Capital structure, market conditions and financial performance of small and medium enterprises in Buganda Region, Uganda

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Abstract

Small and Medium Scale Enterprises (SMEs) continue to be major players in the economic growth of Uganda as well as many of the emerging economies. The Uganda Investment Authority had projected 5.5% economic growth by 2030 in anticipation of stable market conditions necessary for the sustained financial performance of SMEs. However, the business failure rate of SMEs in Uganda had persistently revolved around 70% in 2018 from 50% in 2004. This problem had been linked to the turbulent market conditions characterized by intensive competition as well as volatile consumption behavior of the customers. Empirical literature indicates that competitive intensity, as well as volatile customer demand, presents a negative impact on financial performance. Hence, the study sought to determine the moderating effect of market conditions on the capital structure-financial performance relationship of SMEs in Uganda. From a population of 218,561 SMEs, a sample of 453 respondents was selected out of which, 423 responded to the questionnaire. Primary data were analyzed using descriptive statistics and multiple regression techniques. The hypothesis was tested at a 0.05 level of significance. Findings indicated that Market conditions had a positive and significant moderating effect on the capital structure-financial performance relationship (β= 0.175 and p = 0.027). We conclude that market conditions can strengthen/weaken the effect of capital structure on the financial performance of SMEs. We recommend that SMEs should evaluate the market conditions during the process of deciding the financing mix for their operations to optimize the impact of capital structure on financial performance.

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Introduction

The relevance of capital to business startup and survival has gained prominence in the recent past because of the fluctuations in performance due to unpredictable business environment (Drover, Busenitz, Matusik, Townsend, Anglin & Dushnitsky, 2017). The same authors maintain that equity capital is a springboard for the operations of any business concern. Other studies indicate that equity capital finances the initial costs operationalize the noncurrent assets and facilitates firms in acquisitions and mergers thereby enhancing firm growth as well as financial performance (Akeem, Terer, Kiyanjui & Kayode, 2014; Yapa Abeywardhana, 2016). A poorly thought-out capital structure could lead to a reduction in firm value thereby frustrating the strategic expectations of the shareholders. Accordingly, managers strive to obtain close to an optimal capital structure to maximize the value of the firm. Whereas the optimal capital structure for firms has not been established empirically (Cekrezi, 2013), finance theory indicates that managers must seek a financing mix that optimizes the expectations of the firm's key stakeholders. Accordingly, financing decisions are critical in determining the value as well as the overall risk of the firm (Dao & Ta, 2020). The achievement of the strategic objectives of the key stakeholders of the firm is dependent on the quality of the financing mix decisions managers make.

Studies on the direct relationship between capital structure and financial performance have focused on short-term debt, long-term debt, and equity capital as its major components. Empirical literature indicates that studies linking each of the components of capital structure to financial performance have recorded contradicting results about the relationship. For instance, whereas Shikumo, Oluo,
and Wepukhulu (2020); Karuma, Ndambiri, and Oluch (2018) found a positive and strong relationship; Mboi, Muturi, and Wanjare (2018) recorded a negative and significant impact of short-term debt on firm performance. Whereas the direct capital structure–firm performance relation has been considerably studied, finance research about the moderating effects in the relationship remains scanty especially about SMEs in Uganda. This is against the fact that the effective use of a firm's resources to enhance financial performance is dependent on the conditions in the environment (Teece, 2007). Vij and Farooq (2017) maintain that competitive intensity and market turbulence have been identified among the most widely used moderators in business research.

The performance of SMEs continues to generate debate among researchers, academics, policymakers as well as business practitioners. Empirical evidence indicates that SMEs have had to cease operations due to financial performance challenges in developed and emerging economies alike. For instance, a fall in profits of 20% was reported in Slovakia since the financial crisis of 2007–2009 while a decline of 1.3% in the SME growth was recorded in Mexico for the 2015/2016 financial year (Belas et al., 2015; Palacios et al., 2016). Relatedly, the Kenya National Bureau of Statistics (2016) reported that 73.5% of the SMEs had ceased operations in the previous five years, including 2016. In Uganda, the Competitive Industries and Innovation Program (2016) reported a fall in credit growth by 50% in the period between 2013 and 2016 in the major sectors of the economy.

Moreover, finance theories exploring the association between capital structure and financial performance present conflicting propositions. For instance, the capital structure irrelevancy proposition maintains that the value of the firm is not determined by the combination of debt and equity but rather the value of its real assets (Al-Kahtani & Al-Eraij, 2018). In contrast, the pecking order and the tradeoff theories suggest the relevancy of capital structure in the determination of firm value (Myres & Mujlaf, 1984; Jensen & Mckling, 1976). Empirically, findings on the relationship between capital structure and firm financial performance has continued to be contradictory. For instance, Akeem, Terer, Kiyanjui, and Kayode (2014) as well as Dao, and Ta (2020) established a negative relationship between total debt and firm performance while Iqbal, Farooq, Sandhu, and Abbas (2018) recorded a positive link. Ebad (2009) on his part recorded a weak to no effect relationship.

The contradictions in both the theoretical propositions as well as empirical results in the capital structure-financial performance association are mainly attributed to research approaches that ignore the effect of hidden variables such as moderation in the relationship (Vij & Farooq, 2017; Zhang, Wang & Song, 2020). While it is possible to study the moderating variables in finance research, finance researchers have given limited attention to the approach especially on SMEs (Mohammad & Navida-Reza, 2016). The authors maintain that failure to establish the moderating effects renders the findings incapable of providing solutions to business problems.

Accordingly, this study focused on competitive intensity and market turbulence as important marketplace conditions which influence the capital structure–firm performance relationship. Competitive intensity and market turbulence were measured using a 5-degree Likert scale questionnaire as had been done in most related empirical studies (Kwiecinski, 2017; Jing & Yanling, 2010; Tomaskova, 2009).

The objective of the study was to investigate the moderating effect of market conditions in the relationship between capital structure and financial performance of Small and Medium-scale Enterprises in the Buganda region, Uganda. Literature has indicated that moderation studies improve the quality of the research output by establishing the influence of the hidden variables on the relationship between the predictor and the response variables (Vij & Farooq, 2017). The authors maintain that knowledge of the effect of an extra variable in a direct relationship between the explanatory variables provides additional information useful in making effective business decisions. We argue that whereas capital structure influences financial performance, its impact can be amplified or weakened by the market conditions. Accordingly, this study adopted the following hypothesis:

\[ H_0: \text{Market conditions do not have a significant moderation effect in the relationship between capital structure and Financial Performance of Small and Medium-scale Enterprises in the Buganda region, Uganda.} \]

The rest of the paper is organized as follows: section two presents the theoretical and the empirical review; section three discusses the methodology and data analysis techniques as well as the empirical model of the study. Section four presents the results and their discussion. Lastly, conclusions and recommendations are presented in section five.

**Literature Review**

**Theoretical Review and Conceptual Framework**

**The Pecking Order Theory**

The Pecking order theory as proposed by Myers and Majluf (1984) posits that successful firms choose to employ significantly low levels of debt in their capital structure. In light of the pecking order theory, managers prefer to finance their operations following a hierarchy of financing options. Accordingly, managers will prefer to use their internally generated funds and when they are exhausted, they use debt and finally consider equity as the last resort (Ting & Lean, 2011).

The Pecking order theory gives another clarification in explaining firm leverage. Unlike the trade-off theory, profitability is anticipated to translate into a reduction of leverage since more profitable firms can finance their capital requirements using retained earnings (Myers, 1984; Forte, Barros & Nakamura, 2013). Because shareholders negatively look at the issuance of shares, firms tend
to choose to increase capital using their accumulated profits, if not sufficient, borrowing and finally issuing new equity (Abor & Biekpe, 2009).

The pecking order theory is commended for explaining the capital structure changes as well as abating the cost of equity by emphasizing the use of retained earnings as the major financing option (Butt, Khan & Nafees, 2013). However, it does not address the effect of taxes, financial distress, and agency costs on the capital structure of firms; and also ignores the problems that may arise when firms accumulate so much financial slack that the managers become indifferent to market discipline (Abeywardhana, 2017).

The pecking order theory is discussed in this paper to anchor the capital structure variable. The choice of the theory is premised on its contribution in explaining the link between capital structure and financial performance.

**Tradeoff theory**

The tradeoff theory as advanced by Jensen and Meckling in 1976, proposes that the financing decision of a firm should be determined by the tradeoff between the benefits of the tax shield offered by the debt interest payments and the cost of financial distress (Ahmad & Abdul-Rahim, 2013). According to the tradeoff theory, successful firms prefer to employ high levels of debt in their capital structure to exploit the benefits that accrue from the debt interest tax shield (Ghazouani, 2013). Accordingly, firms strive to achieve the optimal capital structure by balancing the advantages of debt interest tax shield and the effects of financial distress.

According to Ahmadimousaabad, Bajuri, Jahanzeb, Karami, and Rehman (2013), the application of the tradeoff theory is key in achieving the financing mix that maximizes returns on investment in line with the shareholders’ goal of profit maximization. The optimal capital structure is obtained by weighing the marginal cost of debt against the marginal benefits of debt (Adair & Adaskou, 2015). The author maintains that borrowing will increase the benefits of debt up to a point when any additional debt leads to a reduction in the benefits and instead increase the additional cost per additional unit of debt. The point where the marginal benefit of debt equates to the marginal cost of debt marks the desired debt to equity ratio that optimizes firm performance.

**Stakeholder theory**

The stakeholder theory was developed as a reaction to the shareholder theory of firm performance. Whereas the shareholder theory considers shareholders as the only stakeholders that matter in the life of a firm, the stakeholder theory proposes that the success of the firm is determined by all the entities in the community that influence and are influenced by the firm's objectives and operations (Freeman, 1984). The author defines stakeholders to encompass all the parties within the environment in which the firm operates without which, the firm would not exist including customers, suppliers, shareholders, public and private sector institutions as well as the government regulatory bodies.

Proponents of the stakeholder theory argue that the satisfaction stakeholder’s desire transcends beyond just the economic benefits (Harrison & Wicks, 2013). The authors argue that businesses that provide utility exceeding the economic value are more likely to attract and sustain the loyalty of their stakeholders, which is critical for successful performance. This corroborates Lau (2011), who argued that firm performance is enhanced by paying attention to the needs of customers and consequently designing matching product offerings. Accordingly, sustainable firm performance is dependent on customizing its product offerings not only to the wide stakeholder group but also beyond the expected economic value.

The stakeholder theory is discussed in this paper to anchor the dependent variable of financial performance. Studies indicate that the stakeholder viewpoint of the theory enables supervisors to identify areas to focus upon in the attempt to create greater value (Dossi & Patelli, 2010). Harison and Wicks (2013) on their part argue that the stakeholder view of performance necessitates that researchers widen their focus on the effect of firm activities on performance to a wider perspective of stakeholders.

**Conceptual Framework and study variables**

Following the theoretical literature reviewed, the study suggests a framework that provides a graphic presentation of the conceptualized interaction between capital structure, market conditions, and financial performance. The framework indicates the predicted effect of market conditions in the relationship between capital structure and financial performance of SMEs in Uganda.

![Figure 1: Conceptual Framework; Source: Researcher, 2021](image-url)
The study suggests that the choice of a given combination of financing mix enhances financial performance. Capital structure is represented by short-term debt, long-term debt, and equity capital; while financial performance is measured by return on assets. The moderating effect of market conditions in the capital structure-financial performance relation is represented by the competitive intensity and market turbulence. The study adopted short-term debt, long-term debt, and equity capital as measures of capital structure because they are the most used in empirical studies regarding the subject under study (Khan, 2012; Salim & Yadav, 2012; Dananti & Cahjono, 2017). Financial performance was measured using return on assets because it is not only the most frequently used but also the most relevant measure of financial performance (Aliabadi et al., 2013; Carton & Hofer, 2010).

**Empirical Review**

**Capital Structure and Financial Performance**

Financial performance is key to the sustainability and long-run survival of Small and Medium-scale Enterprises. Studies have indicated that growth in financial resources of a firm facilitates innovation, product re-engineering as well as improvement in stakeholder relationships (customers, shareholders suppliers) (Chasmi & Fadaee, 2016; 2018). Attempts to examine what spurs financial performance have precipitated a plethora of research including interrogating the effect of capital structure. Consequently, various studies have been conducted yielding inconsistent findings of the relationship between capital structure and the financial performance of SMEs.

Habimana (2014) studied the capital structure and financial performance of firms in emerging markets. The purpose of the study was to examine the effect of debt levels on performance. Using the least ordinary squares method, the results indicated a negative and significant relationship between debt and returns as proxies for capital structure and financial performance respectively. Similarly, Sivalingam and Kengatharan (2018) investigated the impact of capital structure on firm performance in Sri Lanka. Using panel data from ten listed banks, empirical findings indicated that debt was significantly and negatively linked to financial performance.

Badar and Saeed (2013) investigated the Impact of capital structure on the performance of firms in the sugar sector of Pakistan. The purpose was to assess the effect of capital structure on firm performance. The study focused on food companies listed on the stock exchange from which 5-year data was extracted. Regression results revealed that there was a significant and positive association between long-term debt and firm performance; while short-term debt presented a negative effect. In agreement, other scholars have established a positive link between capital structure and firm performance (Javed, Younas & Imran, 2014; Nguyen & Nguyen, 2020).

**Moderating Effect of Market Conditions**

Studies exploring the link between capital structure and financial performance have largely focused on the direct relationship. Whereas the research findings from the direct relationship study can be informative, Vij and Farooq (2017) argue that research models that do not include hidden variables are incapable of providing practical solutions to business practice. The authors maintain that if business decision-makers know that the link between two variables is affected by a third construct, its effect will be taken into consideration during the decision-making process. Accordingly, this study adopted competitive intensity and market turbulence to explain the effect of marketplace conditions on the capital structure–financial performance relationship as has been done in related studies (Feng, Morgan & Rego, 2017; Jermias, 2008).

Studying leverage and firm performance in competitive casino markets, Kwanglim (2018) investigated the moderating effect of competition in the relationship between excessive leverage and performance of listed companies in the USA casino market. Panel data from a sample of 154 firms indicated that the negative impact of leverage on firm performance increased as competition grew more intense suggesting a negative moderating effect in the relationship.

Investigating short-term debt and firm performance in the restaurant industry of USA firms, Lee and Dalbor (2013) assessed the impact of short-term debt on the performance of restaurant-based US firms focusing on the moderating effect of economic conditions in the relationship. Secondary data from a sample of 1,489 firms indicated that short-term debt negatively affects performance. However, the negative effect reduced significantly during the recession, a condition attributed to the low cost of short-term debt as a result of reduced competition for debt, implying a positive moderating effect of economic conditions in the relationship. During conditions of no recession, the negative effect increases as short-term debt increases due to increased competition for short-term debt leading to reduced profitability arising from the high cost of short-term debt. In a related study, Feng, Morgan, and Rego (2017) investigated firm capabilities and growth focusing on the moderating effect of market conditions proxied by market munificence and competitiveness. The authors dwell on the effect of firm-level capabilities and how they impact business performance under changing market conditions. Panel data relating to 612 USA-based enterprises, indicated that both market munificence and competitiveness had a positive moderating effect on the relationship between the identified firm capabilities and growth.

Safari and Tahmoorespou (2013) investigated the moderating effect of market conditions on the link between dividend yield and stock return in Malaysia. The purpose of the study was to examine the impact of market conditions on the relationship between dividend yield and stock returns in the firms listed on the stock exchange in Malaysia. Using panel data from 181 publicly traded firms, the author established that market conditions had a moderating effect on the relationship.
Studying market orientation and business performance of the manufacturing firms in India, Jain, and Bhatia (2015) examined the impact of market orientation on the performance of businesses in the Indian context focusing on the moderating effect of market turbulence and competition. Using a sample of 600 manufacturing companies, findings indicated no significant moderating effect of both market turbulence and competitive intensity on business performance. However, the study adopted a single-item measure to test for market turbulence and competitive power. According to Diamantopoulos, Sarstedt, Fuchs, Wilczyski, and Kaiser (2012), this could have affected both the validity and predictive power of the instrument. The current study used several items to measure the moderating effect variables in the study.

Additionally, most of the studies focused on specific sectors as well as the listing status. For instance, Kwanglim (2018), Lee and Dalbor (2013), Feng, Morgan, and Rego (2017), Safari and Tahmoorespour (2013), and Jain and Bhatia (2015) all focused on the listed companies. It is also evident that their research effort was directed towards specific sectors. Moreover, in addition to the inconsistency of the research findings, most of the capital structure-financial performance studies were based in developed economies whose socio-economic dynamics significantly differ from the conditions in emerging economies like Uganda.

**Research and Methodology**

**Research Design**

This study adopted a cross-sectional research design. A cross-sectional research design is described as the research design that examines data from a population or selected sample observed at a moment in time (Moorman, Rindfleisch, Malter & Ganesan, 2008). The choice of this design was pegged on the need to test the research hypothesis as a means of investigating the relationship among the variables of interest.

**Study Context, Population, and Sample**

The study focused on registered SMEs operating within the designated business industrial zones in the Buganda region specifically Kampala metropolitan where 61.1% of the SMEs were located (Abaho et al., 2017). Participating SMEs were selected from the key sectors of the Ugandan economy including manufacturing, services, and commercial sectors, which had been in operation for the period between 2012 and 2018. The number of SMEs in the Buganda region was 218,561 of which 133,454 were located in the Kampala metropolitan area comprising of three districts of Kampala, Mukono, and Wakiso. The study was limited to SMEs that had more than 5 but less than 100 employees following the definition of SMEs in Uganda.

Sampling was done at two levels. First, stratified sampling was used to choose SMEs to participate in the study population in the various sectors. Secondly, purposive sampling was used to identify one key respondent from each of the chosen SMEs to respond to the questionnaire. The stratified sampling technique was underpinned by the heterogeneous nature of the study population. Accordingly, a calculated sample size of 399 was computed using the following formula cited in (Singh & Masuku, 2014).

\[ n = \frac{N}{1 + N(e)^2} \]

Where:

- \( n \) = the required sample
- \( N \) = the study population
- \( e \) = margin of error

However, to make up for non-response common in SME studies, the calculated sample was adjusted upwards using the predetermined nonresponse rate of 0.12 established at the instrument pretest stage as suggested by (Mellahi & Harris, 2016). This led to a final actual sample size of 453 was obtained using the following formula.

\[ \text{Actual study sample size} = \frac{\text{calculated sample size}}{1-\text{expected nonresponse rate}} = \frac{399}{1-0.12} = 453 \text{ respondents} \]

**Empirical Data and Analysis**

Primary data was collected at firm level using a 5-degree Likert scale questionnaire considered to be the most widely used tool for collecting quantifiable data where secondary databases are unavailable (Kwiecinski, 2017). Data were analyzed using descriptive (mean, percentages, and standard deviation), and Multiple regression analyses. Multiple regression analysis was the key method of analysis. The approach has been and remains the most widely used method of data analysis in studies exploring relationships involving multiple predictor variables relative to one response variable (Nimon & Oswald, 2013). Data was presented in the form of tables, figures, and graphs to identify the relationships between the variables of interest.
Empirical Model and Hypothesis: Moderating Effect of Market Conditions

The study aimed at testing the hypothesis that ‘market conditions do not have a significant moderating effect in the relationship between capital structure and financial performance. The moderating effect model was formulated based on the empirical studies of Helm and Antje (2012) and Baron and Kenny (1986). The authors postulate that in a regression model, the primary moderator effect is represented as an interaction between the main predictor variables that specify the suitable circumstances for its operation. Accordingly, the model of analysis in this study was formulated as follows:

\[ \text{FP} = \beta_0 + \beta_1 (\text{STD}) + \beta_2 (\text{LTD}) + \beta_3 (\text{EC}) + \beta_4 (\text{MC}) + \varepsilon \]

Where: \( FP = \) Financial performance (Measured by Return on Assets)
STD = Short-term debt
LTD = Long-term debt
EC = Equity Capital
MC = Market conditions
\( \beta_0 = \) A constant
\( \beta_1, \beta_2, \beta_3 = \) regression Coefficients
\( \varepsilon = \) Error term

To measure the moderating effect of market conditions the additive score of the two variables representing market conditions (competitive intensity and market turbulence) interacted with each of the capital structure variables generating moderation equation (ii) in line with the studies of (Helm & Antje, 2012; Al-Rdaydeh, Almansour & Al-Omari, 2018).

\[ \text{FP} = \beta_0 + \beta_1 (\text{STD}) + \beta_2 (\text{LTD}) + \beta_3 (\text{EC}) + \beta_4 (\text{MC}) + \beta_5 (\text{STD*MC}) + \beta_6 (\text{LTD*MC}) + \beta_7 (\text{EC*MC}) + \varepsilon \]

The regression results based on the model are represented in Table 4 in the following section.

Results and Discussion

The multiple regression analysis approach operates on several assumptions. Literature suggests the most common assumptions of multiple regression that should be addressed in empirical research, including multicollinearity, normality, and heteroscedasticity (Osborne & Waters, 2002; Ernst & Albers, 2017). Three diagnostic tests were conducted to ascertain that the data satisfied the propositions of regression analysis as presented in the section that follows below.

Normality test

Visual techniques for data normality testing were adopted as recommended in extant literature (Ghasemi & Zahediasl, 2012; Altman, & Bland, 1996). The Kernel density curve for predicted residuals was obtained using the study data as has been done in related studies (Chen, Ender, Mitchell & Wells, 2003; Das & Imon, 2016).

Procedurally, the Kernel density curve graphs the residuals against the frequency density, and then a normal curve is superimposed to show how the kernel density estimate deviates from the normal distribution of the data. Numerically, the Kernel density metric ranges from 0 to 1, where 0 represents highly nonnormal data while 1 represents perfectly normally distributed data (Krisp, & 2010).

Figure 2: The Kernel Density Estimation (kdensity curve) for data normality; Source: Survey data, 2021
From Figure 2 above, it is evident that the kernel density curve imposed on the normal density curve indicates insignificant departures of the data set distribution curve from the normal distribution curve which illustrates an approximately normal distribution of residuals produced by the regression model process. The bandwidth generated by the STATA software further confirms that the data was largely normally distributed at the Kdensity value of 0.8820.

**Multicollinearity test**

Multicollinearity was tested using the Variance Inflation Factor (VIF). The rule of the thumb for interpreting VIF is that a variable whose VIF values are greater than 10 may indicate multicollinearity (O'brien, 2007). The VIF estimation also provides a tolerance value which is defined as 1/VIF. It is used to check the degree of collinearity and a tolerance value lower than 0.1 is comparable to a VIF of 10 (Chen, Ender, Mitchell, & Wells, 2003). In the current study, VIF was performed on the independent variable of capital structure and results are presented in Table 1.

| Variable     | VIF  | Tolerance (1/VIF) |
|--------------|------|-------------------|
| Long-term debt | 3.22 | 0.311             |
| Short-term debt | 2.68 | 0.374             |
| Equity        | 1.81 | 0.554             |
| Mean VIF      | 2.57 |                  |

**Table 1: Results of Multicollinearity test**

Source: Survey data, 2021

The findings in Table 1 indicate that the VIF values were all less than 10 and the tolerance values were all above 0.1 with the least being 0.311 and the highest being 0.554. This indicates that the inter-correlations amongst the predictor variables were within the acceptable range which demonstrates that multicollinearity was not a threat to data reliability in this study.

**Heteroscedasticity Test**

The test is used to examine the null hypothesis that the variance of the residuals is homogenous. If the p-value is less than 0.05, the null hypothesis is rejected and the alternative hypothesis accepted that the variance is not homogenous (Rosopa, Schaffer & Schroeder, 2013).

| Breusch – Pagan / cook-Weisberg test for Heteroscedasticity |
|------------------------------------------------------------|
| H<sub>0</sub>: Constant Variance                           |
| Variables: fitted values of FP_ROA                         |
| Chi2(1) = 24.47                                           |
| Prob > chi2 = 0.0000                                      |

Source: Survey data, 2021

The heteroscedasticity test results in Table 2 indicate that p-values were less than 0.05 and therefore conclude that residuals were heteroscedastic. To solve this problem, studies recommend the use of robust standard errors in all regression estimations (King & Roberts, 2015; Wahba, 2013). In this study, robust standard errors were used in the regression analysis presented in Table 4 below.

**Descriptive Statistics**

The unit of analysis was the SME. Therefore, participating SMEs were proportionately selected to represent each of the major categories of SMEs (legal status and sector of business operation) as shown in Table 3.

| Legal Status                        | Freq. | Percent |
|------------------------------------|-------|---------|
| Sole proprietorship                | 73    | 17.3    |
| Partnership                        | 110   | 26.0    |
| Private limited company            | 240   | 56.7    |
| Sector of Business Operation       |       |         |
| Services                           | 156   | 36.9    |
| Manufacturing                      | 177   | 41.8    |
| Agribusiness                       | 80    | 18.9    |
| Others                             | 10    | 2.4     |

Source: Survey data, 2021

Findings in Table 3 above indicate that most of the SMEs were limited companies at 56.7 percent. The high concentration of limited companies in the study sample was attributed to the advantages that accrue from limited liability forms of business arrangement where investors enjoy limited liability as well as relatively easier access to credit as compared to other forms of businesses (Abuselidze, & Katamadze, 2018). About sector of business operation findings indicates that most SMEs were engaged in
manufacturing at 41.8 percent. This is in agreement with Okello-Obura and Muzaki (2015) who reported that most Small and Medium businesses engage in manufacturing activities.

**Multiple Linear Regression Results**

The study tested the null hypothesis that Market conditions do not have a significant moderating effect on the relationship between capital structure and financial performance of SMEs in the Buganda region, Uganda. The test was conducted following the three steps approach of Baron and Kenny (1986). The regression analysis based on three models was presented as follows in Table 4.

**Table 4: Moderation Effects of Market Conditions**

| VARIABLES                        | Model 1       | Model 2       | Model 3       |
|----------------------------------|---------------|---------------|---------------|
|                                  | FP_ROA        | FP_ROA        | FP_ROA        |
| Short-term debt                  | -0.239***     | -0.0834       | -0.161        |
|                                  | -0.0547       | -0.23         | -0.236        |
| Long-term debt                   | -0.0777       | -1.263***     | -1.155***     |
|                                  | -0.0744       | -0.365        | -0.358        |
| Equity capital                   | 0.342***      | 1.061**       | 1.040**       |
|                                  | -0.0765       | -0.412        | -0.404        |
| MRT Conditions                   | 0.175***      | 0.158         | 0.175         |
|                                  | -0.027        | -0.114        | -0.115        |
| STD_MRT_Conditions (Interactive term) | -0.00393    | -0.00169      |               |
|                                  | -0.00561      | -0.00583      |               |
| LTD_MRT_Conditions (Interactive term) | 0.0284***   | 0.0257***     |               |
|                                  | -0.0086       | -0.0085       |               |
| Equity_MRT_Conditions (Interactive term) | -0.0175*     | -0.0176*      |               |
|                                  | -0.00955      | -0.00938      |               |
| Partnership (Base: Sole proprietorship) |           | 0.223         |               |
|                                  |               | -0.704        |               |
| Private limited company          |               | 0.872         |               |
|                                  |               | -0.607        |               |
| Manufacturing (Base: services)   |               | -0.941***     |               |
|                                  |               | -0.447        |               |
| Agribusiness                     |               | -0.338        |               |
|                                  |               | -0.527        |               |
| Others                           |               | -1.894        |               |
|                                  |               | -1.546        |               |
| Constant                         | 13.52***      | 14.49***      | 13.84***      |
|                                  | -1.372        | -5.033        | -5.105        |
| F-Statistic                      | F(4,418)=32.68 (p-value=0.000) | F(7,415)=21.09 (p-value=0.000) | F(14,408)=13.11 (p-value=0.000) |
| Observations                     | 423           | 423           | 423           |
| R-squared                        | 0.273         | 0.306         | 0.344         |

Notes: *** p<0.01, ** p<0.05, * p<0.1; Robust standard errors in parentheses

Source: Survey data, 2019

From Table 4 above, Model 1 results present the regression analysis results that include short-term debt, long-term debt, equity capital and moderating variable of market conditions:

\[ FP = 13.51 - 0.239 \times STD - 0.0547 \times LTD + 0.342 \times EC + 0.175 \times MC + \varepsilon \]

Where: FP = Financial performance (Measured by Return on Assets)
STD = Short-term debt
LTD = Long-term debt
EC = Equity Capital
MC = Market Conditions
\( \varepsilon \) = Error term
According to the findings on Model (1) in Table 4, the F-statistic 32.68 with a p-value of 0.0000 suggests that model 1 is statistically significant. The finding indicates that capital structure and market conditions have a significant effect on financial performance measured by the return on assets (ROA) of SMEs. The coefficient of the moderator variable of market condition is 0.175 and a p-value of -0.027 at a significance level of 0.01. The findings indicate a positive and significant moderation effect of market conditions in the capital structure-financial performance relationship. Accordingly, the null hypothesis that market conditions do not have a significant moderating effect on the financial performance of SMEs in the Buganda region is not supported and therefore rejected.

The R-square of the regression model is 0.306, an increase from the R-squared of 0.273 after the inclusion of market conditions in the model. The finding indicates that introducing the moderating variable of market conditions (competitive intensity and market turbulence) in the capital structure-financial performance relationship would lead to a 30 percent variability in the response variable of financial performance representing a 3 percent increase (0.306- 0.273).

Model 2 tests whether market conditions have a significant moderation effect on the relationship between capital structure and financial performance. The test was done by including the interaction terms between capital structure variables and market conditions which yielded the following regression equation:

\[ FP=14.49-0.083STD-1.263LTD+1.061EC+0.158MC-0.004(STD*MC)+0.028(LTD*MC) 0.0175(EC*MC)+\varepsilon \]

Where: 
- **FP** = Financial performance (Measured by Return on Assets)
- **STD** = Short-term debt
- **LTD** = Long-term debt
- **EC** = Equity Capital
- **MC** = Market Conditions
- **STD*MC** = interaction between short-term debt and market conditions
- **LTD*MC** = interaction between long-term debt and market conditions
- **EC*MC** = interaction between equity capital and market conditions
- **\varepsilon** = Error term

The results are presented in the model (2) in Table 4. The F-statistic value of 21.09 is statistically significant at a 5 percent level of significance. This indicates that all the variables included in the model significantly explain the variation in the financial performance of SMEs. The inclusion of interactive terms increases the R-square which indicates that Model (2) has more explanatory power compared to Model (1). The interaction of long-term debt and market conditions yielded a \( \beta = 0.0284 \) and a corresponding p-value of -0.0086 at a significance level of 0.01. This positive and significant effect indicates that an increase in the financial performance of 2.8 percent is explained by the effect of market conditions in the capital structure-financial performance relationship.

Similarly, interacting equity capital with market conditions yielded a negative and statistically significant effect in the capital structure–financial performance relationship. However, the influence of market conditions in the capital structure–financial performance relationship declines and becomes insignificant in model 2. The reduction represents the moderation effect of market conditions which better explains the capital structure–financial performance relationship.

Findings indicate further that market conditions have a significant moderation effect on the relationship between capital structure and financial performance through its impact on long-term debt and equity capital variables. This is illustrated by the long-term debt of \( \beta = -1.263 \) and a corresponding p-value of -0.365 at p<0.01; and equity capital with \( \beta = 1.061 \) with a corresponding p-value of -0.412 at p<0.05. It should be noted that based on Model 2 and Model 3 results, the impact of market conditions through short-term debt was not statistically significant in Model 2 and 3. However, the combined effect of the capital structure variables represented by the R-square increases by including the moderating variables in the model from 0.273 to 0.306, indicating a significant overall moderation effect in the relationship.

The study demonstrates that market conditions represented by the competitive intensity and market turbulence have a significant moderation effect in the relationship between capital structure and financial performance of SMEs.

**Conclusions**

The study set out to test the hypothesis that market conditions do not have a significant moderating effect in the relationship between capital structure and financial performance of SMEs in the Buganda region of Uganda. The study findings demonstrated that market conditions have a positive and significant moderation effect in the relationship between capital structure and the financial performance of SMEs. This suggests that stability of market conditions (competitive intensity and market turbulence) strengthens the effect of capital structure on financial performance leading to improvement in financial performance. The finding implies that the changes in the marketplace conditions explain the changes in the capital structure-financial performance relationship measured by return on assets. However, considering the capital structure constructs individually, the findings indicate that the moderating effect
of market conditions between short-term debt and financial performance is negative and insignificant, while it is positive and significant for long-term debt and negative and significant for equity capital. Therefore, the study concludes that market conditions have a significant moderation effect in the capital structure-financial performance relationship of Small and Medium-scale Enterprises. Therefore, the null hypothesis was rejected.

The result on moderating role of market conditions is an important aspect of the financing decision. The effect of capital structure on financial performance is significantly influenced by the market environmental conditions including competition and market turbulence. Therefore, the study recommends that the practitioners and other stakeholders in the SMEs' sector ought to evaluate the market conditions such as competition as well as customer tastes and preferences whenever deciding the financing mix to optimize the impact of capital structure on the financial performance of SMEs.

The study makes significant contributions to the body of knowledge. First, the study makes a conceptual contribution by introducing a moderator in the relationship between capital structure and financial performance of Small and Medium-scale Enterprises in Uganda. Whereas most of the prior research has focused on the direct relationship in explaining the effect of capital structure on financial performance, this paper explored the moderation approach in explaining the capital structure-financial performance relationship of SMEs. Secondly, the study contributes to practice by documenting the effect of the moderating effect of market conditions in the capital structure-financial performance relationship which provides managers of SMEs with a basis for accurate capital structure decisions.

The study encountered some limitations that should be taken note of. First, it was not possible to obtain actual financial data from secondary sources to permit to more robust statistical analysis due to limited responses on question items relating to financial information. Furthermore, the study was limited to the Buganda region (the central region) which is one of the five regions of Uganda including the Eastern, Northern, Western, and Southern regions. Accordingly, the study findings could not be extended to the rest of the regions other than Buganda where the study was based. Additionally, there were limited local studies, which had employed the variables used in the current study to explain the moderating effect of market conditions in the relationship between capital structure and financial performance of SMEs in Uganda. This limited the empirical comparison of the findings of the current study.

On the account of the research findings, the study identified some areas for further empirical research. Firstly, the study established a negative and significant relationship between short-term debt and financial performance. The study suggests further research on the effect of debt (short-term debt and long-term debt) on financial performance to establish the justification for the negative relationship between short-term debt and long-term debt on financial performance of SMEs. This would be informative while identifying financing strategies for SMEs to improve their financial performance. Further, considering the capital structure constructs individually, the findings indicate that the moderating effect of market conditions between short-term debt and financial performance was negative and insignificant, while it was positive and significant for long-term debt and negative and significant for equity capital. Research should be conducted to establish the justification for the differences in the effect of market conditions relating to each construct of capital structure.

Furthermore, the study period was limited to the period 2013-2018, a period when most businesses experienced a difficult business environment in Uganda. A similar study could be conducted by considering a much longer time period scope.

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