INVESTIGATING THE IMPACT OF MANAGERIAL ENTRENCHMENT ON CORPORATE FINANCIAL STRUCTURE: EVIDENCE FROM NIGERIA

Benjamin Ighodalo EHIKIOYA
Alexander Ehimare, OMKHANLEN
Cordelia Onyinyechi, OMODERO
Ada MAC-OZIGBO

1,2 Department of Banking and Finance, College of Management and Social Sciences, Covenant University, Nigeria.
3 Department of Accounting, College of Management and Social Sciences, Covenant University, Nigeria.
4 Department of Business Administration, National Open University of Nigeria, Abuja, Nigeria.

ABSTRACT

Finance decisions have been some of the most significant but challenging decisions for corporate organizations in recent times. Against this backdrop, this study examines the impact of managerial entrenchment on the financial structure of companies listed on the Nigerian Stock Exchange (NSE). The study employed a regression technique to analyze data from 2010 to 2019. The results reveal evidence that managerial entrenchment is essential to explain the proportion of debt in listed firms' capital structure in Nigeria. The significant negative connection between executive shareholding, CEOs’ tenure, and debt, suggests managerial entrenchment's power to alleviate agency problems and pressure the managers to deploy optimal financial structure in Nigerian listed firms. However, CEO duality, board composition and board size reveal a positive connection with the debt ratio of listed firms in Nigeria. These findings offer empirical evidence on the importance of adopting a mix of monitoring and control mechanisms during decision-making to ensure optimal capital structure and protect stakeholders' interests.

Contribution/Originality: This study contributes to the existing literature on the impact of managerial entrenchment on Nigeria's corporate financial structure. The study demonstrates the behavior of entrenched managers on capital structure decisions and the impact such action could have on shareholders' interest, especially in developing countries with poor corporate governance.

1. INTRODUCTION

In recent times, the significance of financial decisions that ensure a firm's optimal performance has been a subject of serious concern for the stakeholders. A firm's shareholders desire to hire managers that will pursue minimal rent extraction and act in their best interest to guarantee wealth maximization (Fagbemi, Osemene, & Agbaje, 2020; Mule & Mukras, 2015). However, agency problems persist, especially in developing countries such as Nigeria. Agency problems hinder a firm's possibility of focusing on the objective of value maximization (Abor, 2007; Danso & Adomako, 2014; Hafez, 2017). Conflicts resulting from the separation and control of firms are made worse...
by the weak institutional and governance structures that characterize most emerging markets and their economic activities. In the face of these challenges, from a macroeconomic point of view, Nigeria is still an important country in Africa due to the size of its economy, influence, and support to other countries, particularly in the sub-Saharan Africa region. The literature on capital structure identified the substantial role of managerial shareholding and board structure among other factors to align the managers’ concern with that of the owners of the firm (Elhikiyoa, 2019; Jamal & Mahmood, 2018; Jensen, 1986). Moreover, the literature on capital structure emphasizes the significant power of debt in mitigating agency conflicts between managers and owners (Igwe, Ogar, & Ogbu, 2017).

However, despite the importance of capital structure to a firm, there is still no consensus on how firms select a mix of debt and equity finance and the extent to which managerial entrenchment may influence optimal capital structure decisions. How does the behavior of entrenched managers’ impact capital structure decisions in Nigeria? Several theories have been developed to reduce agency conflicts between the managers and shareholders of firms. Previous studies have also attempted to empirically proffer solutions to alleviate agency conflicts in both advanced and developing countries (Hafez, 2017; Mule & Mukras, 2015; Yermack, 1996). Notwithstanding the different strands of studies advanced in the literature, it seems that there are still difficulties understanding why managers always choose the capital structure of a firm that is not likely to be in the shareholders’ interest. It is also difficult to appreciate why managers who were hired to protect the interest of shareholders would turn around to entrench themselves and make it costly for them to be replaced in the mix of poor performance (Berger, Ofek, & Yermack, 1997; Uwuigbe, Eleya, Uwuigbe, Teddy, & Irene, 2018). According to Jensen and Meckling (1976), entrenched managers do not always choose the optimum capital structure; instead, such managers prefer to use a lower level of debt in their firm.

Managerial entrenchment occurs when the managers entrusted with a firm's affairs now have considerable power to make decisions based on their interests and at the expense of the shareholders. According to Berger et al. (1997), entrenched managers may prefer less debt than the optimal level to prevent pressure, monitoring, and bankruptcy risk. In contrast, entrenched managers may accrue more debts to improve the business or discourage takeover and dismissal threats. This action or strategy has remained a common phenomenon among managers in developing countries, especially where there is a weakness or breakdown in corporate governance and control mechanisms. It is also common in places where there is a dispersed ownership structure or high levels of managerial ownership such that the shareholders may find it challenging to take action in contrast to non-value maximization behavior. Berger et al. (1997), in a cross-sectional analysis, argued a negative association between leverage and the degree of managerial entrenchment, which means entrenched managers will deploy lesser debt in their capital structure. On the contrary, Stulz (1988) observed that entrenched executives might have more significant incentives to increase their shareholdings and use more debt than the optimum level to reduce the chance of a successful takeover by any means.

While studies such as Berger et al. (1997) documented the importance of the different monitoring and control mechanisms to deal with agency problems due to the separation of ownership and control of the firms, the financial literature is somewhat scanty about the dynamic relationship between managerial entrenchment and a firm's corporate financial structure in emerging markets such as Nigeria. Several studies have argued that entrenched managers tend to deviate from using the optimal debt structure to pursue their firms’ investment opportunities (Jamal & Mahmood, 2018; Umer, 2014). However, despite these studies, the issue of what influence entrenched managers have to decide the proportion of debt in the capital structure is unresolved. In other words, regardless of the different studies, whether entrenched managers would use more or less debt to finance investment opportunities remains a concern for stakeholders. In their empirical research work, Graham, Leary, & Roberts (2015) concluded that capital structure variation is still unexplained to a considerable degree. The significance of capital structure in the organization, as well as one of the fundamental areas in finance, makes it a relevant and exciting topic for investigation.
With the dynamics in the environment and the pressure on modern organizations to guarantee a return on investment, understanding the influence of managerial entrenchment is fundamental in analyzing a firm's capital structure decisions, especially in developing countries such as Nigeria where the issue is yet to receive proper attention. Thus, this study aims to empirically investigate the impact of managerial entrenchment on the financial structure of companies in Nigeria considering the passage of time between this study and earlier studies on this issue. The study seeks to determine whether managerial entrenchment can explain the variation in firms' capital structure in Nigeria. This study extends the entrenchment framework and predicts a negative relation between corporate financial structure proxy of debt and managerial entrenchment. The study builds on the agency theory and the perception that entrenchment through managerial shareholding, CEO tenure, and CEO duality affect capital structure decisions in Nigeria. We approached the study from a developing economy perspective using data from 2010 to 2019. The study used the fixed effects technique and data from listed firms to examine the connection between managerial entrenchment and capital structure decisions. It concluded that a negative and statistically significant relationship exists between managerial entrenchment and capital structure decisions. The findings of this study have important implications for policymakers and investors in terms of opportunities and portfolio selection that will minimize risks and maximize returns, and also for analysts desirous of understanding this issue in Nigeria.

The rest of the paper is organized as follows: In section 2, the study reviews related literature on managerial entrenchment and a firm's capital structure; section 3 describes the data and methodology employed to pursue the study objective; section 4 presents the findings of the analysis and discussion; and section 5 concludes.

2. LITERATURE REVIEW

Managerial entrenchment and capital structure are essential areas in finance literature that has continued to command attention in recent years. Managerial entrenchment is the extent to which managers, who have been entrusted with the affairs of a firm, take advantage of their positions and the perceived weakness in the governance structure of the firm to pursue self-maximizing interests at the expense of shareholders (Danso & Adomako, 2014; Fabrizio, Juan, & Jordi, 2017; Fagbemi et al., 2020; Tolulope et al., 2018). On the other hand, capital structure is the blend of debt and equity to finance the assets of a business. In modern organizations where ownership and control are in different hands, as a control measure, the shareholders want the managers to use more debt to finance the assets of a firm and maximize its value (Hafez, 2017; Jamal & Mahmood, 2018; Umer, 2014). Conversely, managers have the discretionary power to decide on the amount of debt in a firm's capital structure. In this instance, entrenched managers may have the discretion to use less debt than the optimal because of the desire to minimize any potential monitoring and control pressure from the creditors, regulators, and the firm's shareholders. The choice for entrenched managers to use less debt may signal the need to decrease the risk of insolvency and the loss of position (Jensen, 1986). On the other hand, Harris & Raviv (1988) and Stulz (1988), maintained that managerial entrenchment might compel managers to increase the use of debt beyond the optimal point to discourage the possibility of a takeover by outsiders.

The agency cost theory is a vital theory to explain the development of a firm's capital structure decision. The agency theory argues that using debt to finance investment opportunities could reduce agency problems from the separation of ownership and control (Abor, 2007; Danso & Adomako, 2014). As part of the mechanism to ensure that managers make optimal decisions, the shareholders can institute a monitoring mechanism and mandate the managers to pay out free cash flow and use debt to finance any profitable investment opportunities (Jensen & Meckling, 1976). Although monitoring is costly and may reduce returns to shareholders, this is important to prevent managers from engaging in any opportunistic behavior and investment in projects that do not bring maximum value to the shareholders of the firm. In a situation where the managers have free cash flow, they can be desirous of pursuing personal benefits, such as job safety and empire building, instead of maximizing firm value.
(Harris & Raviv, 1988). Stulz (1988) concluded that the managers would continuously invest free cash flow, even when the projects yield a negative net present value. Conversely, the managers' use of higher debt levels to pursue profitable investment opportunities may engender agency problems between shareholders and debtholders. The problems between shareholders and debtholders stem from their conflicts of interest. While the debtholders are interested in generating enough return to meet the debt obligation, the shareholders are interested in generating more returns for both debt obligations and payouts as dividends.

The empirical literature on the connection between managerial entrenchment and corporate financial structure is mixed. For example, Jensen & Meckling (1976) argued that directors' who share ownership could serve as an instrument to minimize managerial incentives for opportunistic behaviour. However, aligning the managers' interests with those of the shareholders and minimizing their incentives for perquisites has been an issue, particularly when managerial shareholding leads to entrenchment. Furthermore, entrenched managers tend to gain more rights to control the activities of a firm and prevent monitoring from the directors. Managerial entrenchment can avoid replacing a poor performing CEO and determine the level of debt, which would affect the firm's growth. The CEO of the firm has the power to make certain decisions, but with managerial share ownership, a typical CEO now has increased capacity and more rights to make capital structure decisions resulting in more debt to maximize their self-serving interests (Afolabi, Olabisi, Kajola, & Asaolu, 2019; Friend & Lang, 1988). Studies on the link between managerial ownership and the capital structure of a firm are contradictory (Harris & Raviv, 1988; Sheikh & Wang, 2012; Uwaigbe, 2014). In Nigeria, managers' ideas to have some proportion of equity in shared ownership in listed firms to gain their trust is still in its infancy and shared ownership is not primarily used as a means to compensate managers' efforts. Many executives do not have shares in the company they superintend, so we expected managerial shareholding to have no significant relationship with listed companies' capital.

The influence of CEO tenure on capital structure and its value has been investigated (Berger et al., 1997). Managers with a more extended stay in a position can become familiar with the environment and activities with more power and influence more quickly (Taljaard, Ward, & Muller, 2015). CEO tenure, especially for managers who have been in a particular position for a long time, can lead to entrenchment that may affect a firm. Previous studies have been conflicting in their evidence regarding CEO tenure and capital structure. While some studies argued that entrenched managers use debt lower than the optimal point, others argued that they use debt above the optimal capacity. Entrenched managers may make capital structure decisions to reduce pressure and discipline while increasing their voting power and control. Berger et al. (1997) found a negative link between the natural logarithm of CEO tenure and financial leverage. Using data from Chinese listed firms, Wen, Rwegasira, & Bilderbeek (2002) assessed the connection between CEO tenure and leverage. They reported that CEOs with an extended stay in their positions prefer lower debt ratios to avoid risk. However, Allen & Panian (1982) reported a positive connection between CEO tenure and managers’ power. This report indicates that an entrenched CEO has the ability to make self-serving decisions that are against the shareholders' interests. Thus, this study submits an insignificant negative connection between CEO tenure and listed companies' capital structure in Nigeria.

Several corporate governance structures study documents from organizations in different countries that have CEOs with dual responsibilities (Hassan, 2017). CEO duality is when one person is responsible for the firm's affairs as both the CEO and chairman of the board. Hassan (2017) posits that CEOs with dual positions tend to assume more power which leads to entrenchment to exercise more influence in the scheme of activities (Abor, 2007; Afolabi et al., 2019). Furthermore, CEO duality can cause a reduction in the power and influence of the board to impose effective monitoring and control over the CEO, especially in decision making that is solely in the interest of the owners of the firm. This study assumed that CEO duality could lead to entrenchment, which can influence CEOs’ decisions and activities to accrue more debt to finance investment opportunities.
3. MATERIAL AND METHOD

3.1. Data Source

This study employed data from 63 randomly selected non-financial listed companies from 2010 to 2019 with 630 firm-year observations to explore the connection between managerial entrenchment and corporate financial structure in Nigeria. The study sourced data from the listed firms' yearly reports and the annual publications of the Nigerian Stock Exchange (NSE). The study period and the choice of listed firms were influenced not only by consistent data availability but also by considering the CEOs’ minimum tenure of three years in the position. According to Fabrizio et al. (2017) and Fagbemi et al. (2020), CEOs can start to gain power and come to be more entrenched from their third year in office. Moreover, the sample period was partly influenced by the Nigerian economy's performance as the largest economy in Africa after the GDP was rebased from about US$270 billion to US$510 billion in 2013. During this period, firms in Nigeria were said to have performed well based on the reported financial records. However, this period also witnessed a series of irregularities arising from poor corporate governance practices.

3.2. Model Specification

Based on this study's objective, the dependent variable is the debt ratio in the companies' capital structure, and managerial entrenchment represents the explanatory variable. The model for this study in functional form is specified in Equation 1 as follows:

\[ D = f (M, C) \]  

(1)

Where:

\( D \) = Debt ratio (capital structure).
\( M \) = Managerial entrenchment.
\( C \) = Control variables.

The empirical model is stated in equation form as:

\[ DEBT_{i,t} = \beta_0 + \beta_1 MSHARE_{i,t} + \beta_2 CEOTEN_{i,t} + \beta_3 CEO\text{DUAL}_{i,t} + \beta_4 BCOMP_{i,t} + \beta_5 BSIZE_{i,t} + \beta_6 PROF_{i,t} + \beta_7FSIZE_{i,t} + \mu_{i,t} \]  

(2)

Where \( i \) is the \( i \)th firm in time \( t \) and \( \mu \) is the random error term. In Equation 2, \( \beta_0 \) is the intercept and \( \beta_1 - \beta_5 \) are the explanatory variables' slope coefficients. The control variables' slope coefficients are denoted as \( \beta_6 - \beta_7 \), while \( \mu \) represents the error term. The dependent variable is debt and the explanatory variables measuring managerial entrenchment are managerial shareholdings, CEO tenure, and CEO duality. The study introduced control variables likely to influence the capital structure of a firm. Consistent with Rajan & Zingales (1995), a firm's profitability and size have significant power to change the firm's capital structure. The literature on governance and capital structure ascribes different definitions and measurements to variables such as debt, profitability, size, and managerial shareholding. However, for this study, we measured debt using book value and market value to observe any differences in the way debt interacts with the capital structure due to how it is calculated. Moreover, judging by the low level of improvement of the legal system and the corporate governance structure, we believe that an executive with more than five years in the CEO position can be regarded as entrenched to influence decisions. The variable selection and definitions follow the existing studies by Berger et al. (1997), Fabrizio et al. (2017) and Fagbemi et al. (2020). Table 1 presents the description of variables and the expected sign of their coefficients.
### Table 1. Variable definitions and measurement.

| Grouping            | Variable               | Abbreviation | Measurement                                                                 |
|---------------------|------------------------|--------------|-----------------------------------------------------------------------------|
| **Dependent Variables** | Debt Ratio (Book value) | D BV         | Book value of total debt over the book value of total assets of the firm.    |
|                     | Debt Ratio (Market value) | D MV         | Book value of total debt over the market value of total assets of the firm.  |
| **Independent Variables** | Managerial Shareholding | MS          | Total shares owned by the CEO divided by outstanding shares.                |
|                     | CEO Tenure             | CEOTEN       | Natural logarithm of the number of years CEO has been in the position at the firm. |
|                     | CEO Duality            | CEODUAL      | Taking the value of 1 when the CEO doubles as the chairman of the board, 0 otherwise. |
| **Control Variables** | Board Composition      | BCOMP        | Natural logarithm of the number of external directors on the board.         |
|                     | Board Size             | BSIZE        | Natural logarithm of the number of directors on the board.                  |
|                     | Profitability          | PROF         | Return on assets (ROA) represents earnings before interest, taxes, depreciation, and amortization divided by total assets of the firm. |
|                     | Firm Size              | FSIZE        | Natural logarithm of the book value of the total assets of the firm.        |

### 4. EMPIRICAL RESULTS AND DISCUSSION

#### 4.1. Preliminary Analysis

Table 2 shows the results of the descriptive statistics of the variables used in the study. The results indicate that debt book value has a mean of 0.5905 with a standard deviation of 0.3994. This result specifies that firms listed on the Nigerian Stock Exchange for the study period employed 59% debt in their capital to finance assets. This also suggests that only about 41% of the total capital is sourced as equity to finance assets. The market value of debt has a mean value of 0.6069, with a minimum and maximum value of 0.4026 and 1.8453, respectively. The analysis reveals that managerial shareholding is low with a mean value of 4% of the total shares. The mean number of years a CEO held this position is 8.0808 years, and the standard deviation is 3.0108 with a minimum and maximum period of four and 12 years, respectively. CEO duality has a mean of 0.0311 with a standard deviation of 0.0298. This result suggests that most listed firms in Nigeria do not suffer from having the CEO also act as the chairman of the board. Furthermore, board size has a mean of 8.0472 with a minimum of four and maximum of nine outside directors. The minimum value for profitability is -0.4620, which suggests that some firms in the sample were not profitable. The situation of some unprofitable firms is not surprising considering the harsh environment and the periods of economic recession recently experienced in the country.

| Variables      | Obs. | Mean   | Std. Dev. | Minimum | Maximum | Jarque–Bera |
|----------------|------|--------|-----------|---------|---------|-------------|
| Debt (BV)      | 630  | 0.5905 | 0.3994    | 0.3976  | 1.5302  | 0.0000      |
| Debt (MV)      | 630  | 0.6069 | 0.3015    | 0.4026  | 1.8453  | 0.0000      |
| MS             | 630  | 0.0434 | 0.0185    | 0.2637  | 1.0534  | 0.0014      |
| CEO Tenure     | 630  | 8.0808 | 3.0108    | 4.0000  | 12.0000 | 0.0041      |
| CEO Duality    | 630  | 0.0311 | 0.0298    | 0.0000  | 1.0000  | 0.1291      |
| BCOMP          | 630  | 5.1736 | 2.0452    | 4.0000  | 9.0000  | 0.0340      |
| BSIZE          | 630  | 8.0472 | 1.3826    | 7.0000  | 15.0000 | 0.0000      |
| PROF           | 630  | 0.6362 | 0.1520    | -0.4620 | 2.0645  | 0.0036      |
| FSIZE          | 630  | 11.6114| 0.5203    | 7.0453  | 16.3621 | 0.0244      |

Table 3 shows the results of the correlations between the explained, explanatory, and control variables. Since there is no significant difference in direction and degree of influence of debt measured in book or market value on the explanatory variables, this study focuses on explaining the book value of debt against other variables. At a glance, the results revealed that the coefficients of the correlation estimate between the independent variables are
reasonable and lower than 0.8, indicating that there is no issue relating to multicollinearity between the variables. Specifically, the results revealed negative correlation coefficients of -0.030 and -0.041 for managerial shareholding and CEO tenure, respectively. Conversely, the positive correlation coefficient of 0.022 between debt and CEO duality indicates the lack of monitoring and control on CEOs’ activities. This suggests the possibility of entrenched managers through CEO duality to use more debt than other sources. The positive connection between board composition and debt indicates the ability of the board to pressure management to use debt financing. The result shows that profitability of -0.041 negatively correlates with debt levels and confirms the pecking order theory of capital structure. The positive link between firm size and debt confirms the static trade-off theory of capital structure.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
Variable & Debt (BV) & Debt (MV) & MS & CEOTEN & CEODUAL & BCOMP & BSIZE \\
\hline
Debt (BV) & 1.000 &  &  &  &  &  &  \\
Debt (MV) & 0.593 & 1.000 &  &  &  &  &  \\
MS & -0.030 & -0.043 & 1.000 &  &  &  &  \\
CEOTEN & -0.041 & -0.030 & 0.010 & 1.000 &  &  &  \\
CEODUAL & 0.022 & 0.028 & 0.051 & 0.042 & 1.000 &  &  &  \\
BCOMP & 0.014 & 0.041 & -0.144 & 0.050 & 0.048 & 1.000 &  \\
FSIZE & 0.016 & 0.033 & -0.025 & 0.031 & 0.012 & 0.028 & 0.018 & 0.031 & 1.000 \\
\hline
\end{tabular}
\caption{Correlation matrix.}
\end{table}

The study tested the independent variables for multicollinearity using the Variance Inflation Factor (VIF). According to Gujarati & Porter (2009), the VIF analysis of explanatory variables with a value above 10 indicates high multicollinearity. The results presented in Table 4 demonstrate no multicollinearity issue between the explanatory variables since the VIF ranges between 1.042 and 1.201 with a mean value of 1.096.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Variable & VIF & 1/VIF \\
\hline
MS & 1.201 & 0.833 \\
CEOTEN & 1.100 & 0.909 \\
CEODUAL & 1.022 & 0.979 \\
BCOMP & 1.143 & 0.875 \\
FSIZE & 1.066 & 0.938 \\
FSIZE & 1.092 & 0.916 \\
FSIZE & 1.045 & 0.957 \\
Mean value & 1.096 &  \\
\hline
\end{tabular}
\caption{Summary of the multicollinearity test results.}
\end{table}

4.2. Regression Results

The study used the fixed effects regression model to estimate the influence of entrenchment proxied as managerial shareholding, CEO tenure, and CEO duality on the capital structure proxy of debt. The fixed effects model is essential for this study to resolve any issue regarding heteroscedasticity and autocorrelation common with panel data. Before using this model, we carried out the Hausman specification test to decide between the fixed effects and random effects models. The null hypothesis is that there is no substantial difference across the cross-sectional units. In this case, the decision will rely on the fixed effects model since the random effects model may be inappropriate to estimate the data. The Hausman specification test results in Table 5 suggest no panel effect, thus supporting the choice of the fixed effects method of analysis since the test statistics are 134.9703, and the p-value is less than 0.05.
Our analysis estimates two different models for each measurement of debt (book and market values) under the fixed effects estimator to check the influencing power of entrenchment variables, such as managerial shareholding and CEO duality, on debt. The results of the fixed effects analysis are reported in Table 6. Since there is no significant difference between the results obtained using both book value and market value to measure debt, this study discusses the book value only. Overall, this study confirms the predicted signs of the variables, consistent with accepted theories of capital structure and provides evidence to support the argument that managerial entrenchment significantly explains the level of debt in organizations.

The estimation shows that managerial share ownership impacts the capital structure of quoted companies in Nigeria. The result, with a coefficient of -0.0028 and a p-value of 0.0300, offers a statistically significant negative connection between managerial share ownership and debt ratio. This result submits that managerial share ownership may help mitigate agency problems by aligning the interests of the managers with those of the owners of the organization. The supportive evidence of a significant adverse association between managerial entrenchment captured as managerial shareholdings and debt ratio suggests that executives use less debt in the operation of listed firms to mitigate bankruptcy and loss of investment, and remuneration and other incentives are associated with the directorship. This result is also in tandem with the studies by Sheikh & Wang (2012) in Pakistan and Uwuigbe (2014) in Nigeria. However, the result is in contrast to the study by Berger et al. (1997) who reported a positive connection between managerial inside ownership and leverage.

Furthermore, the analysis indicates a negative association between CEO tenure in office and debt ratio. The negative sign for CEO tenure demonstrates that an entrenched CEO tends to employ less debt ratio in operations, which indicates the understanding of the mechanisms in the use of debt ratio and its associated risks. This result, with a coefficient of -0.03010 and a p-value of 0.0813, implies that managers have the ability to avoid the costs of supervision from the providers of funds and bankruptcy costs associated with high levels of debt. This result is in accordance with previous studies, such as Berger et al. (1997); Garba & Abubakar (2014); Taljaard et al. (2015). A critical observation among Nigeria’s listed firms is that executive power to influence the decision making process and control the activities of a firm increases with the length of tenure in office. Interestingly, in column 2, CEO tenure indicates a positive and significant power to influence debt ratio where there is no managerial shareholding. This result partly highlights why a good number of firms finance their assets using more debt without considering the risk of bankruptcy. This means that managerial decision making during their tenure is a function of their shareholding power.

Furthermore, CEO duality has a positive connection with the level of debt in Nigeria’s listed firms; the finding is statistically insignificant at the 5% level. In this study, CEO duality is where the CEO also acts as the chairman of the firm. However, in column 2 of Table 6, the relationship between CEO duality and debt measured as book value is positively and statistically significant when the executives have no share ownership. This result implies that managerial share ownership can serve as a control mechanism to ensure that the managers reduce the risk of bankruptcy that may emanate from debt. The 0.0635 coefficient estimate of CEO duality indicates that when a single individual holds the positions of both CEO and chairman of the board, the debt ratios will increase by 6.4% at book value. This result supports the work of Abor (2007) in Ghana. On the other hand, the result implies that CEO duality may help a firm make quick decisions regarding any issue around debt financing. The finding of this study supports the agency theory that duality increases the debt ratios of firms.

| Table 5. Hausman specification test result. |
|--------------------------------------------|
| Chi-squared | 134.9703 |
| Prob. > Chi-squared | 0.0000 |
The analysis shows a coefficient estimate of 0.10844 and p-value of 0.0005 for board composition. This result reveals a substantial positive connection between board composition and the debt ratio of listed firms in Nigeria. It suggests the ability of external directors to monitor the activities of the executive and pressure them to adopt more debt in their capital structure. Firms with more external directors tend to make better decisions and carry out adequate checks and balances that lead to more debt levels. Moreover, the study suggests the tendency of firms to take advantage of the external directors' experience and influence to raise funding through the financial market or high net worth individuals in society. This is particularly important since independent directors can directly supervise the managers in areas such as the decision on company funding resources. This finding is in support of the research work of Berger et al. (1997). However, it is essential to note that access to the use of debt on account of the influence of external directors may lead to future financial distress, especially if there are no adequate assets to secure the debt or quality investment opportunity to service the debt obligation. The finding that external directors and debt ratio have a positive relationship is inconsistent with Wen et al. (2002) and Anderson, Mansi, & Reeb (2004).

The estimate of board size reveals a coefficient value of 0.3107 and a p-value of 0.1029. This result shows that board size is positively but insignificantly related to listed companies' debt ratio in Nigeria. The positive link between the two variables indicates that firms with a higher number of board members may take advantage of the influence of the directors to raise funds through debt to finance positive investment and improve the performance of the business. This is particularly possible because of the reliability and confidence that banks and other providers of funds may place on such directors. Moreover, it shows the board's ability to monitor a CEO's activities and pressure them to make optimal financing decisions in line with the shareholders' objective. Although this result is consistent with the empirical findings of Jensen (1986); Abor (2007) and Al-Nodel & Hussainey (2010) it, however, contradicts studies such as Berger et al. (1997) and Hassan (2017).
Furthermore, the analysis shows that profitability measured as ROA negatively affects firms' debt ratio in Nigeria. On the other hand, firm size discloses a positive connection with the percentage of debt. These findings are in tandem with the pecking order and the static trade-off theories of capital structure. Table 6 shows that the F-test statistic of 12.19 with a p-value of 0.0010 demonstrates that the study's independent variables are significant and correlate with the debt ratio of quoted companies in Nigeria. The goodness of fit test of the model, as depicted by the $R^2$ (adjusted $R^2$) value of 82% (74%), implies that the explanatory variables explain the importance of debt ratio of listed firms in Nigeria.

4.3. Diagnostic Test

The analysis in Table 7 shows a t-statistic of 10.0631 and a p-value of 0.3106, indicating that there is no issue regarding conditional heteroscedasticity. The t-statistic of 16.1025 and p-value of 0.1430 reveal a normally distributed model at the 5% level of significance. The Breusch–Godfrey LM test indicates a t-statistic of 9.2150 and a p-value of 0.3114. This result establishes that there is no serial correlation issue among the variables.

| Null hypothesis          | Test method           | T-statistic | P-value |
|--------------------------|-----------------------|-------------|---------|
| No serial correlation    | Breusch–Godfrey LM    | 9.2150      | 0.3114  |
| No heteroscedasticity    | White (Chi-square)    | 10.0631     | 0.3106  |
| Normality                | Jarque–Bera           | 16.1025     | 0.1430  |

5. CONCLUDING REMARK

This paper used panel data for the period from 2010 to 2019 and a fixed effects regression model for analysis. The study provides evidence that managerial entrenchment prevents managers from issuing the optimal amount of debt except when under pressure to align with a firm's objectives. Given the degree of uncertainty in the environment and the expectations from stakeholders, we believe the results of this study will be of interest to policymakers, practitioners, and other agents of firms in Nigeria and other emerging countries with similar characteristics. One primary focus of this study was to investigate how managerial shareholding, CEO tenure, and CEO duality proxy for managerial entrenchment influences managers to make suboptimal decisions.

The results suggest that managerial shareholding encourages managers to use less debt to finance positive investment opportunity in Nigeria for the sample period examined. The study also demonstrates that entrenched managers, as a result of their period of service in the capacity of CEO, and through holding the positions of CEO and chairman in the same firm, tend to employ more debt due to inadequate monitoring and the absence of control mechanisms in place. However, these challenges can be reduced where there is managerial shareholding, effective board composition, and board size. Board composition and board size were found to have significant adverse associations with the debt of firms in Nigeria, which suggests that these two variables can guide against the risk of any potential bankruptcy. The negative impact of profitability, measured as return on assets and firm size, is in line with predicting the pecking order theory and static trade-off theory in finance literature.

One underlying factor that may be responsible for the adverse impact of managerial entrenchment on debt in Nigeria is the weak institutional structure that is common among developing countries. Thus, we suggest that all things being equal, the government should strengthen the institutions, especially the regulatory authorities, to ensure that firms are adequately monitored to make financing decisions in the best interest of the owners and the other stakeholders. The study also recommends that competent board members should supervise managers' activities in such a way that the managers are compelled to issue optimal debt ratio in their capital structure to finance investment opportunities. Moreover, the government and other stakeholders should invest in developing the financial market to provide the required funds.
The study concentrated on listed companies on the Nigerian Stock Exchange during the ten years ending in 2019. The study also focused on managerial shareholding, CEO tenure, and CEO duality as governance variables proxied for managerial entrenchment. Therefore, for future studies, it is essential to bring in variables such as executive compensation, gender, and level of education to evaluate this issue in emerging countries. It is also necessary to increase the sample size and time frame to assess how managerial entrenchment influences capital structure in different environments.

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