INFLUENCE OF FIRM SPECIFIC AND CORPORATE GOVERNANCE FACTORS ON CAPITAL STRUCTURE OF PUBLICLY LISTED NON-FINANCIAL FIRMS IN NIGERIA

By Shonubi, Taiwo Anthony Finance Department, Faculty of Management Science,

University of Lagos, Akoka shonubitaiwo@yahoo.com; 08023182260

ABSTRACT

The primary aim of this research is to investigate the impact of firm-specific and corporate governance variables on the capital structure of non-financial firms that are publicly listed in Nigeria. The study's population consists of 123 non-financial firms listed on the Nigerian Exchange Group between 2006 and 2020. A sample of 58 firms was selected using an inclusion and exclusion approach. The data was analysed using the generalized method of moments technique. The results indicate that past values of total debt to assets exhibit a noteworthy and favourable impact on present values of total debt to assets. Conversely, the current ratio, return on assets, non-current assets, board ownership, and board independence display an unfavourable and noteworthy influence on total debt to assets. Return on equity and debt-tax-shield, on the other hand, demonstrate an unfavourable and insignificant impact on total debt to assets. Finally, tangibility and block-ownership manifest a favourable and noteworthy influence on total debt to assets. Conversely, the variables pertaining to firm-specific and corporate governance exhibit noteworthy impact on the ratio of long-term debt to equity. The study recommends that firms should consider past level of debts when setting current debt levels.

Keywords; Capital Structure, Corporate Governance Factors, Firm-Specific Factors

Publicly quoted, Non-Financial Firms.

1.0 INTRODUCTION

Capital structure is a well-researched domain in corporate finance, which pertains to the amalgamation of diverse categories of long-term capital utilized by a company to fund its investments and augment its operations. These categories encompass retained earnings, long-term debts, and long-term equity. Firm specific factors such as profitability, liquidity, tangibility, non-current assets, debt-tax shield etc influence decisions on capital structure. Profit is the essence of setting up any business, profitability enhances retained earnings, firms with adequate retained earnings will make use of this source of capital in funding its investments and augment its operations in line with pecking order theory. Liquidity is the ability of the company to meet its obligations as at when due, liquidity influences the volume of capital needed to be sourced. Firms having high liquidity ratio, will not necessarily consider having more debt in its capital structure decisions, because the firm already have

adequate capital for funding its investments, however, to benefit from debt tax shield and reduces tax payable to government, liquid firms are encouraged to utilize long term debt, since interest payable on debts are tax deductible in line with trade off theory. As firms grows, more tangible assets and long term investments are acquired and employed in their production activities, these assets doubles as collateral securities and thus influences the firms ability to obtain more fund from financial institutions.

Corporate governance pertains to the collection of guidelines, policies, tactics, and instruments employed for the management and regulation of a commercial enterprise. Market confidence, financial market stability, and economic efficiency can all benefit greatly from the application of sound corporate governance practices. Corporate governance factors such as board ownership, block ownership, board independence, and board size have been linked to positive outcomes for businesses. Possible gains include less expensive capital, better results, and easier access to financing. The effect of corporate governance on capital structure has been documented in a number of studies, including those by Nguyen et al. (2020) and Chao et al. (2017).

Corporate governance principles will guide the conducts of managers in running the affairs of the firms effectively and efficiently to generate high profitability, maintain high liquidity ratio, acquire useful tangible assets and long term investments and hugely benefit from debt tax shield in maximizing the value of the firm and the wealth of the shareholders and minimizing the weighted average cost of capital.

 Objective and independent board members as well as block/ institutional board members have the acumen and resources to monitor the activities of managers, in ensuring that they act in the best interest of the shareholders, by investing in profitable ventures that will increase the firms profitability, maintain good liquidity ratio, acquire more assets etc, rather than engaging in activities that are detrimental to the shareholders, such as acquiring perquisite of office for their selfish interest. Managers having opportunities of becoming shareholders in nearest future, will work relentlessly for the growth of the firm, thus enhancing the value of the firm by working to increase profitability, liquidity, tangibility and making good use of debt tax shield, all these will guaranty cheap funding and lower cost of capital. Firm specific factors and corporate governance factors explained above are crucial and influences capital structure decisions.

The emergence of capital structure research started with the historic paper of Modigliani and Miller, (1958) in which they maintained that capital structure is irrelevant to the market value of a company as well as its cost of capital in a perfect capital market, since investors can borrow or lend money at free interest rate to replicate the adverse effect of variation in capital structure, considering some assumptions, such as no transaction cost, no taxation, no information asymmetry, no arbitrage, individual investor can not influence the market, among others. Modigliani and Miller (1963) observed that the introduction of taxation has an impact on the value of a firm. Specifically, they noted that when the interest paid on a loan is tax deductible, the tax liability owed to the government is reduced and the distributive profit to shareholders is increased. This, in turn, affects the overall value of the firm.

The capital structure and market value of a company can benefit from what researchers have shown to be the ideal corporate governance structure. Its ability to cut the cost of capital and encourage investment is two of the main reasons for this (Vijayakumaran, 2021). Factors such as management ownership, block ownership, and board independence all play a role in how a company decides to arrange its capital budget. Managerial ownership, as proposed by Jensen and Meckling (1976), can reduce the agency conflict between shareholders and management. This is because managers prefer debt to stock in order to prevent a dilutive loss of control and to preserve or grow their position of authority in the face of potential takeover bids. Managers who are also stockholders are more committed to the company's success and are more inclined to make decisions that benefit shareholders.

Despite the fact that firm-specific and corporate governance factors have a significant influence on capital structure, the majority of existing literature focuses on the influence of firm-specific factors on capital structure in developed nations (Ekreozi, 2013; Lious, Cecilio & Felix, 2016; Miguel et al., 2015). The influence of corporate governance factors on capital structure in developed nations has been investigated by various scholars, including Shelkh and Wang (2012) and Welalage, Locke, and Acharya (2018). Limited research has been conducted on the impact of both firm-specific and corporate governance factors on the capital structure of non-financial firms in developing nations, including Nigeria, which is characterized by inadequate corporate governance and an underdeveloped capital market. The empirical results regarding the combination in question are varied and lack conclusive evidence, based on the limited number of studies conducted.

Prior studies in this area of research in developing countries have mostly concentrated on the influence of firm-specific characteristics or corporate governance issues on capital structure.

When it comes to the capital structure of non-financial quoted firms in developing countries, particularly in the context of Nigeria, which is characterized by a weak capital market and corporate governance framework, however, there has been limited investigation into the combined impact of both firm-specific and corporate governance factors (Eldomiaty, 2007).

This study sets out to fill that void in the existing literature. Equally important components of a company's capital structure are the debt to asset and equity to debt ratios. Various measurements of capital structure, including debt to assets throughout various time periods and total debt to assets, have been used in the past by academics. In contrast, the equity portion of the capital structure, including the ratios of short-term debt to equity, long-term debt to equity, and/or total debt to equity—has received only marginal attention in the existing literature. Another gap that this research attempts to fill is this one by using the Total Debt to Asset and Long-Term Debt to Equity ratios as stand-ins for capital structure. Similarly, most non-financial quoted firms in Nigeria prefer to source for short-term debt like overdraft and bank loans because they are unable to source for long-term debt and then use same for long-term investment by rolling over such debt for years, thus turning short-term debt into long-term debt, which has a devastating effect on the cost of capital of such firms as interest on loans continue to rise. The selection of an appropriate capital structure is yet another obstacle for non-financial businesses. Debt financing presents the issue of making fixed interest payments regardless of the company's ability to repay, whereas equity financing presents the challenge of having one's ownership stake reduced. Because the erroneous choice of either component of a firm's capital structure can result in insolvencies and liquidity concerns, managers in charge of financial affairs in enterprises must give careful consideration to both parts. When compared to previous studies, which typically relied on a single proxy to assess profitability, asset structure, and other firm characteristics, the findings in this paper are more accurate and well-balanced because they were based on the use of at least two proxies.

2.0: LITERATURE REVIEW

This paper is based on the following three theories namely pecking order theory (Asymmetric information model), the trade-off theory and the resource dependence theory.

Pecking order Theory (Asymmetric information model)

The Pecking Order Theory, initially proposed by Donaldson (1961) and subsequently refined by Myers and Majluf (1984), elucidates the financing choices of managers with respect to

their investment opportunities. The theory suggests that managers tend to prioritise financing their investments through internal funds, such as retained earnings, before resorting to external financing sources, such as debt or equity.The aforementioned inclination stems from the notion of information asymmetry, wherein managers hold a greater and superior amount of information pertaining to the organization as compared to external stakeholders, thereby resulting in a disparity in the power of transactions. To compensate for this, external stakeholders demand higher returns, making internal financing the cheapest and most convenient source of financing. When external financing is required, managers prefer debt over equity due to the lower cost of debt financing. Debt holders require a lower return as compared to shareholders, who require a higher return due to their lower claim to assets in the event of bankruptcy.

The theoretical construct referred to as "Trade-off theory" pertains to the tax-bankruptcy nexus of debt financing. The classical notion of trade-off, as introduced by Kraus and Litzenberger (1973), entails a deliberation of the expenses associated with bankruptcy in comparison to the advantages of tax savings that arise from debt. The trade-off theory aims to explain how a company can achieve an ideal capital structure. The attainment of a harmonious equilibrium between the benefits arising from the tax shield and the expenses incurred as a result of financial distress is accomplished through the regulation of debt and equity levels.

This resource dependence theory was initially introduced by Pfeffer & Salancik, (1978), having its root from sociology theory of social network. The theory focuses on firms collaborating with other powerful external organizations to increase the flow of resources. In corporate governance, this theory focuses on the important roles of 'non-executive directors' in providing critical resources to the firm. This theory perceives board of directors as providers of diversified resources to the firm, called board capital (Hilman & Dalziel, 2003).

Corporate governance serves as a solution to the issue of agency that arises as a result of the separation between ownership and control. The phenomenon of interest conflicts arises between shareholders, who invest in a company and hold ownership, and managers, who are responsible for the daily operations of the company. This can result in managers prioritizing their own interests and gains over those of the shareholders, leading to the misuse of company resources. The emergence of agency conflicts prompted the formulation and advancement of corporate governance mechanisms as a viable solution (Feng et al., 2020).

Corporate governance is equally seen as a mechanism for protecting the interest of all stakeholders, such as managers, investors, customers and regulators (Shahid et al., 2019). Stakeholders interest helps in reducing conflicts which could affect the firm's performance and decisions on capital structure.

The Organisation for Economic Cooperation and Development (OECD) has introduced a set of standards and guidelines, referred to as the Principles of Corporate Governance, in response to the sustained interest in sound Corporate Governance concepts. These principles aim to aid policymakers in evaluating and enhancing the law system, rule and regulation system, and institution system pertaining to Corporate Governance. The ultimate goal is to promote economic growth and ensure the sustainability of financial stability (OECD, 2004).

The concept of corporate governance has experienced a swift evolution in contemporary times and has gained global attention due to its fundamental role in shaping a company's operational structure. The implementation and utilisation of corporate governance (CG) principles within organizations can prove advantageous to shareholders, as it facilitates efficient monitoring of the company's operations, particularly when the principles of transparency and disclosure are incorporated. It is crucial to understand that the notion of corporate governance is situated within the realm of business ethics.

Exemplary corporate governance characteristics ate connected with the behaviour of shareholders, as well as their institutional influence, moral and personal virtues, and structural factors (Steckler & Clark, 2019).

Every corporation possesses a distinctiveness that sets apart its approach to managing investment funding from that of other corporations. According to Jones (2013), the theory of business organisation suggests that the conduct of a company is influenced by both internal and external factors. The internal factors that impact a firm are intrinsically linked to its unique characteristics, including its size, age, industry type, and available resources such as liquidity, profitability, asset tangibility, and ownership. Conversely, the external factors that affect a firm are primarily related to the broader business environment (Vecchiato, 2012). Firm-specific factors serve as distinguishing characteristics that differentiate one firm from another with respect to its functions and operations. The selection of capital structure is influenced by the distinctive strengths and weaknesses of various firms. A firm of significant size is typically linked to more abundant resources in comparison to a smaller firm. Established companies exhibit greater profitability, liquidity, and asset accumulation over

time compared to emerging firms. Firm-specific skills may arise when a firm utilizes equipment that is exclusive to its operations. Firm-specific variables refer to a set of distinctive characteristics that differentiate one firm from another. These variables include tangibility, profitability, liquidity, firm size, market-to-book ratio, and other relevant factors.

Abdulkarim et al., (2019) studied the impact of firm-specific variables on the capital structure of listed six diverse firms on the Nigerian Stock Exchange for 10 years (2008-2017), using panel data analysis, with descriptive statistics and a correlation matrix to analyze the data. The results revealed a favourable relationship between company complexity, growth prospects and capital structure, while reliance on external financing had a negative and significant impact.

The "capital structure" of a company refers to the combination of its financial assets, which include equity and long-term debt. Using a mix of loan and equity financing, the ideal capital structure can lower the firm's weighted average cost of capital and increase its value. Glovanni et al., (2020) defined capital structure as a crucial aspect of corporate financial decisions that maximizes firm value and minimizes cost of capital, by determining the proportion of debt and equity that is appropriate to reduce the financial difficulties of the company.

Nour, (2019) in his study found that long-term debt ratio has no significant impact on performance, as measured by return on equity, return on asset and earnings per-share. This findings is contrary to the theoretical belief. The technique of data analysis used in the study might have however resulted in the result. Olushola, Mengze, Chimezie and Chinedum, (2022) studied the impact of capital structure on firms' performance in Hong Kong, using a panel data model for data analysis, the findings revealed a negative and insignificant relationship.

Capital structure optimization relies on financial managers setting and adjusting goals for the relative proportions of stock and debt. One way to maximise a company's worth is to reduce its weighted average cost of capital. The existing breakdown of capital is perfect. Maximizing shareholder wealth and firm value while limiting the weighted average cost of capital is, according to Parmasivan and Subramanian (2009), the best capital structure.

Finding the optimal capital structure that simultaneously lowers the cost of capital, maximizes shareholder wealth, and increases the value of the enterprise is the focus of the capital structure problem (Akintoye, 2016).

Liquidity which is the ability of a firm to meet its short-term obligations as at when due, is very essential for the survival and existence of any firm, illiquidity can lead to loss of businesses, thereby reducing the potentials for earnings and profitability. Ajose and Balogun, (2021) studied the impact of liquidity management on the financial performance of deposit money banks in Nigeria for a period of ten (10) years (2011-2020). The study adopted the ex-post facto research design. The findings showed that liquidity management has a positive and significant effect on the financial performance of deposit money banks in Nigeria.

Obim, Takon, and Mgbado (2020) utilised the ordinary least square multiple regression technique to investigate the influence of liquidity on the profitability of banks. The findings indicated a positive yet statistically insignificant correlation between bank deposits and return on assets, as well as a positive and statistically insignificant correlation between treasury bills and return on assets.

Profitability and Capital Structure

In business, profit is defined as the residual amount that remains after deducting the opportunity costs of inputs from the revenue generated by a company's outputs. The calculation of profit involves subtracting the sum of explicit and implicit costs from total revenue. According to Lious et al. (2016), there exists a negative and statistically significant relationship between profitability and debt issues reflected on the balance sheet.. Sutardjo and Afriyani (2019) examined how liquidity and company size affect financial firms' profitability and value in Indonesia. Structural equation modelling and moment structure analysis were used to analyze the data, 40 firms listed on Indonesian stock exchange were examined, findings revealed that Profitability and firm value were positively correlated, while liquidity was not.

Kuria and Omboi (2015) conducted an analysis using inferential statistics and correlation to evaluate the profitability and liquidity of banking and investment companies listed on the Nairobi Securities Exchange between 2009 and 2013. The study found a negative correlation between asset returns and debt-to-equity and capital ratios. Long-term debt has no impact. The debt-to-equity ratio of a certain model exhibited a positive correlation with its returns on equity, while its debt-to-capital ratio showed a negative correlation.

Tangibility and Capital Structure

A tangible asset is a type of asset that possesses physical substance. It denotes the percentage of fixed assets in the overall assets of a company. As firms mature, they procure fixed assets

to facilitate their production activities. The size of these fixed assets can serve as a form of assurance for creditors, enabling them to recuperate their funds in the event of financial difficulties encountered by the borrower (Erika, 2019).

Rukmana and Hasmi, (2018) studied the effect of capital structure, asset structure and company size on profitability (a case study of a manufacturing company listed on the IDX) findings revealed that asset structure has a significant positive effect on financial performance.

Debt tax shield and Capital Structure

The tax shield effect pertains to various mechanisms or strategies that can alleviate the impact of corporate tax liability, encompassing both debt and non-debt tax shields.

The concept of tax shield refers to the decrease in the amount of income taxes that arises from the utilization of a permissible deduction from the taxable income. According to colombo and caldeira, (2018), taxation is a first-order predictor of business financial decisions. As a result of the connectivity of different financial instruments, the debt and equity tax shields operate as alternative financial instruments that firms use to adjust their strategies. Changes in tax rates rarely influence a single individual, firm or industry, but frequently affect all economic stakeholders, from ownership structure to institutional environment.

Da-Fonseca et al., (2020) studied 259 listed Brazilian non-financial firms from 2008-2018, using tax proxies, findings revealed a positive relationship between debt tax shield and capital structure

Board ownership and Capital Structure:

The shareholders of a firm are represented by the board of directors. The board oversees the company's operations and provides strategic direction to the CEO and executive team but stays out of the day-to-day business. The positive board ownership–capital structure prediction finds empirical support from (Thakolwiroj & Sithipolvanichgul, 2021).

Block Ownership and Capital Structure:

A block holder is an individual or entity that possesses a significant portion of a company's shares and/or bonds. The proprietors possess the capacity to exert influence over the enterprise through the exercise of their voting privileges that are conferred upon them in proportion to their shareholdings. Individuals and institutions' abilities and experiences regarding monitoring and controlling the activities of the companies and their management

vary, however, institutional investments increase the controlling process over management decisions and leads to performance improvements (Al-Najjar, 2015)

Board Independence and Capital Structure

Elmoursy, (2020). reviewed the UK companies listed on the London Stock and Exchange (LSE) from 1999 to 2016 employing panel data regression model. The result of the work revealed that board size and independence exhibit a positive and significant relationship capital structure decisions. An independent director, is a board member who lacks a significant association with the company or its affiliates, except for receiving sitting fees. Regulators have increasingly emphasized the significance of board independence in light of the emergence of non-executive directors on the board of directors. According to Fama and Jensen's (1983) research, there is a correlation between the independence of the board and the effectiveness of its monitoring also referred to as an outside or non-executive director,function over managers.

From the literature review above, it can be seen that prior researchers examined either firm specific factors with capital structure or corporate governance factors with capital structure, limited attention is given to the examination of both firm-specific and corporate governance factors on capital structure, the gap of which this study seeks to fill.

3.0 METHODOLOGY

This study employs a deductive and quantitative research design, which is consistent with previous research (Anjum et al., 2017; Hussain et al., 2017; and Maqsood et al., 2021). Characteristic of the data used for this study qualified it for a dynamic panel study. The lonitudinal nature, that is fifteen years from year 2006 to year 2020 and the cross-sectional attributes, that is fifty-eight firms, substantiate the usage of dynamic panel technique, this technique takes care of heterogeneity problems and therefore better than ordinary least square panel regression analysis, four estimator and many other techniques that gives bias results due to heteroscedasticity problems.

The research population comprises 123 non-financial publicly traded corporations listed on the Nigerian Exchange Group during the time frame spanning from 2006 to 2020. The financial statements of these publicly traded companies are legally mandated to be disclosed and accessible to the broader populace.

The determination of the sample size was established through an approach that involved the inclusion and exclusion criteria. The Principle of Inclusion and Exclusion (PIE) is a mathematical technique employed for the purpose of ascertaining the quantity of elements that satisfy one or more of a set of criteria, while simultaneously ensuring that elements that satisfy multiple criteria are not duplicated in the count.. The present study included companies that possessed uninterrupted data spanning a period of fifteen years, specifically from 2006 to 2020. Newly listed companies that lacked sufficient data for the aforementioned period, as well as firms with duplicate names, were excluded from the sample. Ultimately, a total of 58 companies were identified as meeting the criteria for inclusion in the study, as they possessed all relevant data pertaining to the research variables and had maintained continuous existence for the entire fifteen-year period.

The study used secondary data (historical data) collected in respect of the variable captured covering the time frame of fifteen years (2006 to 2020) which were obtained from the financial statements and accounts of the sampled firms. Most previous studies have used annual financial statements. Audited financial statements are verifiable and less subject to research manipulation. In this study, secondary data are used; capital structure, its drivers' and corporate governance data are sourced from the Annual Audited Reports and Financials as compiled from Machame RATIOS@database from 2006 to 2020.

This study investigates the influence of firm-specific and corporate governance variables on capital structure using Generalized Methods of Moments (GMM). This was used because, biases may exist in panel regression analysis, which could lead to inconsistent coefficient estimates across different techniques. Therefore, GMM estimation technique is used to estimate the dynamic panel model and correct for any possible biases.

Model Specification

This study aimed at measuring the impact of firm specific drivers of capital structure and corporate governance factors on Capital Structure of listed Non-financial quoted companies in Nigeria. To achieve this objective, the following models are specified.

Model 1

$$DETA_{it} = \beta_0 + \beta_1 DETA_{it}(-1) + \beta_2 CUTR_{it} + \beta_3 ROET_{it} + \beta_4 ROA_{it} + \beta_5 TANG_{it} + \beta_6 NCAR_{it} + \beta_7 DTAX_{it} + \beta_8 MAOW_{it} + \beta_9 BLOW_{it} + \beta_{10} BODI_{it} + \varepsilon_{it}$$

-------------------- 1

Where: DETA = Total debt to Asset, the dependent variable

$DETA_{it}(-1)$ = Value of DETA in the previous year

Model 2

$$LTDE_{it} = \beta_0 + \beta_1 LTDE_{it}(-1) + \beta_2 CUTR_{it} + \beta_3 ROET_{it} + \beta_4 ROA_{it} + \beta_5 TANG_{it} + \beta_6 NCAR_{it} + \beta_7 DTAX_{it} + \beta_8 MAOW_{it} + \beta_9 BLOW_{it} + \beta_{10} BODI_{it} + \varepsilon_{it}$$

-------------------2

Where: LTDE = Long- debt to Equity, the dependent variable

3.7 Measurement of Variables

Dependent variable; Capital Structure

The present study employed two proxies to assess capital structure, namely Total Debts to Assets and Long-term Debts to Equity. The Total Debts to Assets ratio is a leverage metric that quantifies the extent to which a company's debt obligations are proportionate to its total assets.

The formula for DETA is the sum of Short-Term Debt and Long-Term Debt, divided by Total Assets.

In the event that the outcome of the computation exceeds 1, it indicates that the organisation is deemed insolvent from a technical standpoint, given that its liabilities surpass the aggregate value of its assets. Several previous studies have employed the Total Debt to Total Asset metric as a means of representing capital structure, among which are those conducted by Arsov and Naumoski (2016) and Cevheroghu-Acar (2018). The Long-Term Debt to Equity Ratio, on the other hand, serves to indicate the proportion of a firm's assets that are financed through long-term financial obligations, such as loans.

The acronym LTDE stands for Long Term Debt to Equity Ratio.

The term "Shareholders Equity" refers to the residual interest in the assets of a company after deducting liabilities.

After deducting all of a company's liabilities, the amount left over is its shareholders' equity. Simply put, it is the monetary worth of a company as determined by its stockholders. The firm's net value is calculated by deducting all of its debts from all of its assets. An increased risk is associated with a higher ratio. These are the free factors.

By dividing current assets by current liabilities, one can get a measure of liquidity known as the current ratio. To meet its immediate financial commitments, a company must have sufficient working

capital. Return on assets (ROA) and return on equity (ROE) are two key financial statistics used to evaluate profitability. Divide net income by total assets to get return on asset, and divide net income by shareholders' equity to get return on equity. To determine a company's asset tangibility, we divide the value of its fixed assets by the value of its total assets. How much of a company's assets are made up of fixed assets can be gauged by looking at this indicator. This measure suggests that tangible assets are acceptable collateral. Average debt, interest rate, and tax rate are multiplied to arrive at the Debt Tax Shield. The term "board ownership" is used to describe the extent to which a company's management is involved in and responsible for making strategic decisions on behalf of the company. What constitutes "block ownership" is the percentage of equity that is held by the external institutions. The percentage of independent board members is used as a proxy for board independence.

3.8 Multicollinearity Test

This is a concept that indicates correlation among many independent variables in a model. Perfect collinearity exists in two variables, if their coefficient of correlation is +/- 1.0. Existence of multicollinearity among independent variables renders the statistical inferences less reliable. The variance inflation Factor (VIF) is recommended for examining the existence or otherwise of multi-collinearity. If the result of this VIF is above 10, then there is a challenge (Velnampy, 2011).

4: RESULTS AND DISCUSSION OF FINDINGS

4.1 Multi-col linearity test using variance inflated factor and tolerance value: Multi-col linearity can be tested using the variance inflated factor and tolerance level. If the VIF was more than or equal to 10 and tolerance was lower than 0.10, then there is multi-collinearity in the model. The VIF for this study ranges between 1.02 and 2.79 and the tolerance ranges between 0.3590 and 0.9842, while the mean value of the VIF was 1.42, which is less than 10 and the tolerance greater than 0.10, thereby indicating the absence of multi-collinearity.

4.2 Table 1

Descriptive Statistics

VARIABLES	MEAN	MEDIAN	MAXIMUM	MINIMUM	STD. DEV
DETA	64.439	62.439	305.800	4.284	27.262
LTDE	28.632	22.481	100.000	-41.421	25.575
CUTR	1.439	1.214	19.251	0.232	1.084

ROET	14.327	12.098	92.390	-76.123	22.428
ROA	5.912	4.874	42.036	-43.335	9.233
TANG	35.996	33.825	98.000	0.101	20.158
NCAR	43.964	42.974	91.916	0.000	22.211
DTAX	2.670	2.081	13.910	0.000	2.653
MAOW	15.749	2.978	85.803	0.000	22.713
BLOW	52.915	57.000	91.000	5.000	20.582
BODI	62.096	66.667	80.000	0.000	13.418

Source: Authors Computation using Eview

The mean of debt to total Asset (DETA), was 64.439, this implies that the total liabilities of the firms examined on average amounted to 64.44% of total assets value. The maximum value was 305.800 while the minimum was 4.2849, and the standard deviation was 27.262. The standard deviation measures the level of variation of the variables from their mean values. Long term debt to equity (LTDE) revealed the mean value of the sampled companies was 28.632 while its median value was 22.481, implying that beside equity, non-financial firms in Nigeria explore other sources to fund their viable investments. The current ratio mean of 1.439 is greater than 1;1, implying that assets are more than liability, the non-financial companies can meet their obligations as at when due, the median of 1.214 is good indicating that the sample companies are not having liquidity challenges, the variance between the maximum of 19.251 and minimum of 0.0232, implies that some of the sample companies are big with adequate liquidity, while some are small with liquidity challenges. Profitability was measured by return on assets as well as return on equity. Return on assets revealed an average return of 5.912 per Naira, while return on equity revealed an average return of N14.327 for every one Naira, this implies that it will profit non-financial firms to invest on equity rather than long term loan. The high variance between the maximum profit of 92.390 and a loss of -76.123 led to standard deviation of 22.428 as revealed by return on equity, return on assets revealed a maximum profit of 42.036 and loss of -43.335 and standard deviation of 9.233. Asset structure was examined by tangibility and non-current assets, both proxies revealed substantial tangible and intangible assets for the big firms, while some small firms have as low as 0.101 Board ownership revealed that the sampled firms have an average of fifteen managers turned board members, with some firms having

eighty five and above managers turned board members, this is motivating, while some have no manager turned board member. Block ownership revealed an average of fifty-three institutional owners that possess the might to monitor the activities of managers in the best interest of the shareholders. The average board independence is sixty-two independent directors, with some firms having about eighty independent directors, this is good for the shareholders and the firms in general.

4.3 ECONOMETRIC ANALYSIS

$$DETA_{it} = \beta_0 + \beta_1 DETA_{it}(-1) + \beta_2 CUTR_{it} + \beta_3 ROET_{it} + \beta_4 ROA_{it} + \beta_5 TANG_{it} + \beta_6 NCAR_{it} + \beta_7 DTAX_{it} + \beta_8 MAOW_{it} + \beta_9 BLOW_{it} + \beta_{10} BODI_{it} + \varepsilon_{it}$$

TABLE 2

GMM Result For Deta

Dependent Variable: DETA				
Method: Panel Generalized Method of Moments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DETA(-1)	0.325	0.031	10.381	0.000
CUTR	-4.849	1.527	-3.175	0.002
ROET	0.000	0.000	-1.275	0.203
ROA	-0.615	0.059	-10.402	0.000
TANG	0.216	0.054	4.025	0.000
NCAR	-0.620	0.072	-8.581	0.000
DTAX	-0.005	0.227	-0.021	0.983
MAOW	-0.149	0.039	-3.798	0.000
BLOW	0.300	0.067	4.463	0.000
BODI	-0.140	0.050	-2.798	0.005
	Effects Specification			

Mean dependent var	-0.258	S.D. dependent var	19.916
S.E. of regression	21.038	Sum squared resid	320455.200
J-statistic	42.344	Instrument rank	58.000
Prob(J-statistic)	0.6		

Source: Author's Computations Using EViews

The panel generalized method of moments (GMM) estimation shows that past debt levels strongly affect present debt levels. The coefficient between lagged and current values of Total Debt/Total Assets (DETA) is 0.325, and the t-statistic between the two is 10.381. With a coefficient of -4.849 and a t-statistic of -3.175, the relationship between CUTR and DETA is negative and statistically significant. This result is in line with the theory that more liquid companies have less debt overall (Myers, 1977). This finding suggests that for non-financial listed companies in Nigeria, an increase in their working capital (Liquidity) ratio has a significant negative effect on their capital structure.Companies with a better return on asset also have lower debt levels, as ROA has a negative and significant effect on DETA. This result agrees with the pecking order theory (Myers, 1984), which states that retained earnings are used by businesses before turning to debt and equity funding. With a coefficient of 0.000, t-statistic of -1.275, and p value of 0.203, Return on Equity (ROET) is negatively related to DETA, suggesting that enterprises with lower profitability have lower debt levels. The t-statistic for the correlation between DETA and TANG is 4.025, and the coefficient between the two is 0.216. Since tangible assets can be used as collateral for loans, this finding shows that organisations with greater tangible assets likely to have larger debt levels (Jensen & Meckling, 1976). The t-statistic for the correlation between DETA and NCAR is -8.581%, while the coefficient between the two is -0.620. Non-current assets are less liquid and consequently less appropriate as security for loans, so this study suggests that companies with more of them likely to have lower debt levels.The correlation coefficient between DTAX and DETA is -0.005, and the t-statistic is -0.021, indicating that there is no meaningful relationship between the two. Based on these results, it appears that a company's debt levels are not much influenced by the tax advantages of debt financing. Previous empirical studies, such as Graham's (2000), revealed a positive association between tax shelters and leverage, therefore this result contradicts that. There is a statistically significant inverse relationship between MAOW and DETA, suggesting that companies with greater board ownership tend to have lower debt levels. There is a negative correlation between board ownership (MAOW)

and DETA (r=-0.149, t=-3.798). This study shows that companies with greater ownership on the board have lower debt levels, as managers with more ownership have more of an incentive to limit their company's exposure to risk (Jensen & Meckling, 1976). The correlation between block ownership and debt to asset is positive and statistically significant (t = 4.463, r = 0.300). This data indicates that when block ownership rose, the ratio of debt to total assets also rose. Companies with a higher proportion of independent board members had lower debt loads, suggesting that BODI has a negative and statistically significant effect on DETA..

TABLE 3

Are-llano-Bond Serial Correlation Test

Test order	m-Statistic	Prob.
AR(1)	-0.155	0.876
AR(2)	0.033	0.974

Source: **Author's Computations Using EViews**

Serial correlation in panel data, which can be problematic when estimating dynamic panel models, is often screened for with this technique. First- and second-order serial correlation (AR(1) and AR(2)) tests' outcomes are displayed in the output. The test statistics, displayed in the m-Statistic column, are as follows: AR(1) = -0.155, AR(2) = 0.033. Using these calculations, we may examine whether or not the alternative hypothesis of serial correlation is more likely to be correct. The p-values for each test statistic are displayed in the Prob. column. The p-values for AR(1) and AR(2) are 0.876 and 0.974, respectively. The p-value for the AR(1) test statistic is greater than the threshold for statistical significance (often 0.05), indicating that there is no evidence of first-order serial correlation (AR(1)) in the data. Second-order serial correlation (AR(2)) is likewise not significantly present in the data, since the p-value for the AR(2) test statistic is larger than 0.05. Therefore, it may be argued that neither first- nor second-order serial correlation exists in the panel data.

$$LTDE_{it} = \beta_0 + \beta_1 LTDE_{it}(-1) + \beta_2 CUTR_{it} + \beta_3 ROET_{it} + \beta_4 ROA_{it} + \beta_5 TANG_{it} + \beta_6 NCAR_{it} + \beta_7 DTAX_{it} + \beta_8 MAOW_{it} + \beta_9 BLOW_{it} + \beta_{10} BODI_{it} + \varepsilon_{it}$$

TABLE 4

GMM Result For LTDE

Dependent Variable: LTDE				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LTDE(-1)	-0.013	0.000	-1569.760	0.000
CUTR	224.744	1.365	164.633	0.000
ROET	-2.034	0.001	-2545.772	0.000
ROA	6.407	0.148	43.210	0.000
TANG	10.928	0.085	128.815	0.000
NCAR	23.599	0.093	253.141	0.000
DTAX	-9.638	0.211	-45.714	0.000
MAOW	23.964	0.024	1014.276	0.000
BLOW	24.346	0.326	74.712	0.000
BODI	9.331	0.089	105.010	0.000
	Effects Specification			
Mean dependent var	-10.948	S.D. dependent var		8326.472
S.E. of regression	3517.892	Sum squared resid		8960000000.000
J-statistic	43.689	Instrument rank		61.000
Prob(J-statistic)	0.688			

Source: Author's Computations Using Eview

The variable LTDE(-1) denotes the previous value of the dependent variable, LTDE, in a time series analysis. The presence of a negative coefficient implies an inverse relationship between the LTDE ratio in the current period and its value in the previous period, such that an increase in the latter is associated with a decrease in the former. The aforementioned discovery suggests that corporations have the ability to modify their levels of long-term debt in order to sustain a favourable debt-to-equity ratio throughout a given period. The current ratio is a metric utilised to evaluate a corporation's capacity to fulfil its immediate financial

commitments. The presence of a positive coefficient indicates a positive correlation between higher current ratios and higher LTDE ratios. The aforementioned discovery suggests that corporations possessing robust liquidity positions may exhibit a greater tendency to utilise long-term debt as a means of funding their business activities. The Return on Equity (ROE) is a financial metric that gauges a company's profitability by assessing the net income generated in relation to the shareholders' equity. The presence of a negative coefficient implies an inverse relationship between profitability and LTDE ratios, indicating that higher levels of profitability are linked to lower levels of LTDE ratios. The aforementioned discovery suggests that firms that exhibit greater profitability could potentially fund their activities through internally generated resources, thereby reducing their dependence on long-term debt. The present finding is in line with prior investigations, as evidenced by the research conducted by Al-Malkawi et al. (2021). The Return on Asset (ROA) metric gauges the profitability of a company by evaluating the ratio of its net income to its total assets.The presence of a positive coefficient indicates a positive correlation between increased profitability derived from total assets and heightened levels of long-term debt to equity (LTDE) ratios. The present discovery corroborates the prior observation that augmented profitability typically amplifies the necessity for long-term debt financing, in accordance with the trade-off theory. The present study finds that there exists a positive correlation between profitability measures, specifically Return on Assets (ROA), and the Long-Term Debt to Equity (LTDE) ratio. This finding is in line with previous research, which posits that profitable firms tend to leverage their borrowing capacity to maximise tax benefits and preserve their profits. (Atif, 2021). Asset tangibility is a metric that quantifies the percentage of a firm's assets that are tangible or fixed in nature, such as property, plant, and equipment. The study indicates that there exists a positive coefficient, indicating a direct relationship between increased asset tangibility and higher LTDE ratios. The aforementioned discovery suggests that firms possessing a greater quantity of tangible assets may exhibit a higher propensity to depend on long-term debt financing, given that these assets can function as security for debt providers. The aforementioned finding is in line with prior scholarly investigations, such as the research conducted by Al-Malkawi et al. (2021), Chen et al. (2021), and Choi (2014), among others. Non-current assets are those investments that have a long-term nature and are not readily convertible into cash. The concept of debt tax shield pertains to the tax advantages that are linked with the utilisation of debt as a means of financing. The presence of a negative coefficient implies an inverse relationship between debt tax shields and LTDE ratios, indicating that an increase in the former is associated with a decrease in the

latter. The concept of board ownership pertains to the percentage of shares held by individuals who are part of the board of directors. The concept of block ownership pertains to the determination of the percentage of shares held by major shareholders who possess substantial control over the organisation. The present study reveals that Board Independence exerts a constructive and noteworthy influence on Long-Term Debt to Equity (LTDE). This implies that companies that possess a greater proportion of autonomous directors on their board are inclined to exhibit elevated long-term debt to equity ratios.

1.0 CONCLUSION AND RECOMMENDATION

The trade-off argument is supported by how firms modify their debt levels to approach desired levels. As businesses favour internal finance sources, the pecking order argument is supported. Less debt is accumulated when profitability and liquidity increase. Increased debt levels are a result of increased tangible assets, increased non-current assets, increased tax shelters, increased board ownership, and decreased board independence.

Large sample size and a sound technique are used in the study to account for unobserved heterogeneity and any endogeneity problems. Results that are in line with the body of literature, supporting its validity and robustness.

Debt levels are influenced by corporate governance elements such board ownership, block ownership, and board independence. Findings offer insightful information for businesses, investors, and governments..

Recommendation

This study recommends that firms should

I   Consider past debt levels when setting current debt targets.

Ii Monitor liquidity levels to maintain a healthy balance between liquidity and debt.

Iii Strive for profitability to reduce the debt burden.

Iv Consider asset tangibility when making financing decisions.

V Pay attention to non-current assets and tax shields to achieve an optimal balance between tax benefits and financial distress costs.

Vi Monitor board ownership and independence to ensure a balanced board structure that takes into account the potential risks and benefits of debt.

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