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# PERCEIVED RELATIONSHIP BETWEEN FIRM'S FINANCIAL CHARACTERISTICS AND ACCESS TO DEBT FINANCING: A CASE OF SMALL AND MEDIUM AGRIBUSINESS ENTERPRISES IN BENI TOWN, DEMOCRATIC REPUBLIC OF THE CONGO

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**Abstract**

*This study investigated the relationship between firm's financial characteristics and access to debt financing among small-sized agribusiness enterprises in Beni, DRC. The researcher targeted 91 finance managers across all the 27 Agri-SMEs operating in Beni as of February 2019. A structured questionnaire was used to collect primary data in standardized way. The researcher ensured of the construct validity as well as the content validity of the questionnaire. Findings showed that Agri-SMEs' collateral, financial performance, as well as the quality of their financial statements influence access to debt financing in terms of both debt size and borrowing frequency. The study indicated that 59.8% (Adjusted R Square = 0.598) of the variation in access to debt financing was explained by variations in firm's financial characteristics. The study recommends that collateral requirements should be commensurate with loans size in order to allow small businesses with relatively fewer assets to afford access to debt financing.*

*Keywords: Access to Debt Financing, Firm's Financial Characteristics, Agri-SMEs, Collateral, Financial Performance*

## INTRODUCTION

Notwithstanding its undeniable agricultural potential, the Democratic Republic of the Congo (DRC) is extremely underdeveloped (Lubanda, Smutka, & Selby, 2016). The country ranked 176 out of 185 countries in the 2016 Human Development Index (UNDP, 2016). In addition, despite a steady economic growth since 2002, the GDP per capita in purchasing power parity is one of the lowest in the world. It amounted to approximately $ 812 in 2015, and thereafter dropped to $ 808 in 2017 (World Bank, 2018). Researchers as well as policy makers often agree that the economic growth reported in the country over the past two decades has not led to development (Mirembe, 2013). This economic growth is often described as non-inclusive because it only benefits sectors such as mining, trade and construction. Most important sectors such as agriculture and manufacturing, which employ a large segment of the population have been left out of the economic expansion (Shuwa, 2017).

Kisangani and Bobb (2010)noted that in 1958, 40 % of the export value was from agriculture, as compared with 10 % in 1973. In 1997, agricultural exports represented only 2% of the country's total exports. Furthermore, the agricultural trade balance has been negative in the recent years (Lubanda, Smutka, & Selby, 2016). Data from the Central Bank of Congo (Banque Centrale du Congo) show that agriculture accounted only for 22.4% of the country's GDP in 2016 (Banque Centrale du Congo [BCC], 2017).

There are strong arguments for prioritizing agribusiness in DRC. First, DRC population is growing at a fast pace. The World Population Review estimates suggest that the country had over 80 million people in 2018 (World Population Review, 2018). As a result, need for food and other agricultural products is rising and agribusiness role is being accentuated. Secondly, with most of the population being concentrated in agricultural sector, agribusiness has the potential to absorb human capital, provide employment and increase labour productivity within the DRC (Bulaya, 2017). Agribusiness enterprises should therefore play a key role in DRC's economic development process.

Unfortunately, numerous challenges prevent small and medium agribusiness enterprises (Agri-SMEs) from living up to expectations. These challenges include transport and infrastructure, political instability, cost of inputs, climate change and crop diseases (Bulaya, 2017). In addition, in developing countries, finance is often considered as the main culprit of SMEs' failure (Majanga, 2015). Some of the most frequently encountered financial challenges are: insufficient/lack of credit, lack of awareness, lengthy bureaucratic procedures and arbitrary measures applied by banks to potential borrowers, lack of working capital, unfavourable terms of borrowing, high cost of capital (Bhoganadam, Rao, & Rao, 2017; Farsi &Toghraee, 2014).

Firm financial characteristics such as collateral, financial performance and financial records affect its ability to access debt financing. This study examines the perceived relationship between these characteristics and access to debt financing among Agri-SMEs operating in Beni, a town located in North-Kivu Province, DRC.

## THEORETICAL FRAMEWORK

This study was informed by the information asymmetry theory and the pecking order theory (POT). The information asymmetry theory suggests that there is incentive for sellers to market poor quality merchandise (Akerlof, 1970). Information asymmetry can lead debt financing providers to make decisions that could be detrimental to credit applicants. Information asymmetry is likely to result in credit rationing in which some borrowers are unjustifiably denied finance (Nyoni, 2018). Further, Nyoni pointed out that information asymmetry can result in adverse selection whereby insolvent businesses are the most likely to apply for credit. This explains why most finance providers require collaterals from credit applicants (Rahman, Belas, Kliestik, & Tyll, 2017).

According to the pecking order theory, the financing decision of enterprises is subject to the following hierarchy: self-financing, non-risky debt issuance, risky debt issuance and equity issuance as a last resort. In fact, firms with more internally generated funds and high liquidity are expected to use less debt (Al-Tally, 2014). Also, the pecking order theory highlights the importance of financial performance (Brealey, Myers, & Allen, 2011). Indeed, only profitable firms can afford using less debt because they generate sufficient internal capital.

### Firm's Financial Characteristics

Financial characteristics such as performance, collateral base and quality of financial reporting can influence the ability of an enterprise to access debt financing. Empirical evidences suggest that there is a relationship between a firm's performance and the extent to which it can access credit (Lourenço & Oliveira, 2017). Moreover, researches have proven that asset basis also referred to as firm's collateral have an influence over its ability to access credit. Osano and Languitone (2016) found that there is a significant relationship between collateral requirements and access to finance by SMEs in Maputo, Mozambique. Also, quality of financial information produced by an SME is deemed to influence its likelihood to access debt financing. Kung'u, Claude, and Mang'oka (2016) argued that SMEs in Kenya find it hard to access debt financing from the formal financial institutions because they lack proper financial records; and do not have audited financial statements based on reliable accounting standards.

### Access to Debt Financing

Debt is referred to as outside finance employed in the business with obligation to pay back (Akingunola, 2011). The most common debt financing instruments for agribusiness include trade credit, commercial bank loans, cooperative borrowing, and leasing. Trade credit consists of credit advanced by suppliers and vendors of the agribusiness firm. However, commercial banks are the major source of borrowed funds for most agribusinesses because they avail a wide range of financial products such as checking accounts, savings accounts and loans (Osano & Languitone, 2016). Cooperative, which are organizations owned and controlled by members, also provide financial services for agribusiness firms. The advantages of cooperative loans include: low interest rates that limit the possibility of loan defaults, and personal guarantor system that helps borrowers to circumvent the collateral requirements (Oluyombo, 2013).

Access to debt financing refers to the situation where there is little or no significant financial hindrances to the acquisition of debt capital (Bature, Sallehuddin, & Hin, 2018). There are two common ways to appraise access to debt financing. Access to debt financing can be measured in terms of how often an enterprise successfully borrows (Nanyondo, Tauringana, Kamukama, & Nkundabanyanga, 2014). Access to debt financing can also be measured by the size of the loan an enterprise has obtained (Zarook, Rahman, & Khanam, 2013).

## METHODOLOGY

This study adopted a descriptive design in order to get in-depth treatment of the problem under investigation (Freitas, Bufrem, & Breda, 2016). The researcher attempted to describe how firm's financial characteristics influence access to debt financing by Agri-SMEs. The descriptive design also enabled the researcher to relate the interaction of the study's variables (Cooper & Schindler, 2014).

In this study, the researcher targeted all the 91 finance managers across all the 27 Agri-SMEs operating in Beni, DRC as of February 2019. The Agri-SMEs have been grouped into four broad categories as follow: farming, distribution, processing and final consumption (Table 1).

Table 1: Sampling

| Sector | Number of Agri-SMEs | Finance managers |
|---|---|---|
| Farming | 2 | 5 |
| Distribution | 8 | 29 |
| Processing | 8 | 31 |
| Final consumption | 9 | 26 |
| Total | 27 | 91 |

This study used a structured questionnaire to collect primary data from Agri-SMEs in Beni town. The use of a questionnaire was justified by the fact that it enables the researcher to collect quantitative data in standardized way for consistency and coherence (Roopa & Rani, 2012).

The researcher ensured of the construct validity as well as the content validity of the questionnaire. Construct validity was arrived at by ensuring whether or not the instrument taped the concept as theorized (Sekaran & Bougie, 2016). The content validity was achieved by closely examining the questionnaire to check the relevance of the questions in terms of their objectivity, meaning and clarity. The researcher also tested the reliability of the questionnaire. Reliability of a research instrument refers to the consistency of the measure of a concept (Cooper & Schindler, 2014). Cronbach's alpha was computed to test for internal reliability. Admittedly, the questionnaire is reliable if the Cronbach's alpha value is greater than or equal to 0.7 (Bryman & Bell, 2011). The reliability statistics are shown in table 2.

Table 2: Cronbach's Alpha Coefficients for Multiple Likert Scale Items

| Category of multiple Likert scale items | Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No. of Items |
|---|---|---|---|
| Firm's Financial Characteristics | .869 | .871 | 6 |
| Access to debt financing | .797 | .798 | 7 |

Cronbach's alpha coefficients for all variables with multiple Likert scale items was more than 0.7, an indication that the level of internal consistency for the items that were used in each variable was acceptable hence the items were reliable to measure variables and achieve the objectives of this study.

## ANALYSIS AND RESULTS

This research used both descriptive and inferential statistics to analyse the data obtained. Inferential statistics consisted running a simple regression analysis in order to determine the effect of firm's financial characteristics on access to debt financing among Agri in Beni, DRC. This study adopted the following analytical model: $Y = \beta 0 + \beta 1X1 + \varepsilon$

Where: Y was the access to debt financing by Agri-SMEs (dependent variable);

$\beta 0$: The regression constant;

$\beta 1$: Coefficient of firm's financial characteristics;

X1: Firm's financial characteristics (independent variable)

$\varepsilon$: Error term.

X1 is a composite variable. Financial characteristics consist of collateral, performance and quality of financial statements. Therefore, X1 is the mean score for collateral, performance and financial statements.

## Study Response Rate

91 questionnaires were administered, out of which 89 were properly filled and returned leading to a response rate of 97.8%. According to Mugenda and Mugenda (2003), as far as a descriptive research is concerned, a response rate of 50% is adequate, 60% is good and 70% or more is excellent. Thus, this study's response rate of 97.8% was excellent for analysis.

## Manager's perception of the relationship between Firm's Financial Characteristics and Access to Debt Financing

The researcher listed six statements that link firm's financial characteristics with access to debt financing in terms of both borrowing frequency and debt size. Respondents were asked to indicate the extent to which they agreed or disagreed with the statements (Table 3).

Table 3: Extent to which financial characteristics influence access to debt financing

| Statement on effect | | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total |
|---|---|---|---|---|---|---|---|
| **The firm's collateral basis influences its borrowing frequency.** | N | 0 | 4 | 23 | 31 | 31 | 89 |
| | % | 0.0 | 4.5 | 25.8 | 34.8 | 34.8 | 100 |
| **The firm's collateral basis influences the amount of debt it can get from creditors.** | N | 1 | 3 | 27 | 22 | 36 | 89 |
| | % | 1.1 | 3.4 | 30.4 | 24.7 | 40.4 | 100 |
| **The firm's performance, as measured by profitability, influences its borrowing frequency.** | N | 0 | 3 | 14 | 37 | 35 | 89 |
| | % | 0.0 | 3.4 | 15.7 | 41.6 | 39.3 | 100 |
| **The firm's performance, as measured by profitability, influences the amount of debt it can get from creditors.** | N | 0 | 0 | 14 | 43 | 32 | 89 |
| | % | 0.0 | 0.0 | 15.7 | 48.3 | 36.0 | 100 |
| **The quality of the financial statements prepared by the Agri-SME influences the number of times it accesses debt financing.** | N | 0 | 0 | 11 | 42 | 36 | 89 |
| | % | 0.0 | 0.0 | 12.4 | 47.2 | 40.4 | 100 |
| **The quality of the financial statements prepared by the Agri-SME influences the amount of debt it can get from creditors.** | N | 0 | 2 | 19 | 34 | 34 | 89 |
| | % | 0.0 | 2.2 | 21.3 | 38.2 | 38.2 | 100 |

Findings in Table 3 reveal that the majority (at least 65%) of the respondents support the opinion that the collateral, the firm's performance (as measured by profitability), and the quality of firm's financial statements influence access to debt financing in terms of both debt size and borrowing frequency. These findings clearly show that financial characteristics have an effect on access to debt financing among Agri-SMEs in Beni.

**Effect of Financial Factors on Access to Debt Financing**

The study sought to determine the influence of financial factors on access to debt financing among Agri-SMEs. To achieve this, the researcher resorted to a simple linear regression. The results were as follows.

Table 4: Model Summary for Financial Factors

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .776[a] | .603 | .598 | .47824 |

a. Predictors: (Constant), Financial factors

Results in Table 4 reveal that 59.8% (Adjusted R Square = 0.598) of the variation in access to debt financing was explained by variation in firm's financial characteristics. Further, the researcher tested if the model is valid. The ANOVA statistics were as follows:

Table 5: ANOVA Table for Financial Factors

| ANOVA[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| | Regression | 30.195 | 1 | 30.195 | 132.019 | .000[b] |
| | Residual | 19.898 | 87 | .229 | | |
| | Total | 50.093 | 88 | | | |

a. Dependent Variable: Access to debt financing

b. Predictors: (Constant), Financial factors

The ANOVA results in Table 5 reveal that the model was statistically significant ($F=132.019$, $p<0.05$). Consequently, the researcher did a regression model to ascertain the predictive power of financial factors on access to debt financing.

Table 6: Simple Regression Coefficients for Firm's Financial Characteristics

| Model | | Un-standardized Coefficients[a] | | Standardized Coefficients | T Statistics | Sig. Level |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| | (Constant) | -.649 | .381 | | -1.706 | .092 |
| 1 | Financial factors | .998 | 0.87 | 0.776 | 11.490 | .000 |

a. Dependent Variable: Access to debt financing

Findings in Table 6 suggest that financial factors have a positive effect on access to debt financing ($\beta=0.998$, $p<0.05$). The beta value implied that for one unit increase in financial factors, access to debt financing increased by 0.998. Therefore, the findings suggest that financial factors were significantly related to the access to debt financing Agri-SMEs operating in Beni Town.

## DISCUSSION

Findings in this study are supported by a number of previous studies. Kira (2015) and Osano and Languitone (2016) ascertained that collateral is a decisive aspect for borrower to succeed in accessibility of debt financing from lenders. Profitability is one of the determinants of access to debt that have great support in literature (Lourenço & Oliveira, 2017). Many creditors base their decision to lend on the strength of the balance sheet and income statements (Berger & Udell, 2002). Therefore, SMEs with poor bookkeeping find it hard to access debt financing. Ezeoha and Botha (2012) found that a sound asset basis guaranties a greater access to long-term debt financing in South-Africa. Karanja et al. (2015) demonstrated that meeting collateral requirement has a major positive significant contribution on access to debt financing in Kenya.

## CONCLUSION

This study examined the perceived relationship between firm's financial characteristics and access to debt financing. Results revealed that 59.8% of the variation in access to debt financing was attributable to variation in firm's financial characteristics. Furthermore, findings suggested that financial factors have a positive effect on access to debt financing ($\beta=0.998$, $p<0.05$). The beta value implied that for one unit increase in financial factors, access to debt financing increased by 0.998. Therefore, the findings suggest that financial factors were significantly related to the access to debt financing Agri-SMEs operating in Beni Town.

The study recommends that collateral requirements should be commensurate with loans size in order to allow small businesses with relatively fewer assets to afford access to debt financing. Agri-SMEs should also improve their accounting practices so that they can be trustworthy vis-à-vis credit providers.

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