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**The Moderating Effect of Firm Characteristics on the
Relationship between Corporate Governance and
Financial Performance of Business Enterprises in
Uganda**



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The Moderating Effect of Firm Characteristics on the Relationship between Corporate Governance and Financial Performance of Business Enterprises in Uganda

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Abstract

Purpose: This study aimed to establish the moderating effect of firm characteristics on the relationship between corporate governance and the financial performance of companies in Uganda.

Materials and Methods: The study applied a positivist paradigm and a cross-sectional design. Data were obtained from a sample of 394 private companies drawn from central and western Uganda. Companies were stratified by region, sectors, and subsectors; and then selected using simple random sampling from each stratum. A structured questionnaire was distributed to board members, Chief Executive Officers, accountants, Internal Auditors, and managers who were selected purposively. Principle Component Analysis and varimax rotation were employed for data extraction and

reduction. The hierarchical regression technique was employed for data analysis.

Findings: The study results confirmed firm characteristics moderate the relationship between corporate governance and the financial performance of companies in Uganda. The interaction term was found to be enhancing, with the moderator strengthening the effect of corporate governance on financial performance.

Implications to Practice and Policy: From the results, it is deduced that besides ensuring an effective governance system, managers and owners of private limited companies should pay more attention to enhancing firm attributes such as size, age, and reputation.

Keywords: *Corporate Governance, Firm Characteristics, Financial Performance*

1.0 INTRODUCTION

The ongoing discussion presupposes that firm characteristics (such as size, age, and reputation) play a moderating role in the association between corporate governance and financial performance. For instance, large and mature firms with a good reputation tend to have broad-based boards that can effectively discharge the oversight role compared to small and new firms (Nenova, 2013). Theoretically, the moderation effect of firm characteristics in the relationship between corporate governance and financial performance is indisputable. The agency theory authenticates that the influence of corporate governance on business performance is a function of firm characteristics. According to the agency theory, corporate governance serves to minimize conflict of interests between shareholders and managers of an entity (Cuevas-Rodriguez *et al.*, 2012). Thus, this theory guided the study in analyzing whether corporate governance systems among private limited companies improve their financial performance. Furthermore, from the existing literature reviewed so far, it is postulated that the role of corporate governance in financial performance is contingent upon key firm characteristics such as size, age, and reputation. For instance, Bolo *et al* (2011) note that as a firm grows and expands, it becomes more complex, and the need for advanced governance practices tends to materialize increasingly. Scholars such as Ondigo (2019), Mutende *et al* (2017), Maina *et al* (2017), and Nihat and Demir (2016) report that firm characteristics moderate the relationship between corporate governance and financial performance.

This corroborates assertions by Nenova (2013), who suggests that firm characteristics are an influential factor that affects the relationship between corporate governance and firm financial performance. Thus, on top of corporate governance, scholars have empirically linked firm characteristics to efficiency in the operations of a firm. Several studies have unmasked enormous empirical evidence confirming the moderating role of firm characteristics. For instance, Ondigo (2019) found a moderating effect of firm characteristics on the relationship between corporate governance and the financial performance of commercial banks in Kenya. Similar results were obtained by Mutende *et al* (2017) and Maina *et al* (2017). Besides, Nihat and Demir (2016) found a significant moderation effect of firm characteristics in the relationship between gender diversity and the financial performance of listed firms in Turkey. Similarly, Zalaghi *et al* (2019) established a robust moderating effect of firm characteristics on the relationship between working capital management and the financial performance of listed companies in the Republic of Iran for the period 2008 to 2017. These empirical findings concur with Nenova (2013), who posits that firm characteristics are an influential factor that affects the relationship between corporate governance and firm financial performance.

However, the above studies have not been empirically tested in the context of private limited companies in Uganda. Besides, the above scholars relied on a negligible sample size (below 200), making their conclusions and generalizations doubtful (Field, 2006). Thus, the ingredient of the moderating effect of firm characteristics and how they fuse with corporate governance to influence financial performance have remained elusive among empirical studies in Uganda. Moreover, despite enormous empirical evidence on the moderating role of firm characteristics in the relationship between corporate governance and financial performance in other countries, empirical findings in the existing literature are limited in the context of private limited companies in Uganda. It is imperative to note that moderation tests enable a deeper understanding of whether the prediction of firm financial performance from corporate governance differs across levels of firm

characteristics, and this is lacking in the existing studies of Uganda. Baron and Kenny (1986) asserted that introducing an appropriate moderating variable in a study is a potent way to enhance business research designs and provide more realistic and accurate findings. Given the above discussion, it was imperative to investigate the moderating role of firm characteristics in the relationship between corporate governance and financial performance in the context of private limited companies in Uganda. The above debate, therefore, led to the following hypotheses;

H₁: Firm characteristics moderate the relationship between corporate governance and firm financial performance

2.0 MATERIALS AND METHODS

Philosophical Orientation, Study Design, Study Population, Sample Size, Sampling Techniques and Data Collection Method

The study employed a positivist paradigm, collecting quantitative data through scientific procedures for the generalization of results (Zuckweiler, Rosacker, & Hayes, 2016). A cross-sectional study design was followed, to detect patterns between variables (Bell, Bryman, & Harley, 2018). The study population comprised 30,000 private limited companies in Uganda (Uganda Bureau of Statistics, 2016), the study surveyed 394 companies determined using a formula by Yamane, (1973). Emphasis was on Western and Central Uganda since 80% of private companies are located there (Uganda Bureau of Statistics, 2016). Private limited companies were categorized using stratified simple random sampling based on districts and sectors. The study used a self-administered questionnaire to collect data from board members, managing directors, accountants, general managers, and internal auditors.

Measurement of Variables

Firm characteristics were explored in terms of firm size (natural logarithm of a firm's total assets). (Nenova, 2013; Agrawal and Kroeber, 2016; Durnev and Kim, 2005; Himmelberg et al., 2013), firm age (the natural logarithm of the years a firm had been in existence) (Berger and Udell, 2012; Boone et al., 2017 & Borghesi et al., 2017), and corporate reputation (quality of products and services, social and environmental responsibility, workplace environment) (Fombrun et al. (2010). On the other hand, Financial Performance was conceptualized in terms of profitability (ROA, ROE, net profit margin), liquidity (current ratio), solvency (Debt to equity ratio), and financial efficiency (asset turnover ratio and operating expense ratio) (Haat et al, 2018; Imam and Malik, 2017; Heenetigala and Armstrong, 2011; Sengur, 2011).

Data Management and Test for Parametric Assumptions

The study used SPSS V.22 program to check for impossible values, missing values, identification, and management of outliers. The study further conducted exploratory factor analysis to identify clusters of variables and reduce data to a manageable level while retaining the original information as much as possible (Podsakoff *et al.*, 2012). Furthermore, the study ascertained conformity of data to parametric assumptions. The study, therefore, tested for normality, linearity, homogeneity of variance, independence of errors, and multi-collinearity all of which met the minimum thresholds as recommended by Tabachnick and Fidell (2001).

Data Analysis

The study set out to ascertain whether the prediction of the financial performance of private limited companies by corporate governance differed across various levels of firm characteristics. The moderation effect was therefore tested through hierarchical multiple regression analysis where corporate governance and firm characteristics were mean-centered and an interaction term created from their product before model estimation (Anderson et al, 2014; Baron and Kenny, 1986; Tabachnick and Fidell, 2001; and Field, 2006). For confirmation and interpretation of existing moderation, mean scores and standard deviations of centered variables, as well as their unstandardized coefficients, were plotted on a mod-graph. According to Jose (2013), the criteria is that i) the influence of one of the variables must vary depending on the level of the other independent variable and, ii) when the moderation is plotted, regression lines must have different slopes or not be parallel. Thus, the study tested the hypothesis that “Firm characteristics moderate the relationship between corporate governance and financial performance of business enterprises in Uganda”

The following regression models were specified;

$$FP = b_0 + b_1 \text{CorpGov} + e \dots \dots \dots \text{ i}$$

$$FP = b_0 + b_1 \text{CorpGov} + b_2 \text{FXtics} + e \dots \dots \dots \text{ ii}$$

$$FP = b_0 + b_1 \text{CorpGov} + b_2 \text{FXtics} + b_3 \text{CorpGov} * \text{FXtics} + e \dots \dots \dots \text{ iii}$$

Where; FP = Financial Performance, b_0 = Constant, $b_1 \text{CorpGov}$ = Beta coefficient of corporate governance when firm characteristics are at zero, $b_2 \text{FXtics}$ = Unstandardized Beta coefficient of firm characteristics when corporate governance is at zero, and $b_3 \text{CorpGov} * \text{FXtics}$ = Beta coefficient of the interaction term for corporate governance and Firm characteristics.

3.0 FINDINGS

Sample Characteristics

From the descriptive analysis, most (69%) of the companies were located in the central region, with 49% operating in the service sector. 78% of these companies were owned by Ugandans, and 49% had an asset base below Ugx 500 million. A significant 69% of the private limited companies had operated for less than 15 years, and also a significant 43% is operating on equity and loans.

Regression Results

Thus, the study tested the hypothesis that “Firm characteristics moderate the relationship between corporate governance and financial performance. Table 1 shows the hierarchical regression results for the moderation effect of firm characteristics on the relationship between corporate governance and financial performance of private limited companies.

Table 1: Hierarchical Regression Results for Moderation Effect of Firm Characteristics

| | Model 1 | Model 2 | Model 3 |
|----------------------|---------|---------|---------|
| | Beta | Beta | Beta |
| Constant | 1.42 | 0.92 | 0.74 |
| Corporate Governance | 0.60*** | 0.28*** | 1.24*** |
| Firm Characteristics | | 0.41*** | 1.03*** |
| CorpGov * Fxtics | | | 1.51*** |
| R | 0.60 | 0.65 | 0.67 |
| R Square | 0.36 | 0.43 | 0.45 |
| R Square Change | - | 0.07 | 0.02 |
| Sig. R Square Change | - | 0.01 | 0.01 |
| Sig. (ANOVA) | 0.01 | 0.01 | 0.01 |

Note: *** $p < .001$, $N = 394$,

*CorpGov * Fxtics = Interaction term*

Source: Primary Data

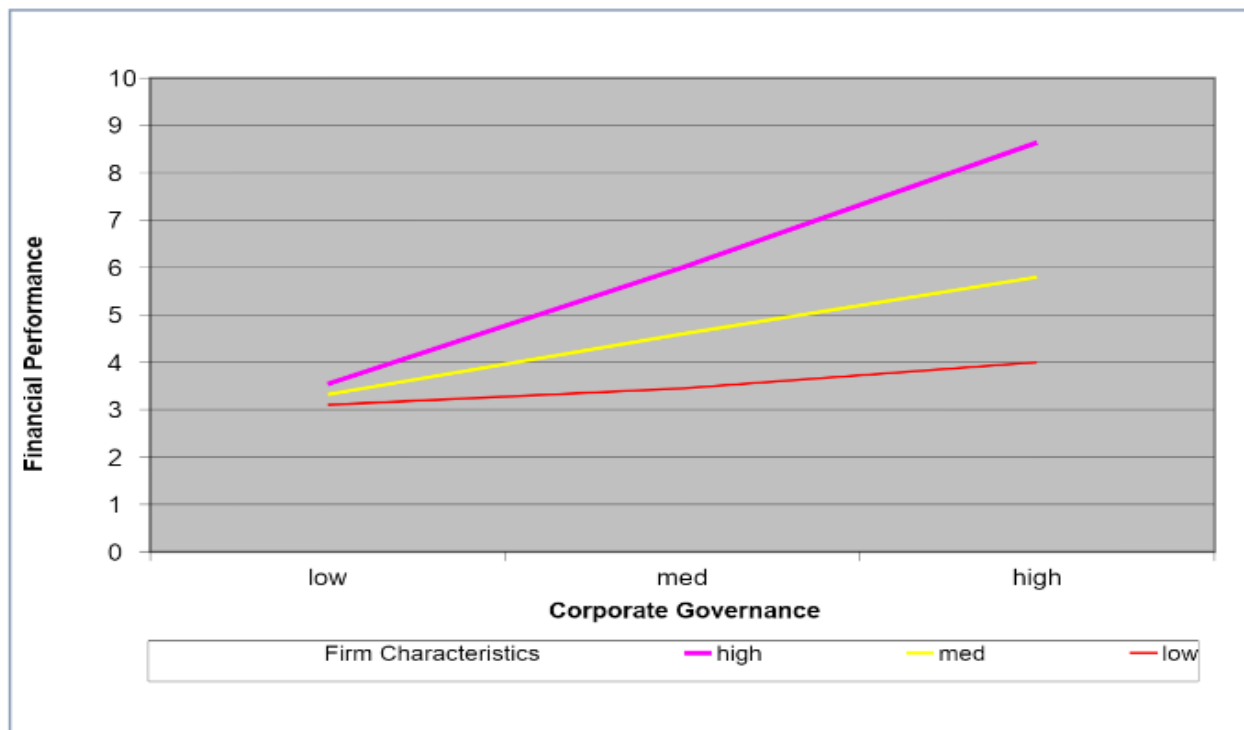


Figure 1: Plot for the Interaction Effect of Corporate Governance and Firm Characteristics on Financial Performance

Note: According to (Jose, 2013), Low = One standard deviation below the mean, Medium = the mean score of financial performance, High = One standard deviation above the mean.

Regression analysis (Table 1, model 2), revealed that corporate governance ($\beta = .28$, $p < .001$) and firm characteristics ($\beta = .41$, $p < .001$) are significant antecedents as they accounted for a substantial (43%) amount of variance in the financial performance of private limited companies ($R^2 = .43$, $p < .001$). The introduction of the interaction term in model 3 enhanced the predictive power of the

model by a significant 2% (from $R^2 = .43$ to $R^2 = .45$). In other words, the significant positive effect of the interaction term in model 3 ($\beta = 1.51$, $p < .001$) (Table 1) indicates that firm characteristics (the moderating variable) strengthen the effect of corporate governance on financial performance (Aiken and West, 1991). However, since the main effect of corporate governance ($\beta = 1.24$, $p < .01$) is still significant even after fitting the interaction term in the moderated model 3, a partial moderation was achieved (Jose, 2013).

Furthermore, an examination of the interaction plot (Figure 1) as proposed by Jose (2013) and; Aiken and West (1991) further confirmed that; i) the effect of corporate governance on financial performance depends on the level of firm characteristics, ii) regression lines are not parallel iii) the magnitude of the effect on financial performance is more significant at a high level of both corporate governance and firm characteristics, hence confirming the occurrence of a significant interaction. Therefore, all the above results are indicative that corporate governance and firm characteristics fuse to predict financial performance; with the effect of corporate governance highly dependent on the level of firm characteristics to influence financial performance hence supporting hypothesis H1. By implication, the above enhancing effect of the interaction term means that whereas corporate governance influences financial performance among private limited companies, the effect partly depends on firm characteristics such as age, size, and reputation. This implies that besides having strong governance mechanisms, a firm needs enough experience in the market, a good reputation among its stakeholders, and adequate assets if it is to achieve greater financial performance.

Discussion

The study tested the moderating effect of firm characteristics in the relationship between corporate governance and financial performance. Fredrick (1986) noted that the existence of two or more predictors in a study warrants an in-depth investigation beyond the main effects of each predictor. Fredrick rightly emphasized the necessity to test for the interaction effect and suggested an assessment of whether the effect of the predictor variable depends on the level of the other. Given two predictor variables in the present study, that is, corporate governance and firm characteristics, it was imperative to test the interaction effect to establish the existence or non-existence of the conditional relationship between them. The study, therefore, hypothesized that firm characteristics moderate the relationship between corporate governance and the financial performance of private limited companies in Uganda (H1).

The results (Table 1) indicated that; i) the interaction term exerted a significant positive effect on financial performance in regression model 3; ii) the main effects of the two predictors remained significant albeit enhanced by the interaction term; iv) The introduction of the interaction term increased the predictive power of the model by a significant 2% (R^2 change = .02, $p < .001$). These results indicated partial moderation of firm characteristics in the relationship between corporate governance and financial performance. The moderation effect was further confirmed by the regression lines or simple slopes in the mod-graph in chapter five (Figure 5.0), which were not parallel (Jose, 2013) hence supporting the hypothesis that firm characteristics moderate the relationship between corporate governance and financial performance (H1). The positive effect of the interaction term means that firm characteristics as a moderator variable had the potential to strengthen the relationship between corporate governance and financial performance. Results in the mod-graph (Figure 1) imply that besides strong governance mechanisms, robust firm characteristics can enable better financial performance, and, the effect of corporate governance on

financial performance depends on firm characteristics. The significance of the main effects of corporate governance and firm characteristics depicts the two variables as real determinants of financial performance and which must co-exist among private limited companies in Uganda, with the effect of corporate governance being a function of firm characteristics.

The above results coincide with Nenova (2013), who emphasized firm characteristics as an influential factor that affects the relationship between corporate governance and firm financial performance. The results also corroborated with Bolo et al. (2011), who noted that the role of corporate governance in financial performance is contingent upon key firm attributes such as size and age of the firm. Bolo and his colleagues recognized that as the firm expands, it becomes more complex; thus, the need for advanced governance practices tends to materialize increasingly. Besides, the above findings coincide with empirical evidence in the academic world. While examining the moderating role of firm characteristics on the relationship between free cash flows and the financial performance of listed companies on the Nairobi Stock Exchange, Mutende et al (2017) established a significant moderation effect of firm characteristics in the relationship. Similar empirical results were obtained by Ondigo (2019) while assessing the moderating effect of firm characteristics on the association between corporate governance and the financial performance of commercial banks in Kenya.

Furthermore, the above moderation effect of firm characteristics confirms the stakeholder theoretical assertion that firms paying attention to their key attributes such as reputation tend to yield substantial business gains (Hill and Jones, 2012). The theory demonstrates that firms that mind the effect of their operations on their demographic characteristics tend to innovatively adopt survival strategies such as improving the quality of their services, investing heavily in assets, and diversifying activities, which in turn improve their financial performance (Minoja, 2012). These theoretical underpinnings concur with Ansong (2017), who argued that stakeholder-oriented companies tend to build critical characteristics that give them an advantage in new markets and ultimately result in better financial performance. In a nutshell, the above findings confirm that corporate governance and firm characteristics fuse to influence financial performance. Private limited companies in Uganda should, therefore, uphold them in their operations and decisions if they are to achieve a competitive advantage and survive financial distress.

4.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

The study confirmed a conceptual debate and theoretical underpinnings that the corporate governance-financial performance relationship is dependent on the level of firm characteristics. A test for the moderation effect revealed that firm characteristics were a real moderator of the relationship between corporate governance and financial performance. It was observed that the interaction effect was enhancing as it strengthened the influence of corporate governance on financial performance. This demonstrated that besides robust governance mechanisms in an entity, firm characteristics such as experience in the market, sufficient asset capacity, and a good reputation could enhance the influence of corporate governance on financial performance. Therefore, it can be concluded that corporate governance interacts with firm characteristics to affect the financial performance of Uganda's private limited companies with firm characteristics taking a moderating role.

Theoretical Implication

By testing the moderating effect, the present study established that corporate governance fuses with firm characteristics to positively influence financial performance among private limited companies in Uganda. The study addresses mixed findings in the literature on the effect of corporate governance and firm characteristics on financial performance and confirms the stakeholder theory, which advocates for reputation as a critical firm characteristic. From the study findings, it can, therefore, be deduced that the financial performance of private limited companies is a complex phenomenon that cannot be explained wholly by a single theory. Due to the absence of a unifying theory, the present study advocates that; i) a multi-theoretical approach that involves agency theory, stakeholder theory, and upper echelons theory provides a vivid explanation to the financial performance of private companies in Uganda. ii) central to the study findings, it suffices that corporate governance is not sufficient in explaining financial performance. The final position is that the relationship between corporate governance and financial performance depends on the level of firm characteristics. Following the findings of the study, it has been accurately pointed out that estimating a model without accounting for the interaction of variables does not vividly explain the accurate relationship between the independent and dependent variables.

Managerial Implication

Besides, the moderating effect of firm characteristics deep-rooted in this study is a caution to owners and managers of companies not to ignore essential firm attributes like age, size, and reputation as they devise strategies to improve financial performance. This points to the urgent need for managers to consider investing heavily in physical assets and maintain good relations with the stakeholders of companies if they are to survive the stiff competition in the market.

Recommendation

From the results, it is suggested that besides ensuring an effective governance system, managers and owners of private limited companies should pay more attention to enhancing firm attributes such as size, age, and reputation. They should aim at improving the reputation of their companies among their stakeholders through enhanced quality of products and services, better working environment, and being environmentally responsible. In all this, managers should pay extra attention to improving their relationships with all stakeholders rather than only shareholders to revive the lost mutual trust that will enhance financial performance.

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