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Examining the Determinants of SMEs Credit Access from Commercial Banks in Tanzania

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Abstract
The economic development in most African countries is greatly supported by Small and Medium Enterprises (SMEs) due to insufficient large capital to start up giant factories. This makes it necessary to focus on how SMEs finance their activities. Extensive literature provides evidence that SMEs find it difficult to meet credit access requirement by Commercial. In view of this, the study aims to examine the determinants of credit access in Tanzania Commercial Banks (TCB) and SMEs access to the credit.The study adopted a survey based approach by choosing some commercial banks in Tanzania and randomly involving SMEs firms in the capital of the Tanzania. Using Multiple Regression Analysis, the study reveals that firm characteristics, legal documents, financial characteristics and SME owner have positive relationship with bank credit access. Most SMEs are denied credit from commercial banks due to their ineffective to provide the require materials such as financial statements, improper documentations and registration certificates, owners level of education which affects his or her understanding on credit lending and others. However, firms' owner characteristics (education, age and experience) narrowly affect credit access. In addition, firm characteristics were perfectly significant with credit access.The paper suggested that priority sector lending and access to credit must be introduced in Tanzania. Also, policy maker should establish a credit guarantee scheme provides third-party credit risk mitigation to lenders. This will help to overcome the challenge of collateral requirement and others that make lending to SMEs risky.
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1. Introduction

Small and Medium- Sized Enterprises (SMEs) contributes significantly to economic growth and development across the world. These enterprises are the source of income for the majority of people in East Africa. They drive economic growth through overwhelming contributions to job creation as well as innovation and entrepreneurship [1], [2]. SMEs can help cause a revolution through the provision of jobs. [3] reported that SMEs account for 97–99% of the aggregate enterprises in the ten most competitive countries throughout the world where SMEs play an important role of economic development.

The economic development in most African countries is heavily dependent on SME due to inadequate large capital to start up giant factories. Therefore, the need to finance the development and growth of SMEs in Sub-Saharan Africa (SSA) economies has been of concern to many policy makers [4].

For example, according to Tanzania chamber of commerce, industry and agriculture TCCIA report, 95% of the businesses in Tanzania are SMEs and they represent about 35% of the country GDP. Over the years, this sector had played a critical role in developing Tanzanian economy through creation of employment opportunities, income generation, saving foreign currencies, equitable distribution of income hence contributing towards poverty alleviation. Similarly, in Ghana, [5] asserted that SMEs contribute 70% to GDP, constitute 92% of all businesses and make up 80% of the private sector. The private sector is thus tagged as the engine of economic growth in Ghana and there is no doubt that SMEs are central in this agenda.

Government's recognition of the vital role of SMEs in the Tanzanian economy dates back to the 1980s. Throughout these periods various policies and programs have been adopted to promote SME development in the country. Despite all these efforts, SMEs in Tanzania like those around the world are still confronted with several challenges that affect their growth and survival. Just to mention a few, these challenges include lack of qualified human resources, limited access to markets, lack of technological innovations and the lack of or limited access to credit. The limited access to credit or the lack of it (credit constraint or financing gap) is the dominant of all the challenges of SMEs [5]. [6] Posit that a credit constrained firm is one that fails to obtain all the financing needed. Similarly, [7] said that when a firm is unable to borrow as much as it would like to at the going market rate it is credit constrained. The access to funding by SMEs is vital to their growth and development. However, access to funding remains one of the major challenges, especially to those SMEs in developing economies.

To date, in most developing countries Tanzania in particular, SMEs lack access to capital and still experience

difficulties in obtaining capital despite efforts by some financial institutions and public sector bodies to open more avenues of funding. The majority of the SMEs are still not considered credit worthy by commercial banks due to their inability to fulfill some conventional banking requirements. Commercial banks credit requirements have driven the synergy of most SMEs to expand and compete with other foreign companies in Tanzania. These unfavorable lending policies have attracted researchers' attention. In view of this, the study aims to examine the determinants of Tanzania Commercial Bank (TCB) credit and how SMEs access the credit. Moreover, SMEs suffer a number of challenges in fulfilling bank credit requirements in acquiring credit. In Tanzania and most of the developing economies, commercial banks are often unable or reluctant to grant loans to small and medium enterprises. Instead, they prefer lending to well established businesses that have well maintained financial statements and credit history; they also contain proper financial statements or records as well as sufficient collateral in form of tangible assets, which are difficult for SMEs to obtain. For this reason, SMEs in Tanzania are forced to consider other informal financing options, whose lending conditions are inflexible. The funding obtained from informal financing, is not enough to finance SMEs' expansion and growth. The question arises why is it so hard for SMEs to acquire credit from these commercial banks? It is due to commercial bank's credit requirements which SMEs find difficult to fulfill. Therefore, it is important and logically to investigate the relationship between banks credit requirement and access to credit by SME

2. LITERATURE REVIEW

A. Small and Medium Enterprises (SME's)

SME's definition is relative to countries, industries and many scholars. Different people have used varied criteria to described SMEs. This has expose SMEs to definitive problems that usually characterize concepts with many components [5]. As a result, a multiplicity of definitions exists. One of the criteria to knowing what constitute a small business is the sized-based criterion which uses number of employees, total assets and sales turnover as measures of size. The fundamental problem with this is that none of the measures for size stands out to be the best measure.

The [8] formulated what is known as the economic and statistical definitions of a small firm. The economic definition holds that; a firm is considered as small if it satisfies the following three criteria;

it has a relatively small share of their market place; it is not managed through the medium of formalized management structure but by owners or part-owners in a personalized way; it is not a subsidiary of larger enterprises.

The statistical definition on the other hand looks at the size of the small firm and its contribution to GDP, employment, exports and innovation. the extent to which the small firm sector has changed its economic contribution over time.

The [8] also allowed for a small firm to be defined according to different criteria in the various sectors; manufacturing, construction and quarrying and mining sectors are defined on the basis of number of employees. For the Retailing, Miscellaneous, Motor trades and Wholesale trades sectors, the sales turnover criterion is used. Whereas the road transport sector uses number of vehicles, the catering sector is based on ownership. Table 1 below gives details;

TABLE I: The Bolton's Committee Definition of SME**Sector**	**Definition**
Manufacturing	200 employees or less
Construction	25 employees or less
Mining and quarrying	25 employees or less
Retailing	Turnover of £50,000 or less
Miscellaneous	Turnover of £50,000 or less
Service	Turnover of £50,000 or less
Motor trade	Turnover of £100,000 or less
Wholesale trade	Turnover of £200,000 or less
Road transport	Five vehicles or less
Catering	All excluding multiples and brewery-

Source: Bolton (1971)

A careful look at the Bolton definition leads to a number of criticisms. For instance, the economic and statistical definitions conflict on the issue of management; the criterion that a small firm is managed by its owner or part-owner in a personalized way conflicts with its statistical definition of a small manufacturing firm having up to 200 employees. It is unlikely that a firm with more than 100 employees could be managed in a 'personalized way' -it would require a more formal management structure, suggesting that the Bolton 'economic' and 'statistical' definitions are incompatible [9].

Due to shortcomings in the various definitions of a small firm the term Small and Medium Enterprises (SMEs) was coined by the European Commission (EC). The EC bases its definition on employment as follows;

Firms with 0 – 9 employees – microenterprises
10 – 99 – small enterprises
100 – 499 – medium enterprises.

Under the EC's definition SME Sector is taken to be enterprises – except agriculture, hunting, forestry and fishing which employ less than 500 workers [9]. Storey again argues that the EC definitions are more appropriate mainly because;

1. It is exclusively based upon employment, rather than a multiplicity of criteria.
2. The use of 100 employees as a small firm limit is more appropriate, given the rises in productivity which have taken place in the last two decades.
3. It recognizes that the SME group is not homogenous, in the sense that distinctions are made between micro, small and medium-sized enterprises.

Agencies like UNIDO have also added their voice to explaining what SMEs are. UNIDO defined SMEs within the context of developed and developing countries. The definition for developing countries in terms of number of employees is as follows;
Large - firms with at least 100workers
Medium - firms with 20 - 99 workers
Small - firms with 5 - 19 workers
Micro - firms with less than 5 workers
For industrialized countries firms are considered to be:
Large if they have at least 500 workers
Medium – if they have between 100 and 499 workers
Small - if they have less than 99 workers

According to the OECD (2000), the European Union considers SMEs as those businesses with a maximum of 250 employees while the United States' upper limit is 500 employees. In other jurisdictions small firms are generally those with a maximum of 50 employees. We thus have SME 50, SME 250 and SME 500. Similarly, [10] use the number of employee criterion and specifies a cut-off point of 30 employees for small scale enterprises. They categorized the small scale enterprises as follows;

1. Less than 6 employees – microenterprises
2. 6- 9 employees - very small enterprises
3. 10 – 29 employees – small enterprises

Commenting on the controversial definitions of SMEs', it constitutes a small business and its explanation has been attributed to the sized-based criterion which uses number of employees, total assets and sales turnover as measures of size. The fundamental problem with this is that none of the measures for size stands out to be the best measure.

In the context of Tanzania, micro enterprises are those engaging up to 4 people and in most cases family members or employing capital amounting up to Tshs.50 million. The majority of micro enterprises fall under the informal sector. Small enterprises are mostly formalized undertakings engaging between 5 and 49 employees or with capital investment from Tshs5 million to Tshs 200 million. Medium enterprises employ between 50 and 99 people or use capital investment from Tshs.200 million to Tshs800 million URT according to SME Policy in 2002).

Pass et al. (2000) defined SMEs as companies that (1) have an annual turnover of less than £11.2 million; (2) have gross assets of under £5.6 million; and (3) have not more than 250 employees. These criteria, especially (1) and (2), cannot be adequately used to define SMEs in Tanzania. In the Tanzanian context, SME definition can be borrowed from [11]. They argued that the definition of SME is slippery and has not been universally agreed upon. They define micro enterprises as those engaging one to five persons and small enterprises as those which engage six to twenty persons.

TABLE II: Categories of SMEs in Tanzania

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

Source: (SME Policy, 2002).

B. History of banks and Microfinance in Tanzania

Commercial banking in Tanzania began in 1905, with the establishment of the Deutsch-Ostafrikanische Bank in Dar es Salaam. As the mainland was part of German East Africa, it was the German government that granted the bank its concession to issue its own notes and coins. The banking sector in Tanzania has undergone substantial structural change since financial sector reform in 1991. During that period of reforms, the banking sector has experienced drastic and comprehensive changes; the sector underwent major transformations and more numbers

of banks were established and commercial banks constitute the largest part of the banking system in Tanzania.

Commercial banks in Tanzania may be subject to the regulations of the Bank of Tanzania, as contained under the provisions of the Bank of Tanzania Act of 1995. Besides, there are other laws that may govern all commercial bank transactions, including the Banking and Financial Institutions Act and the Foreign Exchange Act [12].

The banking sector is a mix of institutions, offering a range of products to an increasing percentage of the population. As of mid-2017 there were 41 fully fledged commercial banks licensed by the BoT. This makes for a crowded sector, with multinational giants such as Standard Chartered, Citibank and Barclays (which re-entered the market in 2000), competing with regional heavy hitters like Stanbic and smaller local operators

Tanzania's financial sector has expanded in recent years. There are more than 30 banks in the country and foreign-owned ones' account for approximately 48 % of the banking industry's total assets. Competition among foreign commercial banks has resulted in significant improvements in the efficiency and quality of financial services. Recent banking reforms have helped increase private sector growth and investment. The financial sector in Tanzania is comprised of four types of entities; they are commercial banks, financial institutions, community banks or microfinance institution and deposit taking microfinance. In June 2016, the Tanzania central bank published a long list of all licensed financial institutions in the country. They categorized these banks into fully fledged commercial banks, financial institutions, community banks deposit taking microfinance banks, private credit reference bureau, and financial leasing companies. The fully fledged banks were forty-one (41). Some are; Barclays Bank (Tanzania) Limited Access Bank (Tanzania) Limited, China Commercial Bank Limited, CRDB Bank Plc. Ecobank (Tanzania) Limited, Exim Bank (Tanzania) Limited, KCB Bank (Tanzania) Limited etc. The primary objective of the Bank of Tanzania is to formulate and implement monetary policy directed to delivering domestic price stability, which is in practice defined as low and stable inflation over time. The role of banks and their trade finance services were highlighted by the financial crisis in 2008/2009, which triggered policy responses [13].

C. Determinants of credit access

Banks consider a lot of factors before giving out credit to small businesses. These key determinants serve as the credit requirement for SMEs to provide or meet in order to have adequate fund from commercial banks. Among some of these are size, age, collateral and others. Mostly, SMEs are usually managed by their owners and so the term SME owner or manager mostly can be used interchangeably. The attributes of the SME owner have greater impact on the business. That is, attributes such as age of the owner, education and experience levels of owner amongst others have consequences on the survival and growth of the business. According to the human capital theory, such human attributes influence a firm's ability to access credit. Thus, SMEs with high quality human capital have greater access to credit than their counterparts with questionable human capital. Specific attributes of the SME owner and their influences on SME access to credit are discussed below;

The SME's owner educational level has serious consequences for the business. Education develops the mental fortitude of entrepreneurs as well as communication abilities [14], which are very vital for the running of a business. Lenders have confidence in highly educated SME owners than those with little or no education [15] Education also make SME owners have knowledge on the requirements of banks which is very vital to accessing loans from banks. Empirical evidence on the effect of SME owner educational level on access to credit has been mixed. [16] in a survey of 600 SMEs in Libya had evidence to conclude that educational level has significant positive effects on access to finance. Similarly, [17] provides evidence from Sri Lanka that there is a positive and significant relationship between education of SME owners and access to bank loan. [18] found that in the UK, highly educated SME owners had less difficulty in accessing credit from banks. They further explain among other reasons that highly educated SME owners are quite prolific in providing convincing business plans and maintaining good relationships with lenders which are vital ingredients to obtaining finance. However, [19] in their study of SMEs in Eritrea found no significant effect of SME owner educational level on access to bank loan.

Age of the SME owner to large extent determines the SME's ability to access credit. From a supply-side perspective, it is believed that information asymmetries tend to decrease with increase in age [20]. For this reason, older entrepreneurs are better positioned to access credit easily than younger ones. Therefore, older SME owners have less appetite for external debt. [20] point out that the motivation for running a business varies across age groups. According to [15] older entrepreneurs may run a business just for pleasure and as a result may not be much concerned about innovativeness and dynamism in the business. Therefore, compared to younger entrepreneurs who are striving for excellence and poised for innovativeness. A study [21] shows there is a significant positive relationship between age and the success of a business. They further show that the success rate for business owners aged above twenty-five (25) years was higher.

SME owners/managers who have been in business for long have rich experience regarding the very line of business they are into. As a result, [14] argues that such SME owners have greater likelihood to avoid serious mistakes that could be detrimental to the growth of the business than owners without prior experience. Consequently, experienced owners may be preferred candidates for bank loans than inexperienced owners. In King Williams' Town, South Africa, [22] record a positive and significant relationship between experience of SME

owners and access to credit. Similarly, [16] found management experience of owners to be an important determinant of SMEs access to credit.

In general, the age of a firm refers to how long the firm has been in existence. This could range from days, weeks to years. All firms are not of the same age. [23] use five years as a benchmark and describe younger firms as those that are five years or less in business whilst those above five years in business are described as old or mature firms. A firm's age speaks well of its reputation, managerial competence and its ability to remain in business. To this end, younger firms are constrained in a number of ways regarding their access to credit. [24] argues the lack of reputation for younger firms makes it more constraining for them to access credit. [17] argues that new and young firms often fail to meet collateral requirements of banks and this affects their ability to access credit. Thus, their operation within a small span of time does not offer them the opportunity to accumulate assets to pledge as collateral. It is also argued that startups and young firms carry high risk. Their probability of failure is very high and even whilst in business their high monitoring cost discourage banks from dealing with them. [25] show that mature and foreign-owned firms in Zimbabwe have access to bank credit easily than younger firms because contrary to younger firms, mature firms have capacity, collateral and performance trade record to support their applications. The size of a firm seems to have some association with the firm's ability to access credit. [26] report that small firms are less likely to access credit than large firms. [6] assert that constrained firms are smaller, younger, and more likely to be owned by their founders. Similarly, [20] observes that credit access is a major constraint for smaller and less established firms. Several reasons have been advanced for the small firm effect. First, greater constraints may be faced by small firms due to market imperfections, in the form of greater informational opacity. Though not unique to small firms, this may be considerably more relevant because of relatively poor quality and provision of financial information by small firms. This leads to greater difficulties in credibly conveying their quality or the quality of their projects [27]

The sector in which a firm operates is a determining factor for a firm to access credit. It is acceptable for banks to prefer to lend to firms in sectors with high profitability and growth potential. This means that some sectors may be deemed by banks as unprofitable to lend to and therefore firms operating in such sectors may have several limitations in accessing credit. [29] assert that firms sector is very crucial to their access to credit. Using data from Mozambican manufacturing firms their results indicated that the metal-mechanic and wood-furniture sectors have significantly lower credit access than the food processing sector. Thus, banks attach a lower risk premium to food processing sector compared to the other two sectors.

Firms in sectors with more capital requirements may most likely face greater credit constraints [30]. Looking into the service sector argue that the service sector usually lacks physical assets to pledge as collateral since they deal in intangibles [31] service rather than physical products) and therefore are more likely to be credit constrained.

The structure of the ownership of a firm is an important determinant of a firm's ability to access credit from formal. For example, there is empirical evidence that listed firms and foreign owned firms face lesser financial constraints [32]. [9] found that legal status influences the bank lending. He further states that corporate status at startup appears to be associated with a greater likelihood of bank lending.

Setting collateral requirements on a loan contract is a traditional bank practice to reduce information opaqueness and to align the interest of borrowers with the interest of banks [33According to the World Business Environment Survey (WBES), collateral requirements are the third of 12 most important financing obstacles for SMEs. Studies have shown that collateral security help ease adverse selection and moral hazard problems in a loan contract because collateral can act as indicating device for banks to sort out quality borrowers from risky ones. This means banks use collateral as a screening device to differentiate quality borrowers and bad ones.) asserted that when borrower quality is known as risky, banks will require higher collateral and charge higher interest rates. [3] using the observed risk hypothesis predicts that banks sort borrowers depending on their risk profile and results in risky borrowers having to pledge collateral and higher interest rates to compensate the risky investment by banks. The role of collateral as a screening device is prominent in banking studies that find that if collateral minimizes adverse selection, pledging collateral can have a negative relationship with credit risk [30-34].

D. Conceptual Framework

The literature reading and review have help conceptualize the study aim by choosing appropriate constructs and variables for achieving the purpose of the research. The conceptual framework focuses on variables based on independent and dependent variables, of which dependent variables will be indicated by bank's credit access requirements for SME and independent variables includes credit access determinants such as financial factors, SME owner characteristics, SME characteristics, and legal documents and social characteristics of the business.

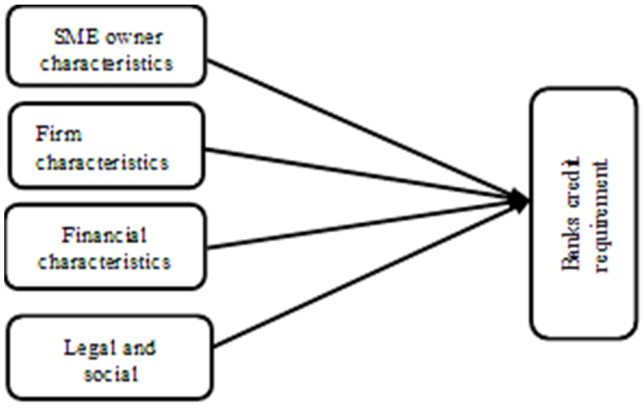

Figure 1. Conceptual framework

Based on the framework, the study hypothesized that SMEs credit determinants have positive relationships with credit access requirements from commercial banks. This is further argued that financial factors, SME owner characteristics, SME characteristics, and legal documents and social characteristics of the business have positive relationship with credit access from commercial banks. That's the banks credit requirement to SMEs credit applicants could be examined using the multiple regression model; Bank requirements (BK) or $Y = \alpha + b1S + b2F + b3X + b4L + error$, where, the independent variables are SME owner characteristics (S), Firm characteristics (F), Financial characteristics (X), Legal documents (L) and the dependent variable is Bank requirements (BK), 'α' is intercept and 'b' is the slope. With this, the study will find out the correlation matrix among study variables and model suitability using enter and stepwise approach to analysis the best model.

3. METHODOLOGY

This study adopted the survey based approach to examine credit access requirements on SME provision of credit. A survey based was necessary to get varied opinions from firms' in different industry. The survey was designed based on broad review of literature on credit rationing determinants and access forms used in banks. Multiple regression model is used to analysis the data.

Six full fledge commercial banks in Tanzania participated in the data collection. The SMEs selected cut across many industries. Simple random technique was adopted to reach all the participants. Most participants were selected based on the distance proximity to urban centers. In all, 120 respondents including both commercial banks and SMEs participated in the study data collection. This includes 60 SMEs operators and 60 commercial bank employees from four major commercial banks. The first hand data were collected by conducting a field survey questionnaire. Data were collected using a set of questionnaire, as it is the most prominent method to gather the needed information. Also, the approach is convenient, easy to reach many people at a time. The question items were measured on the five response scale.

4. RESULTS AND DISCUSSION

The background information of the respondents is gender, age range, educational qualifications, type of business engage and years of working in the business. Fig.2. illustrates the gender of the respondents. 55.8% were male and 44.2% were female. The gender differences show that more males were represented than females.

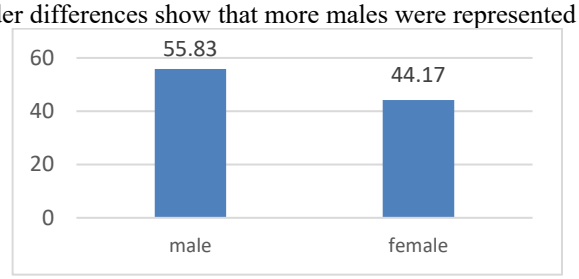

Figure 2. Gender

Fig.3. shows the age range of the respondents. Majority of the participants were from 26-40 years and they represent 54.2%. Those within 18-25 years represent 32.5%. Also, 13.33% are from 41 years.

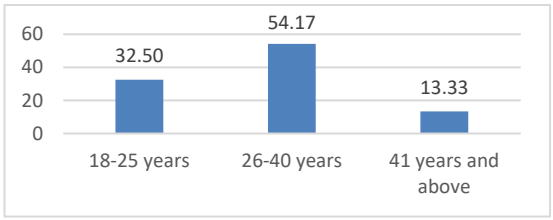

Figure 3. Age of Respondents

In discussion of the marital status of the respondents, most of the participants are married (42.5%). The singles amongst them are 31.7%, whilst 10.8% are widowed. Also, the divorced and the separated groups are 9.2% and 3.3% respectively.

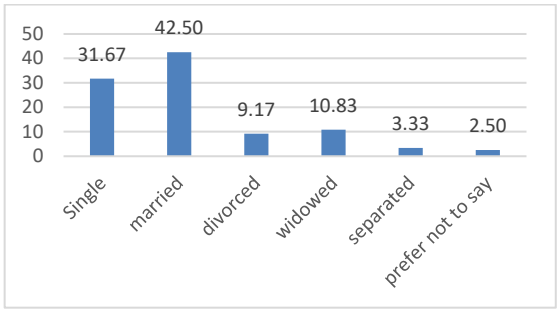

Fig4. Marital Status

The educational background of the respondents was grouped into primary, secondary and tertiary level. Among the respondents, 38.3% have primary level of education, 29.2% have secondary level and the university level is 32.5%. Educational background of SMEs owners is essential in facilitating credit easily. For instance, [35] concluded from their logistic regression analysis that the levels of education of owner managers in Libya influence their decisions to apply for bank loans after the startup stage.

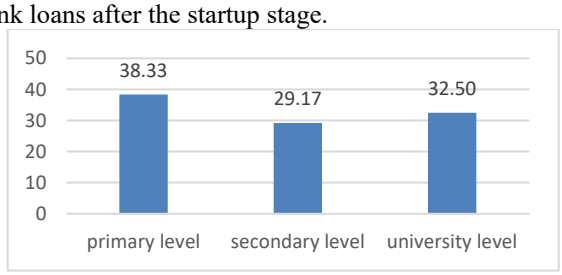

Figure 5. Educational Level of Respondents

The years SMEs have been in active operation is a vital factor because it contributes to experience, business knowledge and reputation. [36] find that the amount of experience determines the propensity to apply for loans. This study reveals that 36.7% of the SMEs are within 0-5 years. 35% are also within the range of 6-10% and 17.5% are between 11-15. Again, SMEs with more than 20 years of working were 5% according to figure 4.5

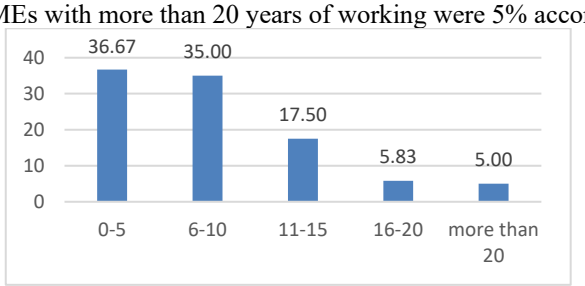

Figure 6. SMEs years in business

E. Descriptive Statistics of the Study Variables

Many studies have revealed the SMEs qualities and factors that make easy access to credit from financial institutions. Based on the literature trends, factors such as owner or manager characteristics, business characteristics, financial statements of the firm, and ability to comply to other legal provisions as stipulated by the Business Act of Tanzania. Using the just listed factors, the author designed questions to find out the views of the SMEs in relation to banks credit requirement. The results are presented under this section.

TABLE III. Descriptive Statistics of Variables

Categorical items	S/N	Variables	Min	Max	Mean	Std. Deviation	Cronbach Alpha
SME owner characteristics	S1	Age of the owner of the firm	2.00	5.00	3.5500	.87188	0.72
	S2	Education level of the owner	2.00	5.00	3.8000	.81926	
	S3	Experience level of owner	2.00	5.00	3.5000	.79191	
Firm characteristics	F1	business age	2.00	5.00	3.4333	.74485	0.81
	F2	size of firm	2.00	5.00	3.6500	.73242	
	F3	type of industry	1.00	5.00	3.6333	.82270	
Financial characteristics	X1	Start-up financing, cash flow and credit history	2.00	5.00	3.7833	.69115	0.69
	X2	financial statements	2.00	4.00	3.5667	.53256	
	X3	profitability of firm	2.00	5.00	3.5167	.72467	
Legal documents and social characteristics	L1	Business plan, certificate and registration	2.00	5.00	3.2333	.74485	0.75
	L2	Collateral security	2.00	5.00	3.2167	.78312	
	L3	Guarantors	1.00	4.00	3.2333	.83090	
	L4	Reputation of the firm	2.00	5.00	3.4333	.74485	
Commercial Bank credit requirement	BK1	Loan or collaterals security	2.00	5.00	3.6500	.73242	0.79
	BK2	Assessment of guarantors or reference	2.00	4.00	3.5667	.53256	
	BK3	Location of the firm	1.00	5.00	3.6333	.82270	
	BK4	SME financial statements	2.00	5.00	3.7833	.69115	
	BK5	Legal documents, Business plan and registration certificate	2.00	5.00	3.5500	.74618	
	BK6	SME characteristics and experience	2.00	5.00	3.2167	.78312	
R = 0.715 R Squared = 0.512 F statistics (14.42, 000)							

Table III shows the categorical variables of both the independent and the dependent variables. It presents the individual variable items, minimum and maximum response, mean, standard deviation, Cronbach's alpha reliability coefficient, F-statistics, R Squared and the adjusted R Squared. The table reveals that the mean or average of each item is more than 3, this indicating most respondents agreed and strongly agreed to the required credit provisions. Also, the coefficient of the Cronbach's alpha reliability test is more than 0.7 in all cases. The predictors explain 51.2% of the variance in the dependent variable (R2 =0.512) with F-statistics of 14.42 showing a positive relationship between credit access SMEs requirements.

F. Multiple Regression Analysis

The author tested the multiple variables or the predictors at once on the bank credit requirement using the enter method. Hinton et al (2014) argued this method is useful if you do not have any theoretical basis for deciding which variables to enter into the analysis. The SPSS produces a correlation matrix of all of the variables under study. Each pair of variables is correlated and the results placed in the Table IV, presenting details of the Pearson correlation R value, probability value and number of participants. From the table, SME owner characteristics factor does not correlate ($p > .01$) with credit requirements. All other variables (firm characteristics, financial characteristics, legal documents) correlate significantly with credit requirements such that ($p < .01$). The coefficient of the items is illustrated in Table V. this show which variable is individually significant predictor on the dependent variable. The coefficients of the independent variables in the regression equation including all the predictor is given in the Unstandardized Coefficients B column. All the predictor variables are significant ($p < .05$)

TABLE IV. Correlations matrix of study variables

Items		1	2	3	4	5
Pearson Correlation	*Credit access*	1.000				
	SME owner characteristics	-.036	1.000			
	Firm characteristics	.493	.124	1.000		
	Financial characteristics	.422	.361	.196	1.000	
	Legal documents	.490	.128	.295	.196	1.000
Sig. (1-tailed)	*Credit access*	.				
	SME owner characteristics	.391	.			
	Firm characteristics	.000	.172	.		
	Financial characteristics	.000	.002	.066		
	Legal documents	.000	.164	.011	.067	.

TABLE V. Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.791	2.026		4.339	.000
	SME owner characteristics	-.271	.105	-.261	-2.581	.013
	Firm characteristics	.437	.125	.349	3.497	.001
	Financial characteristics	.551	.149	.381	3.690	.001
	Legal documents	.372	.107	.346	3.468	.001

a. *Dependent Variable: credit access*

G. Finding the Best Model through Stepwise Approach

Stepwise method adds predictor variables to the regression that best correlate with the dependent variable, and subtracts predictor variables that least correlate. In this way the researcher generates a regression equation using only the predictor variables that make a significant contribution to the prediction. The R Square value in the model summary Table VI shows the amount of variance explained by the independent variable. In model 1, the independent variable accounts for 24.3% of the variability of the credit requirements. In model 2, 3 and 4 the independent variables explained 37.3%, 45.3% and 51.2% accordingly. The R value (0.493) in Model 1 is the multiple correlation coefficient between the independent variables and the explanatory variable. The adjusted R Square adjusts for a bias in R2 with only few predicting variables. As more predictors are added, the adjusted R Square keeps changing. In the model 5, the adjusted R Square is 0.476. Addition of more predictors have effects on the model, the model keeps strengthening the relationship with a change in the significance level, R Squared and the standard error of estimate. With this, model 5 where credit access = α + Firm characteristics + legal documents + Financial characteristics + SME owner + ε. Mathematically Y= α + b1S + b2F + b3X + b4L + error.

Table VII presents the coefficient of the items, t-test value and significant level in each model. The Model variable is individually significant predictor on the dependent variable. From the table, all the predictor variables are significant ($p < .05$) in each model. In the nutshell, it is concluded that Firm characteristics, legal documents, Financial characteristics and SME owner have positive relationship with bank credit access in Tanzania. The model could be written again as Y= 8.79-0.271S + 0.44F + 0.55X + 0.37L + 1.27227.

TABLE VI. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.493[a]	.243	.230	1.54266	.243	18.645	1	58	.000
2	.611[b]	.373	.351	1.41632	.130	11.809	1	57	.001
3	.673[c]	.453	.423	1.33505	.080	8.151	1	56	.006
4	.715[d]	.512	.476	1.27227	.059	6.663	1	55	.013

a. Predictors: (Constant), Firm characteristics
b. Predictors: (Constant), Firm characteristics, legal documents
c. Predictors: (Constant), Firm characteristics, legal documents, Financial characteristics
d. Predictors: (Constant), Firm characteristics, legal documents, Financial characteristics, SME owner

TABLE VII. Coefficients a

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	14.777	1.547		9.554	.000
	Firm characteristics	.618	.143	.493	4.318	.000
2	(Constant)	10.959	1.803		6.078	.000
	Firm characteristics	.479	.138	.382	3.480	.001
	Legal documents	.405	.118	.377	3.436	.001
3	(Constant)	7.590	2.069		3.668	.001
	Firm characteristics	.423	.131	.338	3.229	.002
	Legal documents	.358	.112	.333	3.187	.002
	Financial characteristics	.421	.148	.291	2.855	.006
4	(Constant)	8.791	2.026		4.339	.000
	Firm characteristics	.437	.125	.349	3.497	.001
	Legal documents	.372	.107	.346	3.468	.001
	Financial characteristics	.551	.149	.381	3.690	.001
	SME owner characteristics	-.271	.105	-.261	-2.581	.013

a. *Dependent Variable: credit access*

H. Discussion

With reference to the tables and figures presented from the study results, this part gives deep understanding by relating the findings to other previous ones. The paper analyzes the similarity and dissimilarity of literature studies from local and international research conclusions. The research considers every core points in the analysis including respondents demographic impact on credit requirements, firms' characteristics SMEs manager or owner characteristics, financial aspect of business, available documents, opinions on access to credit and reasons SMEs turn out not to apply for credit from commercial banks requirements. All other variables (firm characteristics, financial characteristics, legal documents) correlate significantly with credit requirements such that ($p < .01$) in the correlations matrix. In an attempt to examined best combination of SMEs requirement factors, stepwise approach was used. Stepwise method adds predictor variables to the regression that best correlate with the dependent variable, and subtracts predictor variables that least correlate. This helps to identify the most significant. In all the models, the adjusted R2 and R2 increases significantly anytime one more independent variable is added. Interestingly, the F value change is significant each level of the model. $Y= \alpha+ B1X1 + B2X2 + \ldots + BiXi$. With this, model 5 where credit access = α + Firm characteristics + legal documents + Financial characteristics + SME owner + ε.

In the nutshell, it is concluded that Firm characteristics, legal documents, Financial characteristics and SME owner have positive relationship with bank credit access in Tanzania. Empirical research on the effect of SME on owner or manager owner educational level on access to credit has varied findings. However, most studies argued for the case. A survey by [16] on 600 SMEs in Libya concluded that the educational level has significant positive effects on access to finance. Likewise, [17] found proof from Sri Lanka that there is a positive and significant relationship between education of SME owners and access to bank loan. [37] argued that SME owners/managers who have been in business for long have rich experience regarding the very line of business they are into. [25] show that mature firms in Zimbabwe have access to bank credit easily than younger firms because contrary to younger firms, mature firms have capacity, collateral and performance track record to support their applications. This research finding affirm the role of legal documents such as business plan, certificate and registration, collateral security provided for the loan and influential level of guarantors or reference as stimulant access to credit from commercial banks. Again, in the conclusion of [38] research, he showed that SMEs had difficulty in accessing funds from formal sources because of inflexible collateral security requirements as well as inadequate risk-mitigating schemes for formal sources of finance. [3] also conducted a similar study in South Korea. They claimed that the country's credit guarantee system is comprehensive; not only does it help the lack of collateral of SMEs in order to obtain loans, but also increases the recovery rate of loans and effectively reduces a bank's cost inefficiency. Evidence from research studies across the world shows that SMEs find it difficult to access credit from formal source such as central banks, commercial banks and others.

5. CONCLUSION

In most developing countries like Tanzania, banks are often unable or not willing to give loans to SMEs. The commercial banks prefer to lend to large, established companies with well-developed plan and balance sheets and credit histories of additional assets for the collateral required in conventional bank financing. Over the years, Tanzania banking regulatory authorities have make changes in trend of business and lending terms. With this, most

SMEs still find it difficult to access credit from commercial banks. The results from the data analysis discloses that firm characteristics, legal documents, financial characteristics and SME owner have positive relationship with bank credit access in Tanzania. Most SMEs are denied credit from commercial banks due to their ineffective to provide the require materials such as financial statements, improper documentations and registration, owners level of education which affects his or her understanding on credit lending and others. However, firms' owner characteristics (education, age and experience) narrowly affects credit access. This means is not a big significant factor as it contributed the least (0.059) in the R Square Change. It is in line with this that [4] suggest that SMEs must take giant steps towards formalization in order to increase their potential for accessing formal credits.

In addition, firm characteristics was perfectly significant with credit access (F=18.7, 0.000) and it had the highest R Square, adjusted R Square and R value that is the coefficient of correlation.

The findings are similar to [35]. They studied on financing SMEs and the determinants of bank loan application in Malaysia. It was concluded that SMEs credit access constrains can be attributed to firms' size, age, lack of business strategy, collateral, financial information, and bank requirements as well as the owner's or manager's educational background and business experience.

Lastly, this study concluded that the major challenges in securing access among SMEs is as a result of Years firm or SME has been in operation, size of the firm and asset and the type of industry the firm is operating. Some of the bank experts explain that it is difficult to recognize some business due to its small size, and years in operation is a doubt whether the firm can survive. The type of industry was crucial in country as certain sectors are difficult to secure loan with collateral due to the service and demand of the business product.

Based on the study results, major findings and the conclusion, the following suggestions are recommended for policy makers, banks and SMEs.

The Tanzania Business Licensing Act and business regulatory authorities should be well-resourced in order to improve efforts of providing training, workshop programs and advisory services for SMEs at the very early stages in their development. This program will enhance the growth and survival for SMEs at the startup and early phases of operation and therefore their credit access. Commercial banks' perception of uncertain future of such SMEs will be reduced.

Secondly, the author recommends priority sector lending and access to credit must be introduced in Tanzania. Priority sector access to credit involves identifying crucial or essential sectors of the economy and making credit readily, easily and affordable to be accessed. For example, this could be the agriculture sector, technology service, certain category of SMEs owners (disabled or special need people) and firm age criteria approach.

The government should set up special SMEs initiative fund that could be accessed the small firms who do not meet the commercial banks credit requirement. For example, given that firm size and depth of credit information are key to accessing credit, [4] similarly recommended that SMEs should join Business Associations and seek group credit schemes.

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