BIDPA Working Paper 50

March 2018

Financing SMEs in Botswana: *Factors Influencing Access to Credit*

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BOTSWANA INSTITUTE FOR DEVELOPMENT POLICY ANALYSIS

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BIDPA is part-funded by the Government of Botswana.

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ISBN: 99912 65 58 9

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TABLE OF CONTENTS

ABSTRACT

This study examines factors influencing access to credit by SMEs in Botswana. Using the 2010 World Bank Enterprise Survey, and employing logit model for analysis, we find that access to credit is influenced by gender, citizenship and experience of the entrepreneur; as well as firm-size, sector of business,sales and land ownership. Therefore, public policy must pay attention to the diversities of SMEs' socio-economic characteristics as well as the business environment in which they operate when implementing finance assistance progammes. Measures to develop SMEs must be carefully focused, aiming at providing incentives for financial institutions to play an active role in SME financing. Government must formulate policies that will make finance institutions relax their requirements and lending procedures which tend to discourage borrowing. Similarly, public policy must be focused on strengthening the business acumen of SMEs through trainings and workshops, such that they are perceived attractive to financiers.

Keywords: Small and medium enterprises (SMEs), Access to credit, entrepreneur

1. INTRODUCTION AND BACKGROUND

Small and Medium Enterprises (SMEs) are perceived to be a fundamental part of a dynamic and healthy economy (Kuntchev et al., 2012). According to Beck (2007), SMEs are the emerging private sector and thus form the base for private sector development. Since they employ more labor intensive production processes than large enterprises, SMEs contribute to the provision of the much needed jobs, income generation and ultimately poverty reduction. It is generally believed that given the right conditions and support, there is a high potential that SMEs can contribute significantly to a country's economic diversification. However, their ability to grow depends on their potential to invest in restructuring and innovation (Ganbold, 2008), a strategy that requires access to finance.

Unfavorable financial market conditions may impede the performance and growth of SMEs. For example, it has been observed that SMEs are commonly constrained in accessing credit due to very demanding requirements, as well as bureaucratic lending procedures by finance institutions (Nkuah et al., 2013). In addition, financial institutions may decline to finance SMEs due to the risks associated with loaning to them (SMEs) and the high probability of defaulting (Atieno, 2011). Similarly, since SMEs are small in nature and are unlikely to build good relations with lenders, it is normally difficult for financial institutions to monitor them,thus creating problems of information asymmetry. Therefore, lenders may restrict access to credit to SMEs as a way of dealing with imperfect information (Stiglitz and Weiss, 1981).

In recognition of these challenges, the government of Botswana has over the years implemented a number of financial assistance programs to provide support for SMEs as well as encourage entrepreneurship. The policy of financing SMEs began in 1982 with the establishment of the Financial Assistance Policy (FAP) (AFDB/OECD, 2005). The main objective of this policy was to stimulate investment in sustainable economic activities, to further support enterprise development. However, amid instances of abuse and high project failures, the FAP scheme was terminated and was replaced by the Citizen Entrepreneurial Development Agency (CEDA) in 2001 after the introduction of the Small Medium Micro Enterprise (SMME) Policy. The goal of CEDA is to provide loans to businesses at subsidized interest rates. In addition, government funding schemes such as the Youth Development Fund and the Women Economic Empowerment Programme were established to provide finance to among others, small and medium enterprises. Other institutions such as the Local Enterprise Authority (LEA) were also launched to promote entrepreneurship and businesses development through training and mentorship.

Despite the assistance given by government through schemes discussed above,the lack of access to finance has remained one of the key constraints to SME development in Botswana (Central Statistics Office, 2009; World Bank, 2011). For example, a needs assessment study by LEA (2009) found that the majority (56%) of SMEs in Botswana

had no access to finance. One of the causes of this is that government policies in favor of SME development seem to be based on a one-size-fits-all approach, thus putting smaller and younger firms at a disadvantage (Lisenda, 1997). Moreover, Sentsho et al. (2007) reported that access to credit for SMEs in Botswana, as in many developing countries, is hampered by limited commercial bank support. Thus, it would appear that credit institutions still fail to cater for the needs of SMEs.

A limited number of studies has investigated access to credit by SMEs in Botswana. Using the 2007 Informal Sector Survey, Okurut et al., (2011) examined factors that influence the credit rationing behavior of banks towards SMEs in Botswana. Among other factors such as business earnings, ownership status and sector of the business; business experience was found to be one important factor that reduced the probability of SMEs being credit rationed in credit markets. When examining the relationship between SME financing, development and trade in Botswana, Kapunda et al. (2007) found that being female reduced the probability of access to credit as compared to being a male entrepreneur.

Studies above suggest that access to credit is inherently shaped by the credit rationing behavior of banks towards SMEs, development of the SME sector and trade among others. Nonetheless, the government of Botswana has designed several programmes to encourage access to credit by SMEs. Yet, SMEs continue to face constraints in the credit market regardless of the many financing options available to them. This calls for the need to empirically study why SMEs in Botswana continue to face credit constraints. This study therefore aims at examining the impact of both entrepreneur and firm characteristics on access to credit, using the World Bank Enterprise Survey of 2010. The study adds to the limited number of studies on access to credit in Botswana; and is expected to feed into the policy arena on the development of SMEs in Botswana.

The rest of this paper is organized as follows. Section 2 reviews the literature on factors influencing access to credit by SMEs, while section 3 discusses the methodological approach used in the study. Empirical results are presented in section 4, while section 5 presents the conclusions and policy implications.

2. REVIEW OF EMPIRICAL LITERATURE

Previous research has identified a number of factors that influence SME access to credit. It has been shown that SME access to credit is influenced by both owner and firm characteristics. Several factors have constrained SME access to credit. First, most SMEs are start-ups and young firms which by their nature tend to show volatile patterns of growth and earnings and are not transparent in their operations (Kung'u, 2011). Second, SMEs have a low asset base to use as security for loans, hence have no built-up relationships with lending institutions. In what follows, we consider both entrepreneur and firm characteristics in reviewing the literature on SME access to credit.

2.1 ENTREPRENEUR CHARACTERISTICS AND ACCESS TO CREDIT

Age of the Owner

According to Mpuga (2004), young individuals tend to borrow more for investment, while the old tend to rely more on their past savings and accumulated wealth. Notwithstanding the above submission, a number of studies (Duman, 2009; Punyasavatsut, 2011 and Hoque et al., 2016) have alluded to the commercial banks' willingness to extend more credit to older entrepreneurs than younger ones. This is because older entrepreneurs normally have established bank contacts or network of connections built through time. In their study, Hoque et al., (2016) found that as the age of the firm owner increases, the probability of access to credit increases. Nkuah et al., (2013) also found that entrepreneurs aged 31 - 40 years as well as 41 - 50 years were considered worthier of credit than younger age groups. Similarly, Punyasavatsut (2011) found that the likelihood of credit access increased with age of the business owner.

Gender

In a traditional African society, women are known to perform household chores while men undertake income generating activities. This segregation leaves female entrepreneurs with a weak financial position and no assets to present as collateral. Hence, women may face greater constraints in the credit market due to their cultural background and some traditional practices (Bennet and Goldberg, 1993). In their study Messah and Wangari (2011) found a gender distribution of 41% females and 59% males among individuals who accessed credit. Ololade and Olagunju (2013) also found that being female reduced the probability of having access to credit by 71%. Similarly, Nkuah et al. (2013) also found that male entrepreneurs were more favored by financial institutions than their female counterparts when it came to access to credit.

Education

Given the exploratory skills that comes with it, education helps entrepreneurs to prepare convincing business plans and gives them the ability to present plausible cases for loan application. According to Hoque et al.,(2016), educated entrepreneurs are always eager to improve their financial market skills, enabling them to present positive financial information before lenders. Thus, education can be associated with high performance of the business, as the owner is usually conversant with all the other areas of the business, including human resources, marketing and finance. Financial institutions may also find it appealing to deal with highly educated entrepreneurs as majority of them are able to utilize borrowed funds accordingly than the uneducated ones. Zeller (1994) supports this view as he found that the probability of being credit rationed significantly decreases as the number of years of schooling of the applicant increase.

Experience

Experience of the entrepreneur has a bearing on a firm's ability to access credit. For entrepreneurs with proven managerial experience, availability of funds could entail increased business productivity hence reduced demand for extra funds in the long run (Harvie et al., 2013). This is because there is a high probability that entrepreneurs with higher levels of experience can operate successful businesses than entrepreneurs with low levels of experience. Ololade and Olagunju (2013) attested to this when they found that experience is an important factor in determining both productivity of the firm and access to credit. However, Abdesamed and Wahab (2014) found that the owner-manager experience has no bearing on the difficulty level encountered by SMEs in accessing bank loans.

2.2 FIRM CHARACTERISTICS AND ACCESS TO CREDIT

Firm Age

Firm age is considered a key indicator of firm performance since its longevity is an indication of survival ability, quality management and increased positive image (Hoque et al., 2016). The more years of experience a firm has, the higher likelihood of it to access credit, as experience brings trust to the financial institution and eliminates the fear of possible default. Alhassan and Sakara (2014) also maintain that experience in credit use, which comes with years in operation, is a critical success factor in accessing bank finance. This is proved by Penoloza (2013) who found that a 1% increase in the market experience of the company increases the chance of getting a loan by 0.03%. Alternatively,firm age may lead to reduced demand for credit from accumulated savings by older firms leading to low demand for credit. For example, Duman (2009) found that the probability of accessing credit decreased as the age of the firm increased.

Size

The effect of firm size on credit access has attracted a lot of debates. One strand of the literature has suggested that larger firms have higher access to debt financing than smaller firms (Kira and He, 2012). According to El-Said et al., (2013), the higher the labor (which is a proxy for firm-size), the higher the probability of access to finance. Hoque et al., (2016) also found that as the number of employees increases, the probability of being credit rationed decreases. The other strand of the literature has found a negative association between firm size and access to credit. For example, Abdesamed and Wahab (2014) found a significant negative relationship between the number of employees and credit access. This is also attested by Nkuah et al., (2013) who found that SMEs with a few number of employees are the ones that received credit than those with many employees. However, other studies have found no significant relationship between access to credit and firm size (Bebczuk, 2004).

Sales

According to Punyasavatsut (2011), SME characteristics associated with better access to credit are those that reflect good performance of the firm. As a measure of performance, a firm's sales are thus identified as an important determinant of access to credit. Penaloza (2015) ascertained that firms with high production volumes and capitalization rates are able to access credit because they can easily produce resources needed for repayment of loans. He found that as the company increases its sales by 1%, its chances of accessing a loan rise by 7.7%. This is further supported by El-said et al. (2013) who found that sales turnover has a significant effect on having access to banking facilities. Nonetheless, greater sales may lead to low demand for credit by the firm. This is reiterated by Harvie et al. (2013) who submitted that rapid sales provide the firm with more liquidity and retained earnings, thereby reducing the demand for funds.

Business Sector

The performance of businesses also differs according to the market in which they operate. This affects the degree of access to credit. Some activities may require lump sum amount of funds while others require less. For example, demand for credit in the manufacturing sector is expected to be higher than that of any other sector due to the type of machinery and capital equipment needed in that sector. Despite these submissions, studies have found differing results with regards to the business sector and access to credit. El-Said et al (2013) found that the odds of accessing credit by firms in the manufacturing sector do not significantly differ from those firms in other economic sectors. On the other hand, Nkuah et al. (2013) found that firms that are in retailing and general services are considered worthier of financial credit that those in the manufacturing sector.

3. METHODOLOGY AND DATA

3.1 EMPIRICAL MODEL SPECIFICATION

In line with previous studies modelling the determinants of access to credit, this study adopts a binary logit model (Punyasavatsut, 2011; Ajagbe, 2012; Kira and He, 2012; El-Said, 2013; Ogubazghi and Muturi, 2014). The model is specified as:

$$ln\left(\frac{P_i}{1-P_i}\right) = \alpha_0 + \sum_{j=1}^{n} \beta_j X_{ij} + \varepsilon_i$$

Where, P_i is the probability that the i^{th} firm has access to credit, X_j denotes entrepreneur/ firm characteristic j, α_0 and β_j are parameters to be estimated, *ln* represents natural logarithm and ε_i is the disturbance term.

The model was estimated using logit regression, and represents the probability of access to credit. Table 1 defines variables used in the model and table 2 provides descriptive statistics. The dependent variable (access to credit) is binary, it takes a value of one if the firm had access to credit and a value of zero if the firm had no access to credit. Based on available data and literature, independent variables are grouped into entrepreneur characteristics and firm characteristics (Okurut et al., 2011; Penaloza, 2012; Alhassan and Sakara, 2014). Entrepreneur characteristics include gender, citizenship, experience and education of the entrepreneur, while firm characteristics include size (number of employees), sector, age, sales, land ownership status of the firm and whether the firm prepares financial statements.

3.2 DATA AND DESCRIPTIVE STATISTICS

The study uses data from the 2010 World Bank Enterprise Survey (WBES) to analyze the determinants of access to credit by SMEs in Botswana. While the total sample has 268 firms, this study is based on 223 SMEs and excludes large firms. Consistent with the World Bank definition, SMEs are those firms with 5-29 (small) and 30-99 (medium) employees. This is slightly similar to Government of Botswana (1999) which defines small enterprises as those firms with less than 25 employees, while medium enterprises are those with 26-99 employees.

Table 1: Definition of Variables used in the Model

Variable	Description
Dependent Variable	
Access to credit	1 if firm has a loan/line of credit from a financial institution, otherwise 0
Entrepreneur Characteristics	
Gender	1 if female and 0 if male
Citizenship	1 if citizen and 0 if non-citizen
Experience (years of the top manager's experience)	
9 and below	1 if experience is less than 10 years and 0 otherwise
10 – 19	1 if experience is 10 – 19 years, otherwise 0
20 – 29	1 if experience is 20 – 29 years, otherwise 0
30 and above	1 if experience is more than 30 years, otherwise 0
Education (highest level of education for the top manager)	
Primary School	1 if highest level of education is primary and 0 otherwise
Secondary School	1 if highest level of education is secondary and 0 otherwise
Vocational Training	1 if highest level of education is vocational training and 0 otherwise

Some University Training	1 if highest level of education is some university training and 0 otherwise
Graduate Degree	1 if highest level of education is degree and 0 otherwise
Firm Characteristics	
Size (number of employees)	
19 and below	1 if the number of employees is less than 20 and 0 otherwise
20 – 39	1 if the number of employees is 20 - 39, otherwise 0
40 – 59	1 if the number of employees is 40 - 59, otherwise 0
60 and above	1 if the number of employees is 60 or more, otherwise 0
Sector	
Manufacturing	1 if main sector of business is manufacturing and 0 otherwise
Retail	1 if main sector of the business is retail and 0 otherwise
Other Services	1 if main sector of the business is services, 0 otherwise.
Firm Age	
10 and below	1 if the business has been in operation for 10 years and below, otherwise 0
11 – 20	1 if business has been in operation for 11 - 20 years and 0 otherwise
21 and above	1 if business has been in operation for 21 years and above, 0 otherwise
Total Annual Sales	
P500, 000 and below	1 if annual sales are P500,000 or less, otherwise 0
P500, 000 < sales ≤ P1 mil	1 if annual sales are more than P500,000 but less or equal to P1,000,000, otherwise 0
P1 mil < sales ≤ P10 mil	1 if annual sales are more than P1,000,000 but less or equal to P10,000,000, otherwise 0
P10 mil < sales ≤ P100 mil	1 if annual sales are more than P10,000,000 but less or equal to P100,000,000, otherwise 0
Above P100 mil	1 if annual sales are more than P100,000,000, otherwise 0
Land Ownership	1 if land is 100% owned, 0 otherwise
Audited Financial Statements	1 if firm keeps audited financial statements and 0 otherwise

As seen, 48% of the enterprises had access to credit, and the remaining 52% had no access to credit. Only 19% of the businesses were owned by females and the remaining 81% were owned by males. Thus males dominate the business sector. Majority (51%) of the owners were citizens of Botswana. Most of the managers (37%) had 10-19 years of

experience, followed by 20-29 years (24%), less than 10 years (22%) and 30 years and above (17%). Educational background of the respondents varied from primary to tertiary levels. Most (57%) of the respondents had a graduate degree, followed by vocational training (20%), some university training (12%), secondary school education (9%) and primary school education (2%).

In terms of firm age, 44% of the firms had been in operation for less than 10 years, whereas 37% and 19% of them had been in operation for 11-20 years and 21 years and above, respectively. The respondents were also from different sectors, i.e. manufacturing, retail and other services. The majority (37%) of the firms operated in the retail sector, while 33% and 30% operated in the other services sectors and manufacturing sector, respectively. Most SMEs (42%) had total annual sales of P1-P10 million pula, followed by those with annual sales of below P500,000 (27%) and P10-P100 million (21%). Only 30% of the enterprises had full ownership of the land they occupied. On the other hand, 71% of the respondents had their annual financial statements checked and certified by an external auditor as compared to 29% who did not.

3.3 DATA LIMITATIONS

We observe some limitations with regard to the main variable of investigation, access to credit. We recognize that entrepreneurs do not access credit randomly. They first have to make a decision of whether or not to apply for credit, taking into consideration a number of factors such as the interest rates and collateral requirements. However, if they actually apply for credit, it is at the discretion of the credit institution whether to approve or reject the application (Zeller, 1994). Similarly, if the entrepreneur does not apply for credit, it may be that they have taken the decision not to apply willingly or that they perceived no chance of being approved even if they were to apply. Therefore, our main variable of investigation is limited in the sense that it does not distinguish between SMEs which did not apply for credit and those which applied but were denied access by financial institutions. It captures only those which have a loan and/or a line of credit from a financial institution. As a result, we can only assume that those SMEs which do not have a loan and/or a line of credit had applied and were unsuccessful. These firms include those who may have chosen not to apply because they did not require credit; they had no liquidity problems.

Table 2: Descriptive Statistics of variables used in the model

Variable	Mean	Std. Dev.	Min	Max
Dependent Variable				
Access to credit	0.48	0.50	0	1
Entrepreneur Characteristics				
Gender	0.19	0.39	0	1
Citizenship	0.51	0.50	0	1
Experience				
9 and below	0.22	0.41	0	1
10-19	0.37	0.48	0	1
20-29	0.24	0.43	0	1
30 and above	0.17	0.38	0	1
Education				
Primary School	0.02	0.15	0	1
Secondary School	0.09	0.28	0	1
Vocational Training	0.20	0.40	0	1
Some University Training	0.12	0.32	0	1
Graduate Degree	0.57	0.49	0	1
Firm Characteristics				
Sector				
Manufacturing	0.30	0.46	0	1
Retail	0.37	0.48	0	1
Other services	0.33	0.47	0	1
Size (number of employees)				
19 and below	0.57	0.49	0	1
20-39	0.22	0.41	0	1
40-59	0.12	0.32	0	1
60 and above	0.09	0.29	0	1
Firm Age				
10 and below	0.44	0.49	0	1
11-20	0.37	0.48	0	1
21 and above	0.19	0.39	0	1
Total Annual Sales				
P500,000 and below	0.27	0.45	0	1
P500,000< sales≤P1 mil	0.07	0.25	0	1
P1 mil < sales ≤P10 mil	0.42	0.49	0	1
P10 mil< sales ≤P100 mil	0.21	0.41	0	1
Above P100 mil	0.03	0.17	0	1
Land Ownership	0.30	0.46	0	1
Audited Financial Statements	0.71	0.45	0	1

n = 223

4. EMPIRICAL RESULTS AND DISCUSSION

The logit model results are presented in Table 3. The coefficients give the likelihood of access to credit given changes in explanatory variables, while the associated p-values give the estimate of the significance of the parameters. The marginal effects reflect the change in the probability of access to credit given changes in entrepreneur or firm characteristics. The log likelihood ratio (LR), which depicts the significance of the overall model, is statistically significant (Prob.>chi2=0.000). The model also explains about 24% of the variation in the dependent variable as indicated by Pseudo R2.

4.1 ENTREPRENEUR CHARACTERISTICS

As highlighted in the literature (Ololade and Olagunju, 2003; Messah and Wangari, 2011; Nkuah et al., 2013), the coefficient for the entrepreneur being female with respect to credit accessibility is negative and statistically significant. The marginal effects indicate that female entrepreneurs are 14 percentage points less likely to access credit than their male counterparts. This could be attributed to the weak financial position of women in the society.

Nationality of the entrepreneur also matters when it comes to access to credit. Citizen owners are 17 percentage points more likely to access credit than foreign owners. These results explain the preference of financial institutions to lend to citizen-owned firms because payment is seen as being better guaranteed, and in case of default citizens would be easier to locate than non-citizens.

The results indicate that managers with less than 10 years of experience are 31 percentage points more likely to access credit than managers with more than 30 years of experience. Similarly, managers with 10-19 years of experience are 22 percentage points more likely to access credit than those with more than 30 years of experience. Those with 20-29 years of experience are also 44 percentage points more likely to access credit than those with more than 30 years of experience. This may be because managers with more than 30 years of experience are able to operate successful businesses and have low demand for credit.

The coefficients for all categories of education are statistically insignificant, which was unexpected. The results imply that access to credit by entrepreneurs with primary, secondary, vocational training and some university training does not differ from those with a graduate degree. This is contrary to a number of studies (Zeller, 1994; Hoque et al., 2016) which found that financial institutions might find it appealing to lend to educated entrepreneurs.

4.2 FIRM CHARACTERISTICS

Given the type of machinery and capital equipment required in the manufacturing industry, it has always been the expectation that firms operating in this sector should have more demand for credit. The results meet this expectation in that SMEs in the manufacturing sector are 15 percentage points more likely to access credit than those in the retail sector. However, firms in other services sectors are not different from those in the retail sector when it comes to access to credit. As part of the credit is from public institutions, the results may also reflect government bias towards improving the manufacturing sector in its efforts to diversify the economy.

Contrary to Bebczuk (2004) who submitted that firm-size does not have any impact on access to credit, the findings show a significant relationship between the number of employees (measure of firm-size) and access to credit. Firms with 20-39 employees are 16 percentage points more likely to access credit than those with less than 20 employees. Similarly, those with 40-59 employees are 18 percentage points more likely to access credit than those with less than 20 employees. However, contrary to the expectation firms with more than 60 employees are 29 percentage points less likely to access credit than those with less than 20 employees. This may be because large firms with more than 60 employees are more liquid and have no demand for credit.

The results show that there is no significant relationship between firm age and access to credit. Firms with 11 – 20 years in operation and those with more than 21 years in operation are not statistically different from those with less than 10 years in operation when it comes to access to credit. This is contrary to the findings of Alhasan and Sakara (2014) who found that there is a positive association between firm age and access to credit.

Enterprises with sales of P500,000 and below are 12 percentage points less likely to access credit than those with sales of more than P1 million and less than or equal to P10 million. Similarly, those with sales of more than P500,000 and less than or equal to P1 million are 28 percentage points less likely to access credit as compared to those with sales of more than P1 million and less than or equal to P10 million. However, firms with sales of more than P10 million and less than or equal to P100 million and those with sales of more than P100 million have insignificant coefficients, implying that their probabilities of accessing credit are not statistically different from those with sales of more than P1 million and less than or equal to P10 million.

An enterprise is more likely to access funds from a financial institution if it has a pool of assets to show as collateral. Land as a factor of production is used in this study to determine the position of a firm in providing assets as security for the loan. The results indicate that ownership of land is positively related to access to credit. Enterprises that operate on a fully owned piece of land are 15 percentage points more likely to access credit than those that only own part or do not own the land in which they operate. A plausible

explanation for this is that land ownership provides an acceptable collateral for loans by financial institutions. Another factor that could influence a firm's ability to secure funds is if it has its financial statements checked and certified by an external auditor annually. However, contrary to Kung'u (2011), keeping audited financial statements does not have any effect on the ability of SMEs in Botswana to access credit.

Table 3: Factors Influencing Access to Credit

Variable	Coefficient	P > z	Marginal Effect
Entrepreneur Characteristics			
Female	-0.757	0.094*	-0.135
Citizen	0.954	0.005**	0.170
Experience (30 and above omitted)			
9 and below	1.708	0.006**	0.305
10 – 19	1.216	0.024**	0.217
20 – 29	2.471	0.000***	0.441
Education (graduate omitted)			
Primary School	0.094	0.936	0.017
Secondary School	0.747	0.212	0.133
Vocational Training	0.369	0.393	0.066
Some University Training	-0.339	0.518	-0.061
Firm Characteristics			
Sector (retail omitted)			
Manufacturing	0.845	0.048**	0.151
Other Services	0.312	0.441	0.056
Size (19 and below omitted)			
20-39	0.899	0.048**	0.160
40-59	1.032	0.087*	0.184
60 and above	-1.621	0.033**	-0.289
Firm Age (10 and below omitted)			
11 – 20	0.098	0.803	0.018
21 and above	-0.712	0.180	-0.127
Sales (P1mil < sales ≤ P10 mil omitted)			
P500,000 and below	-0.678	0.097*	-0.121
P500,000 < sales ≤P1 mil	-1.559	0.034**	-0.278
P10 mil< sales ≤P100 mil	0.494	0.292	0.088
Above P100 mil	-2.307	0.103	-0.412
Land Ownership	0.826	0.045**	0.147
Audited Financial Statements	0.234	0.517	0.042
Constant	-2.598	0.001***	
Number of Obs.	223		
LR chi2	72.40	0.000***	
Pseudo R2	0.235		

*p<0.01; **p<0.05; ***p<0.1

CONCLUSION AND POLICY IMPLICATIONS

This paper examined factors that influence access to credit by SMEs in Botswana. The results show that access to credit is influenced by gender, citizenship and experience of the manager, as well as firm-size, sector of business, sales and land ownership. The paper concludes that female entrepreneurs are less likely to access credit than their male counterparts. Therefore, there is need for amplified targeting of female entrepreneurs in credit programmes. Further it is important to determine factors that impede women from accessing credit and to raise awareness on those issues so as to harness opportunities for increased financial inclusion of women.

SMEs owned by citizens are more likely to access credit than those owned by non-citizens. A plausible reason for this might be that in case of default, citizens would be easier to locate than non-citizens. Therefore, public policy should target those SMEs headed by citizens as part of the strategy to ensure credit accessibility amongst them.

The paper also concludes that firms in the manufacturing sector are more likely to access credit than those in the retail sector. Given that the growth of the manufacturing sector is of paramount importance to the economy of Botswana, it is therefore critical for public policy to ensure that it targets SMEs in the manufacturing sector when designing credit programmes.

Experience of the entrepreneur matters with regard to access to credit. This is expected because the owner's proven managerial experience is likely to lure financial institutions' trust as well as guarantee lower probability of defaulting on the part of the SME. This therefore calls for intensification of efforts by the development finance institutions such as CEDA to increase credit for start-ups who may have difficulties in accessing commercial bank credit. Public policy must also emphasize capacity development of smaller firms so as to enable them to qualify for bank loans.

The paper further ascertains that firm-size influences access to credit. SMEs with a larger number of employees are less likely to access credit than those with fewer employees. Since this might be due to the fact that as SMEs widen their employee base they are able to sustain themselves, measures to support smaller firms should continue to be emphasized to ensure profitability and hence reduced dependence on credit.

We also conclude that sales significantly relate to access to credit. SMEs with lower sales are less likely to access credit than those with higher sales. Thus, given that higher sales are a reflection of good performance and that financial institutions consider sales as a measure of a firm's credit worthiness, public policy should encourage the expansion of SMEs as part of the financial inclusion strategy.

When measured against part ownership of the land, operating in a fully owned piece of land enhances the probability of accessing credit. However, given that only 30% of the SMEs fully own the land in which they operate, the government must review land allocation policies so as to avail more land to small and medium enterprises. The results also underline the need for banks to cut the rigid collateral requirements and develop products suitable for SMEs.

In general, it is necessary that public policy pays attention to the diversities of SMEs' socio-economic characteristics as well as the business setting in which they operate when implementing finance assistance programmes. Finance assistance programmes tailor-made for both youth and female owned enterprises such as CEDA, Youth Development Fund and Women Economic Empowerment Programme must be carefully focused to take into consideration their different needs. Furthermore, financial institutions should improve their enterprise financing services such that they are accessible to all SMEs. Similarly, public policy must be focused at strengthening the business acumen of SMEs through training and workshops, such that they are perceived attractive to financiers. Lack of appropriate information among SMEs also calls for the government to improve awareness among them on the range of financing options available.

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