. The 5-10 Million categories also increase in 2011 and 2014 with the help of BDF. In the 10-15 Million categories a high increment was in 2015 though others too received.

#### 4.2.8 Annual turnover of SMEs before BDF support

**Table 4. 11 Annual turnover before BDF support**

<b>Before 2011</b>	<b>&lt; 1 million</b>	<b>1-5 m</b>	<b>5-10m</b>	<b>10-15m</b>	<b>15 m and above</b>	<b>Total</b>
2004	1	3	1	1	3	9
2005	9	1	5	0	0	15
2006	3	2	5	3	0	13
2007	0	2	1	1	0	4
2008	5	3	0	2	4	14
2009	10	0	1	0	0	11
2010	10	1	0	1	0	12
Total						78

**Source: Primary Data**

According to Table 4.17 on average 5.5 SMEs realized annual turnover of less than 1 Million, about 1.7 got 1-5 Million, 1.8 realized 5-10 Million, 1.1 received 10-15 Million and 1 got 15 and above millions as annual turnover.

#### 4.2.9 Annual turnover of SMEs after BDF support

**Table 4. 12 Amount of Turnover after BDF**

<b>From 2011-2017</b>	<b>&lt; 1 million</b>	<b>1-5 m</b>	<b>5-10m</b>	<b>10-15m</b>	<b>15 m and above</b>	<b>Total</b>
2011	12	8	6	5	2	<b>33</b>
2012	9	13	8	2	10	<b>42</b>
2013	7	6	4	4	1	<b>22</b>
2014	3	3	10	1	2	<b>19</b>
2015	5	6	10	2	2	<b>25</b>
2016	10	8	9	3	1	<b>31</b>
2017	11	12	7	10	2	<b>42</b>
	<b>57</b>	<b>56</b>	<b>54</b>	<b>27</b>	<b>20</b>	<b>214</b>
Average turnover	<b>8.1</b>	<b>8</b>	<b>7.7</b>	<b>3.8</b>	<b>2.8</b>	

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**Source:** Primary Data

According to Table 4.18, on average 8.1 realized annual turnover of less than 1 million with the help of BDF. In the category 1-5Million there were 8 on average, 7.7 in the 5-10 Million category, over 3.8 and 2.8 in the category 10-15 million and above 15 million respectively.

#### **4.2.10 Relationship between financial accessibility and SMEs in Rwanda**

**Table 4.13 Model summary**

Multiple R	.350
R Square	.059
Adjusted R Square	.059
Std. Error of the Estimate	.100
Log-likelihood Function Value	53.449

**Source:** Primary Data

Research findings as presented in table 4.18 showed the correlation between financial accessibility and growth of small and medium enterprises and this showed by coefficient of 0.350 with a square of 0.059.

**Table 4. 14 : Analysis of variance (ANOVA)**

	Sum of Squares	Df	Mean Square	Sig.
Regression	.067	1	.028	.005
Residual	.674	67	.010	
Total	.740	246		

**Source:** Primary Data

The relationship was significant at  $p = 0.005$  with a mean square of regression at 0.028 implying no difference in the square.

**Table 4. 15 Regression Coefficients**

	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	1.030	.119			8.679	.000
collateral requirements	.100	.039	.318	.124	2.565	.003
Access support opportunity	.043	.078	-.067	.118	-.569	.002
Access loans and grants	.065	.088	-.119	.123	-.970	.015

**Source:** Primary Data

The intercept of the regression was 1.030 and statistically significant (p= 0.000). While the coefficient of collateral requirement was 0.100 and p = 0.003. Access to support opportunity had an intercept of 0.044 but significant and finally access to loans and grants had it at 0.065 and also positive. The findings justify the model relationship below:

$$y = \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varepsilon$$

Where is  $y$ , financial growth and constants,  $\beta_{1,2,3,4}$   $x_{1,2,3,4}$  are constants and variables (collateral requirements, access to business support services and loan and grants respectively).

Substituting the coefficients, the model therefore is modified as;

$$\begin{aligned} \text{SME growth} = & 0.1(\text{access to Collateral requirements}) \\ & + 0.043(\text{access to Business support services}) \\ & + 0.063(\text{access to loan and grants}) + 1.03 \end{aligned}$$

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

### **5.1 Summary of findings**

In this section, researcher discussed themes related to the research objectives such as to determine the extent to which collateral requirements affect the growth of SMEs in Nyagatare District, to determine the level of support opportunities the growth and development of small and medium enterprises. The findings for this research was drawn from respondents own answers and are grouped following the research objectives.

#### **5.1.2 Findings of research objectives**

##### ***5.1.2.1 To determine the collateral requirements of financial accessibility that contributes to the growth of small and medium enterprises in Nyagatare District.***

The findings as presented in table 4.5, loans were provided by commercial Banks, microfinance and cooperatives, friends and families. According to 30(12%) the commercial Bank loan was the source of the startup, 57(23%) financed through Microfinance and cooperative loans, 15(6%) from friend provided loans, 47(19%) through family loans. A total of 97(39%) financed the business through personal saving. The finding shows that majority of the respondents financed their business startup through personal saving but a considerable percentage 23% financed through microfinance and cooperative loans. Commercial banks and other means too contributed.

The findings in Table 4.6, 185(75%) had applied for a loan before the period 2011-2017. The remaining 61(25%) did not apply in the period quoted. The majority therefore had desired to startup using a Bank loan. According to Figure 4.1, 80% of the respondents who applied for the loan did not receive it. This explains the use of personal savings that was revealed in previous finding. The research findings showed that 185 respondents who had ever applied for a loan, 37(20%) applied once, 24(13%) twice, 92(50%) thrice and the remaining 32(17%) for more than four times. The finding indicated that 173(94%) of the applicants were asked to provide high valued collateral, 51 (28%) were to belong to a solidarity group, 185(100%) were to have business registration and a bank statement or loan clearance certificate. A banking period was demanded by 180(97%), and period for loan received in previous bank was also required

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according to 177(96%). The findings show that there were several conditions that were placed on a loan applicant and high value collateral was just among the requirements.

***5.1.2.2 To identify the extent to which business support services those contribute to the growth of small and medium enterprises in Nyagatare District***

As indicated in the table 4.15, out of 78 who applied for credit in the preceding years to 2011, 38 of them received less than 1 million and at most 7 received 10-15 Million. In 2004, 15 received credit but 9 of them received less than 1 million and the maximum received was 10-15 Million by only a single SME. In 2005, 2006 and 2007 again those who received less than 1M were 11 but the maximum was between 5-10 M. while in 2006 those who received loan were 9 but 7 received <than 1M and the maximum was 5-10M received by only two firms. The research findings also show that majority of the recipients of the loans were those of less than 1 million and very few were able to more than 10 Million. According to the research findings in table 4.16 in 2011, 6, 18, 20 and 3 of 47 that received finances were given below million, 1-5million, 5-10 Million and 10-15 Million respectively. This was just soon after BDF was established and in 2012, 3 received less than 1 million out of 30 firms. In 2013, 2 out of 33 received less than 1 million and by 2017 out of 30 firms only 9 firms received 15 million and above.

Research findings as shown in table 4.17 indicated that on average 5.5 SMEs realized annual turnover of less than 1 Million, about 1.7 got 1-5 Million, 1.8 realized 5-10 Million, 1.1 received 10-15 Million and 1 got 15 and above millions as annual turnover. This shows that majority realized between 1-5 million in their annual turnover.

Research findings in table 4.18 showed that on average 8.1 realized annual turnover of less than 1 million with the help of BDF. In the category 1-5 Million there were 8 on average, 7.7 in the 5-10 Million category, over 3.8 and 2.8 in the category 10-15 million and above 15 million respectively. In terms of change in number of employees, research findings as shown in table 4.19 indicated that 58(27%) of the SMEs had 1 employee, 64(30%) had 2-5 employees and 92(43%) had above 5 employees. The finding shows that majority of the SMEs had above 5 employees after accessing BDF support. The research findings also showed that findings the number of assets increased as indicated by 176(72%) and according to 70(29%) it didn't. the findings shows that the number of assets had increased after accessing support from BDF

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### ***5.1.2.3 To establish the relationship between financial accessibility and growth of small and medium enterprises in Nyagatare District***

The extent to which financial institutions contribute to the growth of small and medium enterprises has a coefficient of 0.350 with a square of 0.059. The relationship was positive implying improvement in financial accessibility also led to increase in the growth of SMEs sample. The relationship was significant at  $p = 0.005$  with a mean square of regression at 0.028 implying no difference in the square. The intercept of the regression was 1.030 and statistically significant ( $p = 0.000$ ). While the coefficient of collateral requirement was 0.100 and  $p = 0.003$ . Access to support opportunity had an intercept of 0.044 but significant and finally access to loans and grants had it at 0.065 and also positive.

## **5.2. Conclusion**

A positive relationship exists between financial accessibility and SME growth. SME growth is dependent on access to loans and grants, business support services as well as the ability to provide collateral requirements.

## **5.3. Recommendations**

The government should continue the support through financial intermediaries such as BDF to support SMEs. The high valued collaterals and other requirements need to be fulfilled through the guarantees of these intermediaries.

## **5.4. Suggestion for further studies**

- (i) Effect of financial intermediaries on the profitability of SMEs in Rwanda
- (ii) M&E provided by government on BDF supported SMEs and the performance of SMEs
- (iii) Startup financing and its effects on the survival of local manufacturing companies owned through partnership in Rwanda.

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## REFERENCES

- Abdulwahed, M., Benammar, M., Hasna, M., Ghani, S., Akhmat, G., Zaman, K., Gao, Q. (2014). *Research in online and blended learning in the business disciplines: Key findings and possible future directions. Computers in Human Behavior* (Vol. 30). <https://doi.org/10.1177/1469787410379680>
- Ahiawodzi, A. & Adade, T. (2012). *Access to Credit and Growth of Small and Medium Scale Enterprises in the Ho Municipality of Ghana. British Journal of Economics, Finance and Management Sciences* (Vol. 6). Retrieved from <https://pdfs.semanticscholar.org/0e0f/87f43db8c551cc311fb310c66f06c475cc5e.pdf>
- Almazari, A. (2014). The Relationship between Working Capital Management and Profitability: Evidence from Saudi Cement Companies. *British Journal of Economics, Management & Trade*, 4(1), 146–157. Retrieved from 1
- Arjona, S. & Kapaj, A. (2016). Small and Medium Enterprises Environment—Case of Albania. *Chinese Business Review*, 15(6), 305–310. Retrieved from <https://pdfs.semanticscholar.org/667d/6cbe70ee45a25cd51d9c750b9d866d35666e.pdf>
- BDF. (2012). *Annual Report 2011*. Kigali. <https://doi.org/10.3929/ethz-a-007047464>
- Bianchini, S., Pellegrino, G. & Tamagni, F. (2014). *Innovation Strategies and Firm Growth : New Longitudinal Evidence from Spanish Firms*.
- Boverket. (2008). Individuell mätning och debitering av flerbostadshus. Retrieved July 14, 2015, from <http://www.boverket.se/Global/Webbokhandel/Dokument/2008/Individ>
- Ellis, M., Mcmillan, M. & Silver, J. (2017). WIDER Working Paper 2017/16 Employment and productivity growth in Tanzania's service sector. In *UNU-WIDER project*. Retrieved from <https://www.wider.unu.edu/sites/default/files/wp2017-16.pdf>
- Ernst and Young. (2016). *Alternate revenue models for Payments Banks in India*. Retrieved from [https://www.ey.com/Publication/vwLUAssets/ey-alternate-revenue-models-for-payments-banks/\\$FILE/ey-alternate-revenue-models-for-payments-banks.pdf](https://www.ey.com/Publication/vwLUAssets/ey-alternate-revenue-models-for-payments-banks/$FILE/ey-alternate-revenue-models-for-payments-banks.pdf)
- European Union. (2013). 2013 SMEs ' Access to Finance survey Analytical Report. *European Commission Analytical Report*, (November), 1–154.
- FinScope. (2016). *Digital Financial Services in Rwanda: Leveraging technology for maximum use of financial services*. Kigali.
- Javid, S. (2014). Effect of Working Capital Management on SME ' s Performance in, 6(12), 206–221.
- Jensen, M. & Meckling, W. Theory of the Firm : Managerial Behavior , Agency Costs and Ownership Structure Theory of the Firm : Managerial Behavior , Agency Costs and Ownership Structure.
- JPMorgan Chase & Co. (2018). *A n n u a l report 2018*. Retrieved from [jpmorganchase.com](http://jpmorganchase.com)
- Kastiel, K., & Libson, A. (2019). *Global Antitakeover Devices. Kobi Kastiel & Adi Libson Global Antitakeover Devices* (Vol. 36). Retrieved from <http://yalejreg.com/articlepdfs/36-JREG-117.pdf>

Publication Partner:

International Journal of Scientific and Research Publications (ISSN: 2250-3153)

Makori, D. & Jagongo, A. (2013). Working Capital Management and Firm Profitability: Empirical Evidence from Manufacturing and Construction Firms Listed on Nairobi Securities Exchange, Kenya. *International Journal of Accounting and Taxation*, 1(1), 1–14.

MINCOM. (2013). *MINICOM annual Report 2012/13*. Kigali: Ministry of Trade and Industry. Retrieved from [http://www.minicom.gov.rw/fileadmin/minicom\\_publications/Reports/MINICOM\\_Annual\\_Report\\_2012-13-2.pdf](http://www.minicom.gov.rw/fileadmin/minicom_publications/Reports/MINICOM_Annual_Report_2012-13-2.pdf)

Minicom. (2010). Rwandan Ministry of Trade and Industry, Small and Medium Enterprises (SMEs) Development Policy. Rwandan Ministry of Trade and Industry SME Policy. Kigali. Retrieved from [http://www.minicom.gov.rw/fileadmin/minicom\\_publications/policies/SME](http://www.minicom.gov.rw/fileadmin/minicom_publications/policies/SME)

Devt policyV180610.pdf

Murugi Mbaka, R., Mugambi, F. & Kenyatta, J. (2014). Factors affecting successful strategy implementation in the Water Sector in. *IOSR Journal of Business and Management (IOSR-JBM)*, 16(7), 61–68. Retrieved from [www.iosrjournals.org](http://www.iosrjournals.org)

Niskanen, M., & Niskanen, J. (2007). *The Determinants of Firm Growth in Small and Micro Firms-Evidence on relationship lending effects*. Retrieved from <https://pdfs.semanticscholar.org/1572/54373e8d0c167e01172e89a8ccb8b222a652.pdf>

Ofunya Afande, F. (2015). Factors Influencing Growth of Small and Microenterprises in Nairobi Central Business District. *An International Peer-Reviewed Journal*, 9. Retrieved from [www.iiste.org](http://www.iiste.org)

Onafowokan, O. (2012). The role of cooperative societies in rural finance: Evidence from Ogun State, Nigeria, (December). Retrieved from <http://hdl.handle.net/2086/7990>

Roach, D. (2011). The impact of product management on SME performance. *Journal of Small Business and Enterprise Development*, 18(4), 695–714. <https://doi.org/10.1108/14626001111179758>

Ruhara, C. & Kayitana, C. (2016). *Mind-set and Entrepreneurial Activities in Rwanda: A firm level investigation*. Retrieved from <https://includeplatform.net/wp-content/uploads/2017/12/Research-Papers-on-Mindset-and-Entrepreneurship-in-Rwanda.pdf>

Schwienbacher, A. & Larralde, B. (2012). Crowdfunding of Small Entrepreneurial Ventures. *SSRN Electronic Journal*, (September 2010). <https://doi.org/10.2139/ssrn.1699183>

Yahaya, O., Kutigi, U., Solanke, A., Onyabe, J., & Usman, S. (2015). *Current Assets Management and Financial Performance: Evidence from Listed Deposit Money Banks in Nigeria*. *International Journal of African and Asian Studies* [www.iiste.org](http://www.iiste.org) ISSN (Vol. 13). Retrieved from [www.iiste.org](http://www.iiste.org)

Yam, Y. (2016). *The influence of macro and micro-environmental factors on the consumption of mobile phones and marketing strategies*. *Southern Cross University ePublications@SCU*. Lismore. Retrieved from <https://pdfs.semanticscholar.org/d15e/f9b37b247953dec952538488683ed1640eac.pdf>

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# **Appendixes**

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## Appendix 1: Introduction letter

# Mount Kenya University

INSTITUTE OF POST GRADUATE STUDIES & RESEARCH

### INTRODUCTION LETTER

REF: MKU04/PGS&R/0211/2019

25<sup>th</sup> October, 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RWIHIMBA RUHUMURIZA Jean Claude-MBA/0156/12

This is to confirm that the above named person is a bonafide student of Mount Kenya University Rwanda.

He is currently carrying out research work to enable him complete his **Master of Business Administration (Accounting and Finance Option) Degree Program**. The title of his research is: **FINANCIAL ACCESSIBILITY AND GROWTH OF SMALL MEDIUM ENTERPRISES (SMEs) IN RWANDA: A SURVEY OF SELECTED SMEs, IN NYAGATARE DISTRICT**

The information received will be confidential and for academic purposes only.

Any assistance accorded to him to complete this study will be highly appreciated.

Thank you.

  
  
Alice Kituyi Nyake (PhD)  
Ag. DIRECTOR OF INSTITUTE OF POST GRADUATE STUDIES & RESEARCH  
PO BOX 5026 Kigali-Rwanda

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## Appendix 2: Acceptance letter

REPUBLIC OF RWANDA

Nyagatare, 1/11/2019

NO.....07/05/02/KJB

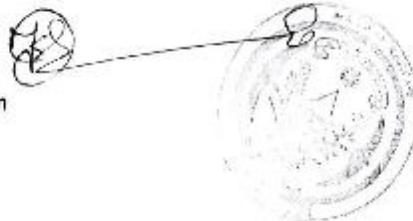


EASTERN PROVINCE  
NYAGATARE DISTRICT  
B.P 20 NYAGATARE  
TEL/FAX: 0252565249  
E-mail: [nyagataredistrict@minaloc.gov.rw](mailto:nyagataredistrict@minaloc.gov.rw)

TO: Ag. D RECTOR, INSTITUTE OF POST GRADUATE STUDIES AND RESEARCH  
MOUNT KENYA UNIVERSITY

SUBJECT: RESEARCH APPROVAL LETTER

I MUSHABE David Claudian Mayor of Nyagatare district. I accept RW HIMBA Ruhumuriza Jean Claude a Student of MOUNT KENYA UNIVERSITY to do Research in Nyagatare district from the request of University in way of pursuing his Masters course in Business Administration. He will work in BDU sms Unit.



MUSHABE David Claudian

Mayor of Nyagatare District

CC:

District Executive Secretary

### Appendix 3: Questionnaire

#### PART A: BACKGROUND INFORMATION

1. Age of respondents:

- a. Below 20 years
- b. 21 – 30 years
- c. 31 – 40 years
- d. . above 40 years

2. Gender of respondents

- a. Male
- b. Female

3. Marital status of respondents

- a. Single
- b. Married
- c. Others

4. What is your education level

- a. No education
- b. Primary
- c. Diploma
- d. Degree

5. Age of the firm?

- a. Before 2011
- b. 2011-2015
- c. 2016-2017

6. Number of employees at start

- a. 0-1

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- b. 2-5
  - c. above 5
7. What is your firm's main activity?
- a. Manufacturing
  - b. Retail
  - c. Wholesale
  - d. Service providers
8. Type of ownership (legal status of the firm)
- a. Sole proprietorship
  - b. Family ownership
  - c. Partnership
  - d. Company limited by share
  - e. Company limited by liability
  - f. Company limited by guarantee

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## **PART TWO: SPECIFIC QUESTIONS**

**Objective one: To determine the collateral requirements that contributes to financial accessibility and growth of small and medium enterprises in Nyagatare District.**

4. What were the main sources of finance of your firm? (tick what applies)

- (i) Loan from commercial bank [ ]
- (ii) Loan from microfinance or cooperative [ ]
- (iii) Loan from friends [ ]
- (iv) Loan from family [ ]
- (v) Loan from suppliers [ ]
- (vi) Loan from NGO [ ]
- (vii) Personally generated fund [ ]

5. Had you ever applied for loan?

- a. Yes [ ]
- b. No [ ]

6. How many loan applications did you make?

- a. One application [ ]
- b. Two applications [ ]
- c. Three applications [ ]
- d. Four applications and more [ ]

7. What main conditions did your bank ask you to fulfill?

- a. High valued Collateral [ ]
- b. Solidarity group membership [ ]
- c. Business registration documents [ ]
- d. Banking period [ ]

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- e. Having received a loan in the previous bank [ ]
- f. Bank statement or loan clearance certificate [ ]
- g. Having received loan, at least once, with the current bank [ ]

**Objective two: To identify the business support opportunities that contributes to the growth of small and business enterprises at Nyagatare District.**

8. How much credit did you receive over the last 7 years (tick the appropriate space)?

Year	2011	2012	2013	2014	2015	2016	2017
Credit							
< 1 million							
1-5 m							
5-10m							
10-15m							
15 m and above							

9. Have you ever received BDF support for your business?

- a. No [ ]
- b. Yes [ ]

10. What are types of business support service have you received from BDF?

- a. Financial Literacy
- b. Investment advisory services
- c. Business Management training
- d. Tax compliance

11. Exactly how much were you able to receive with the support of BDF?

Credit Year	2011	2012	2013	2014	2015	2016	2017
< 1 million							
1-5 m							
5-10m							
10-15m							
15 m and above							

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12. What is your annual turnover before BDF Support for the periods below?

Credit Year \	2004	2005	2006	2007	2008	2009	2010
< 1 million							
1-5 m							
5-10m							
10-15m							
15 m and above							

13. What is your annual turnover after BDF Support for the periods below?

Credit Year \	2011	2012	2013	2014	2015	2016	2017
< 1 million							
1-5 m							
5-10m							
10-15m							
15 m and above							

14. How many employees in your firm after BDF support

- a. 0-1 [ ]
- b. 2-5 [ ]
- c. Above 5 [ ]

15. Has the number of assets changed since you accessed BDF support?

- a. Yes [ ]
- b. No [ ]

**Objective three: To establish the relationship between financial accessibility and growth of small and medium enterprises in Nyagatare District.**

16. Is there any relationship between loan and grants on growth of SMEs?

- a. Yes [ ]
- b. No [ ]

**Thank you.**