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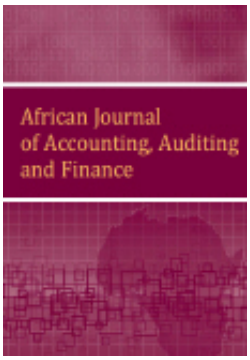

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Board leadership and firm capital structure decision in Nigeria: an examination of CEO and chairperson's characteristics

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Board leadership and firm capital structure decision in Nigeria: an examination of CEO and chairperson's characteristics

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Abstract: Prior studies on firm capital financing ignored the importance of the leadership characteristics. As a result, this study investigates the impact of board chairperson and CEO characteristics on firm debt financing in Nigeria. The study draws data on 54 listed firms and analysed using regression estimator in testing the hypotheses of the relationship between the board leaders' characteristics and firm capital structure. The finding from the analysis shows that firms secure more debt financings when the board leaders have ownership stakes in the firm. This study presents the original result of the relationship between CEO and chairperson characteristics and firm capital structure decision which were ignored in prior studies. The study shows how powerful the board leadership is in determining capital structure which prior study linked to firms outcomes.

Keywords: board structure; CEO; chairperson; debt financing; firm performance; Nigeria.

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1 Introduction

In recent years, businesses face difficulties in selecting the available financing options to promote firm growth. The different financing options are classified broadly into equity and debt financing options, and each of the options has its limitations. Notable among the limitations of equity financing, is the regulatory restrictions posed by the security commission of the country concerning the maximum a firm could raise as equity finance and the requirements that have to be fulfilled for the firm to go on public offer. For debt financing, on the other hand, a firm could devise ways to generate as much capital as it

may require in boosting the company's growth without recourse to the regulator. Also, debt financing enables the firm to retain control of its activities without the interventions of the lender and at the same time reap the tax advantages embedded in the interest payment. However, a firm that opt for a debt financing option (which is embedded in most firms' strategies) may need to convince the creditors that they could repay a loan without default. These persuasions are mostly championed by the firm's leaders (CEO and/or Chairperson) who are at the helm of the firm's affairs and are moved to ensure the firm's achievement of its strategic decisions.

Money lenders in the less developed economies are not enthusiastic to offer long term debt to the firms who are mostly critically in need of expansion but rather prefer to lend it to the well grown entities (Olokoyo, 2011). Access to long-term debt by many companies has made managers of many firms opt for other options available in the financial market. In Nigeria, the Bank of Industry has come up with several lines of products to offer short, medium and long-term loans to help remedy the financing gap by firms. Despite such measures, access to such facilities proves to be difficult for the firms' managers owing to the managerial ability to give them 'a push' in securing such financing options. This study, therefore, undertakes to examine the board leadership characteristics in order to find the managerial qualities that have can secure such a facility and ultimately improve the firm's outcomes.

Extant literature on firms' capital structure in Nigeria, and in many developing countries, are skewed towards finding relationships between the firms' attributes such as liquidity, profitability, etc. and the capital structures. Myriads of theoretical papers from the time of the Modigliani and Miller (1958) to date show the significance of the debt capital to the overall companies growths. However, evidence about the relationship between leadership attributes and firm debt financing is still lacking. This study, therefore, tends to breach the literature gap by examining the impact of the two board leaders (Chairperson and CEO) on firm debt financing.

The two board leaders have tremendous contributions they can make in the company's governance and policy implementations. It is noted that extant literatures in corporate governance tend to underestimate the important roles played by the board chairperson (Nguyen et al., 2018; Zhang et al., 2018; Knockaert et al., 2015). While CEO has the leadership role in leading the management in the day-to-day running of the firm, board chairperson has enamours contribution in ensuring that the strategies and policies agreed upon are carried out accordingly. Chairperson also provides a platform for better leadership which is important in meeting the company's goal (Krause et al., 2019). Similarly, the board leader is responsible for ensuring openness and constructive debates among the directors. Despite the importance of the two board leaders, the question on the qualities of the two board leaders that help promote firm growth through debt financing remained unanswered.

To address the question of the relationship between the qualities of the board leaders and debt financing, this study examines evidence from listed firms in Nigeria. Various studies (such as Peni, 2014; Krause et al., 2019; You et al., 2020; Bala et al., 2021; Rahman and Chen, 2022) highlighted the importance of characteristics of firm leaders in turning things around. In view of the importance of the qualities of those that head the firm supreme organ (the board), this study investigates the effects of the board chairperson and CEO characteristics on firm's debt financing decision. However, due to inexhaustibleness of the characteristics, this study examines those that relate to experience, education and connections because they are the key qualities that are basic

for leadership role and are from the four power dimensions (Finkelstein, 1992; Day et al., 2004; Dumulescu and Muţiu, 2021; Shen, 2021). In addition, the board leaders' ownership is examined due to the consequence of the capital structure decision on their control interest (Ganguli, 2013). Findings from the empirical analysis established that stock ownership by Chairperson and CEO has a positive impact on the company's ability to secure debt financing. The policy implication of the study is that CEOs and chairpersons, who have no considerable ownership in the firm need to be closely monitored because they could restrict the firm from addressing its growth challenges through the use of debt financing.

The remaining parts of this paper are partitioned into four segments. Section 2 discusses some theoretical and empirical literature on capital structure. Section 3 discusses the research design and Section 4 is about the analysis, findings and discussions. Finally, Section 5 is about the summary and conclusion of the paper.

2 Empirical review and research hypotheses

A plethora of prior studies were made in investigating the impacts and determinants of capital structure. Studies on the firm capital structure are crucial because it is one of the key financing decisions to enhance company performance and by extension the values of the firm (Li and Islam, 2019; Ramli et al., 2019). In this direction, many studies were conducted to examine the implications of the capital structure on company outcomes in various settings (Ramli et al., 2019; Nguyen and Nguyen, 2020; Ngatno et al., 2021; Abdullah and Tursoy, 2021). These and many such studies reported that debt financing has a significant effect firm's growth and performance.

Despite the paucity of studies on the relationship between board leadership and debt financing, few extant studies examined the impact of corporate governance on the capital structure decision. For instance, Kieschnick and Moussawi (2018) examined the impact of governance index on the capital structure decision of US firms and found that the corporate governance indices affect capital structure choice as firm ages. The study focuses on the corporate governance index of the firms and used firm age as the interactions to figure out the stages at which firms opted for more debt capital. In another study, Elmagrhi et al. (2018) examined the implication of board structure and diversity on the capital structure of US firms. The study revealed that gender diversity and the presence of minority on the board have a negative impact on capital structure. However, the study focused only on the board of trustees of the charity organisation rather than the board of directors of for profit organisations. Further, the study found a positive relationship between capital structure and firm performance.

Among the factors considered by the scholars that have some impact on corporate financing is the firm shareholdings structure. Bajagai et al. (2019) examined evidence from firms listed in Nepal and findings revealed that institutional shareholdings and managerial shareholdings affect firms' leverages. Also, Meah (2019) examined the effect of corporate governance efficiencies on the capital structure of listed manufacturing firms in Bangladesh. The study reported a negative effect of board size and foreign ownership on capital structure. The study also revealed a positive effect of managerial ownership and audit committee independence on the capital structure of the firms. However, the study focused on the diversity of the board of directors. In another study, Das et al.

(2020) analysed data from Indian the Manufacturing sector and confirmed the effect of board size, board independence and audit committee meetings on capital structure.

Rather than examining the actual capital structure of the firms, Nguyen et al. (2021) investigated the impact of board governance variables on the rate of adjustment of the firms' debt structure (capital structure dynamism). The study reported that board size, board independence, gender diversity and managerial ownership contributed positively to the speed of adjustment of the capital structure of the Vietnamese firms. Also, Ezeani et al. (2022) examined the effect of capital structure dynamism on firms using data from multiple countries (France, Germany and Japan). The study confirmed that the board characteristics affect the speed of changes in the firm's capital structure. However, the study revealed that the speeds vary from one country to the other.

It could be noted that studies on determinants of firms' capital structure are heavily skewed toward board characteristics rather than the leadership structure. However, despite the paucity of studies on the effect of board leadership on capital structure, some studies attempted to find the relationship between CEO characteristics and capital structure. For example, Li et al. (2017) examined the relationships between CEO power and capital structure of the Chinese SMEs listed in the Shenzhen Stock Exchange. The study established that CEO power affects firm leverage. The study emphasised a nonlinear relationship. Also, Thijssen (2017) examined the effect of CEO characteristics on capital structure and found that the interaction between CEO ownership and age has a positive effect on capital structure while the interaction between female CEO and age has a negative effect on capital structure. Furthermore, Zaid et al. (2020) analysed data from Palestinian firm and found that CEO duality affect capital structure negatively.

2.1 CEO characteristics and capital structure

According to the political cost hypothesis of the positive accounting theory, managers tend to shift earnings from current to future in order to shield the tax cost and other related cost (Bansal and Ali, 2021). However, some managers have self-interestedness and hence choose to shift the future earnings to the current period to reap the bonus advantage in the current period. In either of the two cases, firm management may choose to apply a method that best suits them. However, many CEOs are stewards and tend to choose the decision which is in the best interest of the stakeholders (Allen and Tomoaia-Cotisel, 2021). Despite the valuable contributions of various factors in determining capital structure of a firm, the leadership structure and composition have not been fully explored (Luciano et al., 2020). Rahman et al. (2019) maintained that leadership style improves firms' efficiencies and performance. Meanwhile, Pitelis and Wagner (2019) maintained that a strategic shared leadership style improves organisational cognition. These empirical findings and many theoretical explanations provide the premises that the leadership of a firm could influence the firm financing option.

This study assumes that board leaders are stewards and maximise the overall benefits by choosing the best financing option. The study, therefore, examines the board leaders (CEO and chairperson) characteristics and their tendency to opt for debt financings which helps improves firm growth. Zhang et al. (2018) argued that some leadership characteristics amount to discretionary power and could be used positively. Going by the effect of some of the leadership characteristics such as ownership (Hassanein et al., 2021; Wang et al., 2021), education (Naseem et al., 2020), insider (Banerjee et al., 2020;

El-Khatib et al., 2021), financial expertise (Custódio and Metzger, 2014; Matemilola et al., 2018; Oradi et al., 2020), and connections (Wu et al., 2012; Jiang et al., 2021) in the firms' decisions, the following hypotheses are drawn:

H1 CEO ownership, education, financial expertise, and connection have positive effect on capital structure.

H1 Chairperson ownership, education, financial expertise, and connection have positive effect on capital structure.

3 Research design

This study aims to examine the CEO and board chairperson's characteristics to establish evidence of a relationship between board leaders' characteristics and firms' debt financing (capital structure). To establish the relationship among the study variables, I used secondary data obtained from companies listed in Nigeria. Data are collected from a sample of 54 non-financial firms listed by the Nigerian Stock Exchange (NSE) from 2011 to 2016. The number of equities listed by the NSE as of the last quarter of 2016 is 175. The study sample is arrived at after removing 57 firms from financial services sectors and 5 listed investment funds. In addition, 49 firms are excluded for not disclosing the relevant information in their annual reports (as in Yuan et al., 2022) and also ten newly listed firms do not form part of the sample. Table 1 summarises how the sample is arrived at.

Table 1 Computation of the sample of the study

Conditions	*Number of firms*
Total number of listed equities	175
Listed investment funds	5
Listed firm in financial sector	57
Newly listed	10
Firms with no much disclosure	49
Sample	*54*

3.1 Dependent variable

This study is about capital structure decision, which is one of the important financial decisions. The outcome variable for this study is the capital structure which is computed as the ratio of the long-term debt to the total assets of the firm. The banks in the country are reluctant in offering firm's long-term debt unless the firm is deemed strong enough to repay the facility. Similarly, the choice of long-term debt is more logical because the actual short-term debt incurred during the year is not fully reported. Preliminary examination of the firm's annual reports shows that only the closing balance of the total short-term loan is reported using the short term as a component of the debt ratio may be faulty. The debt-equity structure is therefore measured as the ratio of the long-term debt to total assets as shown below:

$$CS = LTD / TA$$

3.2 Independent variables

The study considers the observable characteristics of the CEO are chairpersons that are retrievable from the firm's annual reports and Bloomberg database. The chairperson's characteristics include political connection; former CEO; financial expertise; insider; education and ownership. All the variables regarding the chairperson are dummy variables such that 1 indicates the presence of the quality and 0 indicates none. The other set 0f variables are drawn from the CEO characteristics and they include ownership, insider, education, financial expertise and CEO multiple memberships. Except for the CEO ownership, all the variables driven from the CEO characteristics are dummy variables such that 1 indicates the presence of the characteristics and 0 otherwise. Table 2 summarises the variables and their measurements.

Table 2 Independent variables and measurements

Chairpersons/CEO characteristics:	*Measurement*	*As used in*
CHAIR_FCEO	Dummy variable such that 1 indicates chairperson previously served as the CEO and 0 otherwise.	Puffer and Weintrop (1995)
CHAIR_IN	Dummy variable such that 1 indicates chairperson previously served in the firm and 0 otherwise.	Zhang and Rajagopalan (2010)
CHAIR_FIN	Dummy variable such that 1 indicate chairperson is either served or acquired academic or professional certificate in accounting, finance or related discipline and 0 otherwise.	Luo (2015)
CHAIR_POL	Dummy variable such that 1 indicates chairperson is in politics and 0 otherwise.	Sharma et al. (2020)
CHAIR_OWN	This is the percentage of the Chairperson's direct and indirect ownership interest in the firm to the total share ownership of the firm.	Luo (2015)
CEO_OWN	This is the percentage of the CEO's direct and indirect ownership interest in the firm to the total share ownership of the firm.	Luo (2015), Saidu (2019)
CEO_IN	Dummy variable such that 1 indicates CEO previously served in the firm and 0 otherwise.	Zhang and Rajagopalan (2010)
CEO_MM	Dummy variable such that 1 indicates CEO serves other board(s) and 0 otherwise.	Withers and Fitza (2017), Alzahrani and Che-Ahmad (2015), Saidu (2019)
CEO_FIN	Dummy variable such that 1 indicate CEO has either served or acquired academic or professional certificate in accounting, finance or related discipline and 0 otherwise.	Custódio and Metzger (2014)
CEO_ED	Dummy variable such that 1 indicates if CEO acquired postgraduate education and 0 otherwise.	Saidu (2019)

3.3 Control variables

This study follows other previous studies to control for firm-specific effect using some control variables. Four control variables are used for this study. The control variables

include the firm size, board size, liquidity and firm performance. The firm size is measured as the natural logarithm of the total sales as used in Deloof (2003). Board size is measured as the absolute number of directors served during the period (Carter et al., 2003). Liquidity is measured as the net operating cash flows for the period (Ayers et al., 2006; Malmendier and Tate, 2015) and firm performance is measured as the earnings per share (Healy, 1985; Rhode and Packel, 2014).

3.4 Model

This study examines the relationship between the CEO and Chairperson's attributes and capital structure decisions. The study used multivariate regression to test the hypothesis on the relationship between the CEO and chairperson's characteristics and firm capital structure. The dependent variable in the model is capital Structure while the independent variables are the CEO and chairperson's attributes. Four control variables are also included in the models which include the firm size, board size, liquidity and firm performance. The mathematical model is expressed as follows:

$$\begin{aligned} CS = {} & \alpha + \beta 1 CHAIR\_OWN_{it} + \beta 2 CHAIR\_ED_{it} + \beta 3 CHAIR\_IN_{it} \\ & + \beta 4 CHAIR\_FIN_{it} + \beta 5 CHAIR\_POL_{it} + \beta 6 CHAIR\_FCEO_{it} \\ & + \beta 7 FSize_{it} + \beta 8 BSize_{it} + \beta 9 CFO_{it} + \beta 10 EPS_{it} + \varepsilon \end{aligned} \tag{1}$$

$$\begin{aligned} CS = {} & \alpha + \beta 1 CEO\_OWN_{it} + \beta 2 CEO\_EDUC_{it} + \beta 3 CEO\_IN_{it} \\ & + \beta 4 CEO\_FIN_{it} + \beta 5 CEO\_Con_{it} + \beta 6 Size_{it} + \beta 7 Size_{it} + \beta 8 CFO_{it} \\ & + \beta 9 EPS_{it} + \varepsilon \end{aligned} \tag{2}$$

where

α	intercept
CS	Capital structure
CEO_OWN	CEO ownership
CEO_EDUC	CEO education
CEO-IN	CEO insider
CEO_FIN	CEO financial expertise;
CEO_MM	CEO multiple memberships
CHAIR_OWN	Chairperson Ownership
CHAIR_EDUC	CEO education
CHAIR_IN	CEO Insider
CHAIR_FIN	Chairperson Financial Expertise
CHAIR_POL	CEO Political connection
CHAIR_FCEO	Chairperson Financial Expertise
EPS	Earnings per share

CFO	Cash flows
CFO	Cash flow from operation
FSIZE	Firm size
BSIZE	Board size
ε	error term.

4 Result and discussion

This study examines the relationships between the Chairperson and CEO attributes and the capital structure decision. The study considers five CEO characteristics and six chairperson characteristics. This section considers descriptive statistics, correlation and regression analysis with a view to achieving the study objective.

4.1 Descriptive statistics

Table 3 describes and summarises the descriptive statistics of the study variables. The figures highlight the statistics for all the variables of the study including the mean, standard deviation and minimum and maximum values of the destribution. The mean value for the capital structure is 0.1741 which indicates that 17% of the total capital of the firms is financed by debt. Similarly, the maximum value of 0.9525 indicates that the maximum debt to total assets ratio is 95% and the minimum value of 0%. Chairperson ownership has a mean value of 25.5% with a minimum of 0% and a maximum of 91%. This indicates a high variation in chairmen's stock ownership. Chairperson's education and insider have the mean values of 51% and 52% respectively. This indicates that 51% of the chairperson acquired postgraduate education while 52% of chairpersons served the firm before their promotion to the position. 69% of the chairpersons have financial expertise while 57% of them are politically connected. The table also highlighted that 24% of the CEOs are retired CEOs.

The table also highlights the statistics about the variables relating to the CEO and control variables. The table shows that the average CEO stock ownership is 6% with a standard deviation of 0.116. The maximum and minimum CEO share ownership are 43.5% and 0% respectively. This also indicates that there is a high variation in the CEO stock ownership in Nigeria. 54.6% of the CEOs in Nigeria acquired postgraduate certificates while up to 75% of the CEOs served the firm before promotion to the position. Table 3 also reports that 68% of the CEOs have financial expertise while CEOs with multiple board ownerships are 72.8%. The statistics for the control variables are also included in the table. The mean cash flow from operation is 11% with minimun and maximum values of 71% and -0.298. Earnings per share have a mean value of 3.223 with minimum and maximum values of 219 and -72.8 respectively. The mean for firm size and board size are 16.62 and 8.8 respectively. The maximum board size is 17 members while the minimum board size is 4 members.

Table 3 Descriptive statistics

Variable	*Mean*	*Max*	*Min*	*SD*	*Skewness*	*Kurtosis*
CS	0.1741	0.9527	0	5.2353	0.3486	2.3462
CHAIR_OWN	0.2558	0.9106	0	0.2937	0.8786	2.4238
CHAIR_ED	0.5123	1	0	0.5006	–0.0494	1.0024
CHAIR_IN	0.5216	1	0	0.5003	–0.0865	1.0075
CHAIR_FIN	0.6944	1	0	0.4614	–0.8442	1.7127
CHAIR_POL	0.5741	1	0	0.4952	–0.2996	1.0898
CHAIR_FCEO	0.2438	1	0	0.4301	1.1932	2.4237
CEO_OWN	0.0601	0.4352	0	0.1164	1.9959	5.6772
CEO_ED	0.5463	1	0	.49862	–0.1859	1.0345
CEO_IN	0.7500	1	0	0.4337	–1.1547	2.3333
CEO_FIN	0.6821	1	0	0.4664	–0.7821	1.6117
CEO_MM	0.7284	1	0	0.4455	–1.0270	2.0547
CFO	0.1108	0.7172	–0.2980	0.1299	0.5554	5.4219
EPS	3.2359	219.40	–72.845	1.9159	0.8639	0.9187
FSIZE	16.6168	20.327	12.869	1.6450	0.0950	2.1667
BSIZE	8.8056	17	4	2.2974	0.5488	3.2829

4.2 Correlation analysis

The correlation analysis is summarised in Table 4. The Tables highlight the correlation coeffecient for every two sets of values. It could be noticed from Table 4 that capital structure is positively related to chairperson ownership and CEO ownership but has a negative relationship with chairperson education, chairperson financial expertise and CEO education. A chairperson who was a retired CEO (CHAIR_FCEO) has a negative correlation coefficient with the chairperson's political connection, education and financial expertise. Similarly, it has a negative correlation with CEO insider, ownership and financial expertise. In contrast, CHAIR_FCEO has a postive relationship with chairperson insider, CEO education two control variables (firm size and CFO). Chairperson's political connections have a negative correlation coefficient with almost all the variables of the study except CEO education, financial expertise and ownership. Chairperson ownership is related to all the variables except the chairperson's education, financial expertise and CEO insider. Similarly, chairperson's insider has a positive correlation coefficient with the chairperson's financial expertise and all the control variables.

Table 4 also indicates that CEO insider positively relates to CEO ownership and negatively related to CEO multiple board membership and EPS. Similarly, CEO ownership has a positive correlation coefficient with CEO financial expertise and multiple membership while a negative correlation is reported in relation to CEO education, firm size and board size. CEO education is also reported to have a positive correlation with CEO multiple memberships, CFO and board size. While CEO financial expertise is positively related to CEO multiple board membership, it has a negative relationship with firm size, EPS and board size.

Table 4 Correlation matrix

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
(1) CS	1															
(2) CHAIR_FCEO	0.002	1														
(3) CHAIR_POL	0.027	–0.209*	1													
(4) CHAIR_OWN	0.150*	0.081	0.002	1												
(5) CHAIR_ED	–0.115*	–0.179*	0.246*	0.055	1											
(6) CHAIR_IN	–0.067	0.472*	–0.337*	–0.120*	0.018	1										
(7) CHAIR_FIN	–0.215*	–0.123*	–0.124*	–0.095	0.010	0.143*	1									
(8) CEO_IN	0.006	–0.187*	–0.022	–0.082	–0.064	–0.096	0.143*	1								
(9) CEO_OWN	0.199*	–0.264*	0.058	0.504*	0.011	–0.387*	–0.051	0.117*	1							
(10) CEO_ED	–0.170*	0.146*	0.052	0.133*	–0.045	0.165*	0.220*	–0.045	–0.125*	1						
(11) CEO_FIN	–0.036	–0.168*	0.163*	0.214*	–0.029	–0.216*	0.065	0.034	0.238*	0.038	1					
(12) CEO_MM	0.011	0.072	–0.008	0.216*	0.168*	0.096	–0.179*	–0.224*	0.114*	0.117*	0.254*	1				
(13) EPS	0.053	–0.031	–0.151*	0.145*	0.071	0.138*	0.063	–0.143*	0.059	0.063	–0.144*	0.061	1			
(14) FSIZE	0.013	0.153*	–0.059	–0.152*	0.049	0.212*	–0.011	0.052	–0.305*	0.059	–0.237*	0.081	0.183*	1		
(15) CFO	0.004	0.149*	–0.215*	0.203*	–0.137*	0.241*	0.109*	0.025	–0.078	0.161*	–0.052	0.152*	0.137*	0.311*	1	
(16) BSIZE	0.106	–0.033	–0.114*	–0.145*	0.036	0.215*	0.005	–0.046	–0.279*	0.145*	–0.199*	0.136*	0.126*	0.351*	0.177*	1

Note: *Indicates that the correlation coefficient is significant at 5%.

4.3 Regression analysis

The classical assumptions of linear regression are diagnosed to ascertain the conformity of the model to the assumptions. Data normality is checked using Shapiro and Swilk test and the result indicates that the data is normally distributed. This is further corroborated by the results of the Skewness and Kurtosis presented in Table 3 and P-P plots shown in Appendix B. In addition, multicollinearity is checked using both correlation coefficients and variance inflation factor (VIF). Table 4 presents the correlation coefficients of all the variables and none of the two pairs of variables has a high correlation. Multicollinearity is present if the correlation coefficient is 0.8 or above (Tabachnick and Fidell, 2014). Hausman specification test and Breuch-Pagan Langrangian Multiplier tests indicate that random effect fits the data best. Furthermore, the Breuch-Pagan test confirms that the problem of heteroskedasticity is present in the model. To correct the heteroskedasticity problem, Panel Corrected Standard Error models are used as the main model. Table 5 and Table 6 present the summary of the regressions. The two tables present the results for both pool OLS and the panel corrected standard error models (PSCE). The presence of heteroskedasticity indicates that the OLS may represent a biased linear estimator due to the high standard error.

Table 5 Impact of chairpersons characteristics on capital structure

	POOLED OLS			*PCSE*		
	Coef.	*t-stat*	*P-value*	*Coef.*	*t-stat*	*P-value*
Cons.	0.118	0.49	0.627	0.219	1.43	0.152
CHAIR_OWN	0.081	1.19	0.235	0.103	4.89	0.000***
CHAIR_INSIDER	–0.006	–0.15	0.882	–0.010	–0.88	0.380
CHAIR_FCEO	0.025	0.55	0.584	–0.017	–1.02	0.308
CHAIR_POL	0.034	0.85	0.397	0.012	0.52	0.602
CHAIR_ED	–0.087	–2.62	0.009***	–0.078	–3.48	0.000***
CHAIR_FINEXP	–0.053	–1.42	0.155	–0.102	–4.06	0.000***
CFO	–0.248	–2.7	0.007***	–0.390	–2.94	0.003***
EPS	0.000	0.67	0.505	0.001	2.05	0.041***
FSIZE	0.004	0.3	0.767	–0.002	–0.22	0.823
BOARDSIZE	0.007	0.89	0.373	0.014	4.33	0.000***
ADJ. R2		18%			15%	
N		324			324	

It could be seen that Table 5 presents the results of the regressions on the relationship between chairpersons' characteristics and firm capital structure. Table 6, on the other hand, presents the results of the relationships between the CEO characteristics and the Capital structure. The results show that the chairperson's ownership is positively related to the firm capital structure. This implies that the more the chairperson owns stocks in the firm, the higher the chance of the firm securing debt financing. Table 5 further reports that the chairperson's education and chairperson's financial expertise have a negative relationship with firm capital structure. This implies that an educated chairperson tends to be sceptical about securing debt capital. The finding is surprising because, under normal circumstances having a good understanding of finance by the chairperson needs to

encourage them to influence the financing of the firm through the outside sources (debt). However, the possible explanation to this scenario is that the chairperson is not confident about the profitability of securing the debt financing.

Table 6 Impact of CEO characteristics on capital structure

DV = capital structure	*Pool OLS*			*PCSE*		
	Coef.	*t-stat*	*p-value*	*Coef.*	*t-stat*	*p-value*
Cons.		–0.12	0.906	0.067	0.60	0.552
CEO_OWN	0.461	2.35	0.019**	0.435	2.63	0.009***
CEO_IN	–0.017	–0.52	0.606	–0.006	–0.43	0.669
CEO_ED	–0.044	–1.43	0.153	–0.082	–4.25	0.000***
CEO_FIN	–0.009	–0.27	0.785	–0.011	–0.6	0.549
CEO_CON	0.000	0.00	0.999	–0.015	–0.49	0.622
CFO	–0.218	–2.38	0.018**	–0.354	–2.91	0.004***
EPS	0.000	0.42	0.676	0.001	1.85	0.064*
FSIZE	0.009	0.61	0.545	0.002	0.29	0.770
BSIZE	0.012	1.52	0.128	0.019	3.92	0.000***
R^2		14%			18%	
N		324			324	

Table 7 Regressions with industry dummies

	Model 1 PCSE				*Model 2 PCSE*		
	Coef.	*t-stat*	*P-value*		*Coef.*	*t-stat*	*P-value*
Const	0.248	1.81	0.07*	Cons.	0.213	1.59	0.111
CHAIR_OWN	0.092	3.6	0.000***	CEO_IN	0.024	1.41	0.158
CHAIR_FCEO	–0.024	–1.3	0.195	CEO_OWN	0.417	2.92	0.004***
CHAIR_POL	0.023	1.34	0.180	CEO_ED	–0.101	–3.22	0.001***
CHAIR_ED	–0.082	–4.42	0.000***	CEO_FIN	–0.012	–0.56	0.575
CHAIR_INSIDER	0.001	0.06	0.950	CEO_CON	–0.019	–0.63	0.530
CHAIR_FINEXP	–0.109	–3.77	0.000***	CFO	–0.375	–2.7	0.007***
CFO	–0.399	–2.65	0.008***	EPS	0.000	0.56	0.578
EPS	0.001	1.66	0.097*	FSIZE	–0.015	–1.54	0.123
FSIZE	–0.011	–1.22	0.221	BSIZE	0.024	4.04	0.000***
BSIZE	0.014	4.35	0.000***				
Industry dummy	Included			Industry dummy	Included		
ADJ. R^2	17%				18%		
N	324				324		

The results of the relationship between CEO power and capital structure are presented in Table 6. The result shows a statistically significant positive relationship between CEO ownership and the capital structure of the firm. This implies that CEO ownership could make the firm secure debt financing. The finding is similar to the finding concerning the board chairperson which also establishes a significant positive relationship. The finding

concerning to the stock ownership by the firm leaders is interesting because it indicates that being owners of the firms and leaders on the board, they could encourage the board to initiate strategies to source the needed finance to help the firm improve its outcomes. Similar to the finding concerning the chairperson's education, CEO education has a negative impact on firm capital structure. Further analysis of the relationship is made by including the industry dummy and the results are presented in Table 7. The table summarises the regression result and further confirms the findings in the main analyses presented in Table 5 and Table 6. The result of the relationship between the chairperson's characteristics and firm performance shows that the chairperson's education and financial expertise have a negative relation to firm capital structure.

Like many developing countries, Nigeria's capital structure is largely financed by the shareholders' equity. This is evident in the low rate of debt to equity ratio with a high standard deviation. This implies that the few firms that are top debt financers raised the CS ratio to 17% and there is a host of other firms with zero debt capital. This explains the differences in the financing patterns between developing and developed economies. For instance, Li et al. (2017) reported an average of 38% while Sun et al. (2016) reported 29% for UK companies. This development limits the firms' ability to harness the benefits derivable from debt investment.

The result also indicates the importance of the ownership stake of the firm leaders in the capital structure. It could be noted from Table 5 and Table 6 that the relationship between both leaders' ownership and firm capital structure is positive. This justifies how important debt financing is taken by both the CEO and chairperson in aiding their investment growth. Prior studies such as Ngo et al. (2017) confirmed the importance of raising capital through debt and how the inventors benefit from such decisions. The finding of this study is corroborated by some prior studies such as Sun et al. (2016). The findings also confirmed the agency theory alignment hypothesis that ownership makes the firm's leaders align their interests with that of the company.

5 Conclusions

This study examines the impact of the Chairperson and CEO on firms' ability to secure debt financing. This resulted in the pecking order nature of the firm capital financing of the firms in Nigeria. The study uses a sample from non-financial firms listed by the NSE from 2011 to 2016. Findings from the analysis revealed that stock ownership by Chairperson and CEO has a positive impact on a firm's ability to secure debt financing. This is not surprising in that when the board leaders have an interest in the firm ownership, all hands will be on deck to ensure that they maintain their ownership status. This is possible through securing debt financing instead of equity financing. In contrast, chairperson's education and financial expertise as well as CEO education is shown to have a negative impact on firm capital structure.

The findings have some important policy implications because CEO and chairpersons who have considerable ownership in the firm may constrict a firm to vie for other financing options that may change their ownership ratio in the firm ownership structure irrespective of the importance of the options. This by implication will enable the firm leadership to dominate the other stockholders of the firm. This study contributes to the existing literature on capital structure and board governance by highlighting the board leadership tendencies on the debt financing options of the firm.

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Appendix A

Table A1 Result of VIF for multicollinearity test

MODEL 1			*MODEL 2*		
Variable	*VIF*	*1/VIF*	*Variable*	*VIF*	*1/VIF*
CEO_IN	1.33	0.754	CHAIR_OWN	1.66	0.603
CEO_OWN	1.32	0.759	CHAIR_FCEO	1.54	0.647
CEO_ED	1.25	0.799	CHAIR_POL	1.27	0.790
CEO_FIN	1.24	0.804	CHAIR_ED	1.25	0.801
CEO_CON	1.24	0.805	CHAIR_INSIDER	1.23	0.815
CFO	1.15	0.870	CHAIR_FINEXP	1.16	0.864
EPS	1.14	0.876	CFO	1.15	0.867
FSIZE	1.06	0.941	EPS	1.15	0.873
BSIZE	1.06	0.944	FSIZE	1.09	0.915
			BSIZE	1.05	0.950
Mean VIF	1.2		Mean VIF	1.25	

Appendix B

Figure A1 P-P plot of normality for model 1 (see online version for colours)

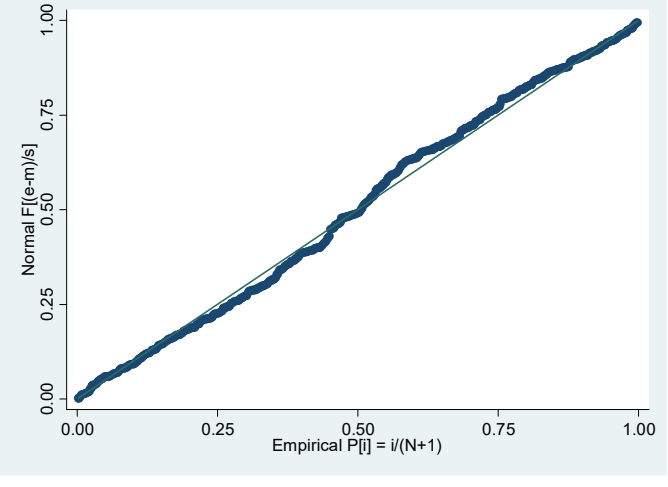

Figure 2 P-P plot of normality for model 2 (see online version for colours)