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Debt Financing and Financial Performance of Quoted Companies in Nigeria

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Abstract:

The purpose of this research was to examine the relationship between debt financing and the financial health of publicly traded companies in Nigeria. The study set out to determine the effect of long-term debt on the success of Nigerian publicly traded companies. The study used an ex-post-facto research strategy. As part of the research, data from Guarantee Trust Bank, Zenith Bank, Dangote Cement Plc, Nestle Nigeria, Seplat Energy Plc, and Total Nigeria Plc were used. Secondary information was gathered from the selected companies' annual reports and financial statements. E-View statistical software was employed for data analysis. Means, medians, and other descriptive results were calculated for each of the study's specified variables using. The data were analysed using Ordinary Least Square (OLS) and the significance threshold set at 5%. This study discovered no correlation between the long-term debt and the financial performance of publicly traded enterprises. Hence, the study concludes that long term debt of finance does not enhance the profitability of quoted companies in Nigeria.

The study recommends that management of the listed firms in Nigeria should make sure that long term debt obligation does not threaten long term financial stability of the business and companies should cut back on long-term debt financing because it has no effect on performance. Managers should carefully balance their capital structure to minimise overmatching and mismatching of financial resources; failing to do so may significantly impact the company's long-term operations, resulting in layoffs and a loss in revenue

Keywords — **Debt financing, performance, short-term debt, long-term debt, total debt.**

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I. INTRODUCTION

The choice to raise capital is a crucial part of any company's financial management. There are two main considerations in this decision: whether to use equity financing or long-term debt. When a company decides to use both types of financing, it must carefully consider its capital structure to determine which option provides the most advantageous mix of resources. Taking on long-term debt, such as through bond issuance or loans, is a way to secure financing from outside sources without having to sell off any stake in the company. This has been shown to be the case (Lin, Ma, Malatesta, & Xuan, 2013).

Corporate financing has recently gained a lot of attention and popularity because of its importance in determining a company's ability to make investments and thrive economically. Several recent research, including both established and developing economies, attest to the concept's relevance.

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Though not comprehensive, these studies have focused primarily on the debt-equity structure tradeoff, or the capital structure of the firm, with a specific leverage variant serving as the primary focus. Debt as a theoretical concept is good; however studies should look at more than just the leverage decision when examining the debt option.

In addition, a narrow examination of debt structure is unlikely to uncover mismatch of funding by enterprises (Chen, 2004; Khan, 2012; Zeitun & Tian, 2007), whereas a broad research of debt structure is more likely to do so (Chen, 2004; Khan, 2012; Zeitun & Tian, 2007). As a result of the financial mismatch brought on by the scarcity of long-term debt, Lucey and Zhang (2011) recommended looking at the ratio between long-term and short-term debt as a suitable indicator of leverage. Nigeria, like many other developing countries, has a financial sector plagued by weak debt markets. For instance, use broader metrics of debt financial structure than others (debt ratio, equity ratio, interest coverage ratio, etc.). When investments made with a longer time horizon are financed by liabilities with a shorter maturity, this is known as a mismatch of funds.

The terms of long-term debt financing include obligations to repay the borrowed money at a future date, and as a result, the interest coverage ratios, leverage, and loan terms all have an impact on the leveraged company's equity return (Kirimi, Simiyu, and Dennis, 2017). According to Modigliani and Miller (1958), businesses must choose the debt and equity ratios that will increase the firm's worth and the wealth of its owners. As a result, in order to finance expansion, extra investment will be required, which would change the company's capital structure (Akingunola, Olawale, & Olaniyan, 2017).

Decisions about debt structure are among the most important financial issues that organisations must deal with, according to the literature. Whether such choices affect capital costs and firm valuations is still an open subject today. Choosing the right debt structure for a company is essentially a financial and marketing challenge that depends on the organizations and/or the management's risk and return characteristics (Tudose, 2012). Since it is impossible to pinpoint the precise combination of ideal debt, it is difficult to describe a firm's debt structure realistically. Because of this, the company must issue a variety of securities in endless combinations in order to find the one that maximizes overall value and improves performance (San & Heng, 2011).

Debt finance can affect a company's success because businesses often agree to fixed repayments for a set time. Regardless of how well the business does, these payments are still made. Businesses can avoid making these repayments with equity financing, but doing so comes at the cost of giving investors a share in the business. Therefore, choosing a capital structure is primarily a financial choice problem, which is made significantly more difficult when the environment in which the company operates is extremely uncertain, as it is in Nigeria. It is crucial that Nigerian businesses select an appropriate financial structure because of this.

By examining the effects of long-term, short-term, and total debt on the performance and acceptability of financing for the listed firm, this research aims to act as a catalyst for financing decision-making.

The expression "quid pro quo" (which literally translates as "something for something") is widely used in the financial industry, claim Akingunola, Olawale, and Olaniyan (2017). They continued by claiming that since all investors (those who own shares, bonds, or debentures) expect to receive a return in the form of dividends or interest, they willingly part with their money.

Lucey and Zhang (2011) suggested using the ratio of long-term to short-term debt as an acceptable measure of leverage due to the financial mismatch caused by the lack of long-term debt. Nigeria's financial industry, like that of many other emerging nations, is troubled by shaky loan markets. Due to the majority of businesses' reliance on banks and other financial institutions for external funding, they are currently required to pay high interest rates on their debt financing. For instance, some scholars

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utilize broader metrics of debt financial structure than others (debt ratio, equity ratio, interest coverage ratio, etc.)

Statement of the Problem

The firm's overall success is impacted by the financing decisions made by the management. Debt capital was proven to significantly improve financial performance, as reported by Tausee, Lohano, and Khan (2013). Debt capital is advantageous because it allows the borrower to finance short-term investments while spreading the burden of debt over a longer period of time. Debt finance theory has come to divergent conclusions, with Modigliani and Miller arguing that debt plays no role in capital structure and agency theory emphasising the need of debt in capital structure to regulate management's behaviour. Debt financing's consequences on financial performance are still up for debate, both from an empirical and theoretical standpoint.

What impacts corporate performance with relation to organisations' funding mix remains an empirical subject in corporate finance despite ongoing theoretical and empirical research. Therefore, greater research and clarifications are needed to determine if debt or equity, or the optimal usage of both, increases business success. Debt structure choices have been proved to be among the most crucial financial decisions for businesses. Whether or whether such choices affect capital costs and business valuations is a topic of ongoing discussion.

Internationally, the Pakistan Stock Exchange Aziz (2019) investigated how debt affected return on assets for non-financial companies. He cautioned against relying on external financing and instead suggested that businesses look inward. Harelimana (2017) looked into the impact of using debt as a financing method on Rwandan firms and discovered a positive correlation between the two, with more debt increasing the worth of the company. Pradhan and Khadka (2017) came to a similar conclusion, arguing that debt can boost a company's profits. Magoro and Abeywardhana (2017) of South Africa discovered that loan financing has a chilling effect on business success. Among the limited body of local research on the topic, Charles and Aondofa (2019) found that long-term debt negatively affects performance. Although the economics of the nations on these continents are often stable, it would be incorrect to believe that research done there can be applied to the developing economies in Africa without taking into account the distinctive features of each economy.

The legal, business, and audit environments, as well as the regulatory framework, distinguish the developed and developing worlds. The results of a study could potentially be impacted by all of these factors. As a result, a worldwide discourse regarding the link between debt finance and corporate success will be greatly aided by the results from other countries. Our research was motivated by the need to address this knowledge gap in the literature. To address this shortcoming, we developed a model for company performance in the Nigerian context using a variety of debt finance alternatives. In light of this information, this research set out to examine the effect of debt financing on the profits of companies trading on the Nigerian Stock Exchange using the most recent available data.

This study's overarching goal is to examine the role that debt financing plays in the growth and profitability of publicly traded Nigerian companies. The specific goal of this research is to investigate the effect of long-term debt on the financial standing of publicly traded Nigerian enterprises.

H_0: Long term debt has no significant effect on the financial performance of quoted companies in Nigeria.

II. LITERATURE REVIEW

Debt Financing

Debt financing, as defined by Miller (2019), occurs when a company borrows money with the expectation that it will eventually pay back the principal plus interest. Interest rates are a measure of the lender's willingness to take on risk by loaning money. The goal of a debt financing structure is to

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increase return on investment (ROI) relative to the interest paid on borrowed money. According to Harelimana (2017), a high rate of return on invested capital is necessary to cover the interest expenditures that accrue on debt financing and are paid in excess of partial principal payments made over the life of the loan.

Due to the fact that borrowed capital enables the borrower to finance investments over the short term while spreading the expense of debt over a longer time horizon, Vengesai & Kwenda (2018) discovered that leverage significantly affected firm performance. Most business ventures use some form of financial leverage, and those that are funded through preferred stock rather than common stock use it even more. It is often said that money is the lifeblood of a company, as without it, it would be unable to operate and accomplish its mission.

Debt finance is one type of funding that businesses can use to maintain operations and expand. The debt financing ratio measures the proportion of borrowed funds to total funds. Prepayment of interest and eventual repayment of the loan principal is known as prepayment. The tax deductibility of interest payments on loans is considered as advantageous because it reduces the cost of capital for the business (Galille, 2020). High levels of leverage are related with greater hazards and a proportional rise in average industry earnings.

Along with factors like business size, sales growth, asset structure, and tangibility, optimal loan capital for firms has long been a primary focus in growth research. When a business borrows money, either from a bank or an investor, it is doing so to cover its current and future cash flow needs. When a business uses debt financing, Miller (2019) when taking out a loan, it is standard practice to factor in the interest rate and the time frame over which the money will be repaid. Interest rates are a measure of the lender's willingness to take on risk by loaning money. When using debt finance, neither ownership nor control is ever relinquished. The interest payments made are deductible as well.

Debt Financing and Corporate Performance

According to the findings of a study conducted by Oguna (2014) on the effect of capital structure on the financial performance of companies that are listed on the Nigerian Stock Exchange, a significant negative correlation exists between long-term debt and return on equity. According to this finding, leverage only has an influence over the course of a lengthy period of time, but it has no bearing on the immediate future. The authors of this study broke down total debt into two categories: long-term debt and short-term debt. This was done so that they could analyse the debt component of the capital structure. As a result, we will now present a summary of the variables that are included in the loan capital structure.

Long-term Debts and Corporate Performance

The amount of total assets supported by debt with maturities longer than one year is represented by long-term debts. This group includes long-term loans and bonds. Longer-term bonds and loans often have higher interest rates to make up for the additional risk that lenders are taking on. Long-term loans, according to Hernandez-Canovas and Koeter-Kant's (2008) research, are more crucial than other elements in determining a company's profitability. Numerous empirical studies show a favourable association between long-term debt and ROA works by authors such as Yan (2013), Zeitun and Tian (2007), and Onoja and Ovayioza (2015) are included. However, Onaolapo and Kajola (2010) and Makanga (2015) revealed an inverse relationship.

Profitability

All businesses should be run with the intention of making a profit. It's impossible for a company to succeed without generating a profit. It is, therefore, of utmost importance for every business to track its present and historical profits and make predictions about its future profits. Profitability, as defined by Ayanda et al. (2013), is an organization's capacity to sustain a positive cash flow throughout its lifetime. A bank's profitability is defined by how effectively it generates profits, as stated by Podder

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(2012). The importance of profitability extends beyond just the health of individual businesses to the economy as a whole. Just like people, businesses need money to keep going and expanding over time. Profit (or loss) can be calculated as the difference between sales revenue and selling expenses in the simplest form.

Furthermore, profit could either be normal or supernormal. If total revenues are equal to total expenditures, then a company is making a normal profit, which is the bare minimum, required to remain in operation. This is a sustainable level of profit for the company, which allows for fair compensation for all employees and management.

Theoretical Review

Pecking Order Theory

The pecking-order theory, made popular by Myers and Majluf (1984), states that internal financing is the least expensive type of financing, followed by debt and external equity. The theory underlines that issuing securities to raise outside cash results in investors receiving less profit than they had anticipated due to the asymmetry of knowledge. Investors, acting rationally, raise the company's discount rate because they demand a larger rate of return. Management theory predicts that executives will prioritise shareholder returns since they have insider information about the company's potential for growth (Sheikh & Wang, 2011). It is also presumed that there is an information gap between them. Managers may not actually become less disciplined as they become more familiar with their company's finances (Kishore, 2009). The theory is relevant to the research since it is hypothesised that Nigerian enterprises agree with the pecking order theory's premise that internal resources should be exhausted before turning to external financing.

According to this idea, businesses have a clear preference for the order in which they utilise different types of financing while making long-term investments. It states that a company should use its own resources (i.e., keep profits) before turning to debt or outside investors for capital. According to the principle, companies should reduce their reliance on external financing for investment initiatives as their profits rise. It is stated further that when a company's internal finances are insufficient, it should look to external financing.

Finance managers' efforts to improve the company's capital structure are supported by this notion. In order to maximise the firm's debt capital in relation to its revenue growth, Chadha and Sharma (2015) argue that it is vital to obtain funding from outside sources. Financing managers focus primarily on improving a company's bottom line by optimising the capital structure. Therefore, debt is granted when the company's own resources are exhausted, and stock is offered when that alternative is no longer an option. Nenu, Vintila, and Stefan (2018) contend.. According to the hypothesis, investors often feel that company managers have a more complete understanding of price-sensitive information. The idea proposes that enterprises can maximise their financial performance by adopting a debt structure that strikes a balance between the risks they face and the profits they expect to earn.

Trade off Theory

According to trade-off theory (Sheikh & Wang, 2010), a company should choose a debt load that maximises its value while minimising the impact of any market imperfections. According to the trade-off theory (Abubakar, 2017), companies that retain a larger portion of their earnings are more likely to take on more debt so that they can take full advantage of interest tax deductions. According to Abubakar and Garba (2019), the optimal capital structure occurs when the marginal present value of the cost of financial hardship on increasing debt is equal to the marginal present value of the tax shield on new debt. In this article, we use the Trade-Off Theory to analyse the impact of debt on a business's bottom line.

M&M theorem controversy (Ajibola, Wisdom, & Qudus, 2018) is where this idea first emerged. The theory of trade-offs is relevant to any enterprise that conducts a cost-benefit analysis. The ideal capital structure, according to the notion, finds a

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balance between the benefits and drawbacks of taking on debt.

According to the trade-off theory that Graham and Harvey presented in 2002, the ideal debt ratio for a firm is determined by striking a balance between the benefits and drawbacks of borrowing while maintaining the value of the company's assets at a constant level. The trade-off hypothesis highlights the relative benefits and drawbacks of different types of debt in order to create a capital structure that is effective. M&M theorem controversy (Ajibola, Wisdom, & Qudus, 2018) is where this idea first emerged. The theory of trade-offs is relevant to any enterprise that conducts a cost-benefit analysis.

In terms of how benefits and negatives should be balanced, researchers are at odds. The limitations of MM's irrelevant capital structure thesis are removed. To solve the "capital structure puzzle," Myer (1984) relied on the trade-off theory. According to Myers (1977), there comes a point at which the benefits of borrowing money outweigh the risks of running into financial trouble and losing your interest deduction. Direct and indirect costs of insolvency are linked to debt service in the trade-off hypothesis. Legal and administrative fees are included in the cost of bankruptcy, as indicated by Bradley et al., (1984). There will be additional hidden expenses as a direct result of the uncertainty-caused loss of customers and confidence among employees and vendors.

According to Brounen et al. (2005), shareholders benefit when the company's capital structure is either optimal or targeted. In addition, the analysis shows that even when value-maximizing firms spend all of their available loan capital, they have a low risk of going bankrupt. According to Hovakimian et al. (2004), a higher tax shelter and reduced likelihood of bankruptcy are associated with a higher profitability of gearing. Profitability increases with higher gearing, which is in line with the main prediction of the trade-off model. The trade-off theory is still being tested based on the original assumptions because none of the theoretical or empirical studies have been able to totally replace the conventional version. There is conflicting research on the trade-off model and the optimal capital structure in the published literature.

The utilisation of debt capital and the presence of a non-debt tax shield are positively connected, as discovered by Titman and Wessels (1988). Not in line with this finding. Mackie-Mason (1990) revealed that firms that incur a tax loss almost never issue borrowed capital as revealed by Modigliani and Miller (1963). Companies maintain a consistent level of gearing despite wide fluctuations in tax rates (Wright, 2004). However, Graham and Harvey (2001) found that a company's choice of capital structure is influenced by tax rates. It's possible that issuing debt capital and/or equity capital is the best option for the company when deciding on a capital structure.

Empirical Review

The effects of debt capital on company performance are examined, along with similar publications by other scholars and their conclusions and suggestions. Although researchers cannot agree on the nature of the relationship between debt structure and business performance, a comprehensive assessment of empirical studies on debt financing and firm performance in Sub-Saharan African countries includes Ghana, South Africa, Egypt, and Nigeria demonstrates its existence.

The impact of long-term debt on Ecuadorian businesses was studied by Jaramillo and Schiantarelli (2017). Debt levels and company age went up together. More capital is available to older companies, and they tend to perform better as a result. In this research, the estimate power of the GMM model was tested. Debt and productivity were found to have a positive correlation, with the former leading to the latter.

The connection between company performance and capital structure in Jordan was analysed by Zeitun and Tian (2017). The financial statements of trading companies and the Amman stock market provided the bulk of the secondary data used in this analysis. Using a regression model, we found that debt negatively correlated with a company's

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profitability. Because large companies have lower bankruptcy costs, company size also has a favourable effect on performance.

History and capital structures of Pakistani enterprises are analysed by Kayhan and Titman (2017). Using OLS, they discovered that these factors significantly affect shifts in capital structure. In particular, shifts in the stock price and financial deficits (measured as the amount of external capital raised) have considerable sway over modifications to the capital structure. They also observe a subsequent attenuation or reversal of their effects. Despite the fact that a company's past greatly affects its current capital structure, these findings suggest that, over time, firms' financing decisions typically lead them to target debt levels compatible with the tradeoff theories of capital structure.

Abor (2017) studied the relationship between SMEs' success and their use of long-term debt in Ghana and South Africa. A random sample of 68 businesses from South Africa and 92 businesses from Ghana were chosen for this research. Financial results were measured using the ratios of short-term debt to total debt and long-term debt to total debt. The Generalised Least Square (GLS) panel model was used for the estimate in this research. Using return on asset as the performance metric in the sample from Ghana, a significant negative correlation was established between all indices of capital structure and business performance. Abor observed that the performance of Ghanaian SMEs suffered when they relied heavily on loans. Specifically, he discovered that a company's performance suffered when its debt levels were increased, as this increased the likelihood of bankruptcy. According to the findings of the study, larger companies also have a lower ROA. Within the context of the South African sample, it was discovered that ROA had a relationship that was statistically significant with short-term debt. Given these findings, it is reasonable to draw the conclusion that increasing the total amount of short-term debt would result in a significant increase in profitability. There was a statistically and practically significant correlation between total debt, which includes long-term debt, and poorer levels of business performance. As a consequence of this, it was demonstrated that high interest rates on long-term debt will result in poor performance. Additionally, the size of the company has been shown to have a positive and statistically significant effect on ROI.

Dahiru, I., Dogarawa, A. B., & Haruna, M. A. (2016) study's findings suggest that the ratios of total debt to total assets and long-term debt to total assets are the parts of capital structure that have an adverse effect on the financial performance of listed manufacturing enterprises in Nigeria. This indicates that the amount of profit that the firms would record would be smaller the greater the ratios of total debt to total assets and/or long-term debt to total assets.

An empirical study was carried out by Aziz and Abbas (2019), amongst others, with the purpose of determining the effect that debt financing has on the performance of businesses that are active in the nonfinancial sector of Pakistan. This study aimed to evaluate, with the help of a secondary data gathering technique, how the various forms of loan financing affect the success of firms across fourteen (14) distinct industries in Pakistan. During the period of time spanning from 2006 till 2014, data was collected from each of the fourteen (14) different industries that are listed on the Pakistan Stock Exchange. When the significance of the association is determined with the assistance of a correlation analysis, the findings hint to a negative influence, albeit one of low significance, on financial performance in Pakistan. This is despite the fact that the significance of the association is low.

According to the data presented by HMDN Somathilake (2020), ROA is greatly impacted by long-term debt but is unaffected by either short-term or overall debt. Return on equity is substantially impacted by the presence of long-term debt. Return on equity is not influenced in any way by either the total debt or the short-term debt. It was demonstrated that long-term debt financing has a significant effect on the bottom lines of publicly traded Sri Lankan firms. It was emphasised that

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management should work towards striking a healthy balance between their capital expenditures and their revenue streams in order to maximise profitability.

In addition, Patrick (2013) investigated whether or not businesses in Nigeria's private sector adhere to the traditional theory of capital structure when making capital structure decisions and how those choices impact business performance. The correlation between leverage and performance of the company was shown to be negative. (ROI). Leverage was found to be a significant predictor of firm performance, lending credence to the traditional idea of capital structure. However, contrary to popular belief, the selected firm's optimal level of debt as implemented in its capital structure has a detrimental impact on its performance. They hypothesise that the negative effect of the optimal amount of debt on firm performance is due to the compounding nature of interest rates on debt of Nigerian private sector companies. The study distinguishes between high-geared organisations, those with a leverage ratio above 10%, and low-geared businesses, those with a leverage ratio below 10%. geared. High gearing has a greater impact on a company's efficiency than low gearing, as shown by a comparison of the two systems. High-leverage companies perform 17% worse than those with low leverage for every 100% increase in leverage. This shows that higher levels of debt are linked to less successful business outcomes. Despite this, the authors found that high-geared businesses outperform low-geared businesses in terms of value creation. This is largely due to the larger investments made by the former.

Olokoyo (2013) conducted research on the effect that leverage has on Nigerian companies by using a pooled regression model, fixed-effect estimation, and random-effect estimation. All of these methods were combined into one analysis. It was discovered that the market performance indicator known as Tobin's Q has a correlation that is both positive and statistically significant with all of the different measures of leverage. According to the findings of the survey, the majority of firms in Nigeria rely on either equity capital or a combination of equity capital and short-term borrowing to finance their operations. According to the findings, Nigerian businesses have room for improvement if they take measures to guarantee that their external successes translate into continuous internal development and profitable outcomes. There is evidence from a variety of sources indicating that the capital structure of an organisation has a major impact on the performance of that organisation.

Utile, Ikya, and Akwuobu (2016) looked into how short-term debt affected the profitability of cement manufacturing businesses in Nigeria. Secondary sources, such as scholarly publications and electronic databases, were used for this research. According to the findings, executives have increased pressure to strike the optimal balance between debt and equity funding for their companies. To this day, experts are divided about what constitutes the optimal debt structure of a firm that would optimise corporate success. As management continues to experiment with various debt to equity ratios, more research is needed to find the optimal capital structure that would optimise a company's success.

Charles and Aondofa (2019) examine how debt financing affects the profitability of publicly traded Nigerian agricultural companies. The research was conducted on four listed agribusinesses in Nigeria. As a secondary source, we looked at the financial reports of agricultural companies. For this data analysis, we opted for multivariate regression analysis. Long-term debt financing was found to drastically diminish profits for listed agricultural firms in Nigeria. According to the findings, agribusinesses are best served by including a reasonable level of long-term debt in their capital structure.

III. METHODOLOGY

The researcher employed an ex post facto research design to investigate how debt financing impacts the profitability of publicly traded companies in Nigeria. In pursuit of this objective, the study relied on preexisting data, specifically the annual reports

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and financial statements of various publicly traded companies during the selected study period. Appropriate accounting ratios attached to each identified variables of the study were used. The overall population for the purpose of this study was comprised of all of the companies that are traded on the Nigerian Stock Exchange. This study used Guarantee Trust Bank, Zenith Bank, Dangote Cement Plc, Nestle Nigeria, Seplat Energy Plc, and Total Nigeria Plc as the sample size from its sample population and the research time frame includes the years 2010 through 2022. The researcher chose to employ the judgmental sampling strategy. In this study, we employed E-view statistical software as our primary statistical tool to analyze the panel data.

The study focused on assessing debt financing, utilizing the long-term debt ratio as the independent variable, and evaluating a company's profitability through its return on assets (ROA). To investigate the relationships among the different factors of interest, we employed a panel regression model. The estimation regression equation based on the above functional relation is:

$ROA = \beta_0 + \beta_1 LTD + \varepsilon$

Where:

ROA = Return on Assets (PAT/Total Assets)

LTD = Long Term Debt (Non-Current Liabilities/Total Assets

β_1 = regression coefficient

Where, ROA = β_0 = constant or intercept

ε = Error Term

IV. RESULT AND DISCUSSION.

Table 1: Showing the Unit Root Test

Variable	Level: PP Fisher Chi-Square		Order of Integration
	Stat	P-value	
ROA	41.9920	0.0000**	1 (0)
LTD	23.8832	0.0211**	1 (0)

Source: Author's Computation (2023)

Analysis of Panel Unit Root

Table 1 demonstrates that for all variables stated in level terms, PP-Fisher (Chi-square tests) usually reject the null hypothesis of non-stationarity at the 5% level. The unit root tests show that Return on Asset (ROA) and Long Term Debt (LTD) are stationary at order (0) with a 5% level of significance. The study's variables are all simultaneously stationary, hence the co-integration test is not necessary

Analysis of Hausman Test

Table 2: Hausman Test

Null hypothesis	Chi-square stat	Probability
Difference in coefficient not systematic	0.408390	0.5228

Source: Author's Computation (2023)

If the p-value of the Hausman test is less than the significance level, then we can reject the null hypothesis and conclude that the pooled OLS model is appropriate. If the p-value is greater than the significance level, then we cannot reject the null hypothesis and we should use the fixed effects model. Based on the result, the Fixed Effect is used and null hypothesis is accepted.

Table 3: Pairwise Dumitrescu Hurlin Panel Causality Tests

Null Hypothesis	W-Stat	Probability
LTD does not granger cause ROA	2.09836	0.6708
ROA does not granger cause LTD	50.0696	0.0000

Source: Author's Computation (2023)

Analysis of Granger Causality Test

The statistical result on table 3 shows that W-stat and p-value of LTD and ROA are 2.09836 and 0.6708 respectively. These shows that long term debt does not granger cause the return on asset. On the other hand, it shows that return on asset (ROA) can granger cause long term debt because the p-value (0.0000) is less than significant level of 0.05. This indicates that there is unidirectional relationship between long term debt (LTD) and return on asset (ROA) within the period examined in this study.

Table 4: Result of Panel Analysis

Variable	Fixed Effects Model			Random Effects Model		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
C	0.144036	0.022648	0.0000	0.149834	0.031251	0.0000
LTD	-0.092466	0.067855	0.1773	-0.112402	0.060259	0.0660
R-square	0.327413			0.044106		
Adj R-Square	0.270575			0.031528		
Prob. (*F*-Stat)	0.000063			0.064967		
Durbin Wats.	1.363155			1.300064		

Source: Author's Computation (2023)

Analysis of Long term Debt and Return on Asset

Based on the fixed effect model, it shows that proportion of variation in the return on asset (ROA) which is the measure of financial performance that

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can explained by long term debt are 33% and 27% respectively, these are based on the R-square and Adjusted R-square which are both 0.327413 and 0.000063 respectively. This means that the remaining proportion of variation in the level of return on asset (ROA) will be explained by other determinants not considered in this study.

F-statistics which measure the overall significance between independent and dependent variables show the p-value of 0.000063. This indicates that parameter estimation in the panel regression at 5% is statistically significant. This confirms that long term debt is good fit to predict the outcome of performance of selected quoted companies in Nigeria.

Durbin Watson statistic shows the value of 1.363155, this liess outside the threshold of 1.5 to 2.0. Hence, it is establishes that there is auto-corelation problem between long term debt and retrun on asset. Hence, there is no need to conduct serial correlation test.

According to Random Effect Model, the explanatory factor which is long term debt (LTD) account for 4.1% and 3.2% of variation in the level of return on asset (ROA) respectievly. This is shows on the table below that R-square and Adjusted R-square are 0.044106 and 0.031528 respectively.

The F-statistic of random effect model shows that p-value of 0.064967 and this establishes estimation parameter in the panel regression at 5% is not statistically significant. Hence, long term debt has no significant effect on the performance of quoted companies in Nigeria.

Durbin Watson statistic is the measure of auto-correlation between two or more variables. Random effect reported figure of 1.30006 and this denotes that there is auto-correlation problem between long term debt and return on asset. Hence, serial auto-correlation is not conducted in the study.

The outcome also reveals that the long-term debt coefficient and p-value are, respectively, 0.060259 and 0.0660. Because the p-value of the t-statistics (0.0660) is higher than the specified level of 0.05, there is sufficient statistical evidence to reject the null hypothesis. As a result, long-term debt and return on asset have little in common.

Discussion of Finding

The validation of this study relies on fixed effect model, it was discovered that long-term debt has no significant effect on the performance of quoted firm in Nigeria. This finding is consistent studies conducted by Dahiru and Dogarawa (2016); Ebaid (2009), Muchiri (2016); Salawu (2017) and Usman (2019) affirmed that long term debt have insignificant effect on the profitability while studies such as Charles and Aondofa (2019) and Abor (2017) findings were in disagreement with current study.

V. CONCLUSION AND RECOMMENDATIONS

Conclusion

In light of the comprehensive analysis conducted in this study, which investigated the impact of long-term debt on the performance of publicly traded companies in Nigeria, the findings clearly indicate that long-term debt does not exert a significant influence on firm performance. The metric employed to gauge performance, Return on Assets (ROA), was unable to reveal any substantial correlation between long-term debt and improved performance among the surveyed companies.

Thus, it can be confidently inferred from the results of this research that the utilization of long-term debt as a means of financial leverage does not confer a heightened level of profitability to quoted firms operating within the Nigerian business landscape. These findings shed valuable insights on the financial strategies employed by such companies and highlight the necessity of exploring alternative methods for enhancing and optimizing their performance, as the data underscores the limited role that long-term debt plays in this regard. This conclusion underscores the importance of a diversified and multifaceted approach to financial management for companies in Nigeria seeking to maximize their profitability and overall success

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Recommendations

In corollary with the conclusion of the study recommends that management of the listed firms in Nigeria should make sure that long term debt obligation does not threaten long term financial stability of the business.

According to this study, listed companies should cut back on long-term debt financing because it has no effect on performance. To do this, shares may be issued through right and bonus issues.

Managers should carefully balance their capital structure to minimise overmatching and mismatching of financial resources; failing to do so may significantly impact the company's long-term operations, resulting in layoffs and a loss in revenue.

REFERENCES

Abeywardhana, D. K. Y. & Magoro, K. M. R. (2017). Debt capital and financial performance: A comparative analysis of South African and Sri Lankan listed companies. *Asian Journal of Finance and Accounting,* 9(2), 103 – 127 2.

Abor, J. (2007). Debt policy and performance of SMEs: evidence from Ghanaian and South Africa firms. *Journal of Risk Finance,* 8, 364-379.

Abor, J. (2017). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana, *Journal of Risk Finance,* 6, 438-47.

Abormi, J. (2017). Debt policy and performance of SMEs: Evidence from Ghanaian and South African firms. *The Journal of Risk Finance*, 8, 364-379.

Abubakar, A., & Garba, A. (2019). Financial leverage and financial performance of quoted services firmsin Nigeria. *Nigerian Journal of Management Technology & Development,* 4(2), 8–13.

Akingunola, R. O., Olawale, L. S. & Olaniyan, J. D. (2017). Capital structure decision and firm performance: evidence from non-financial firms in Nigeria. *Acta Universitatis Dabubius (ECONOMICA (AUD(E,* 13 (6), 351-364.

Ayanda AM, Christopher EI, Mudashiru MA. Determinants of banks' profitability in developing economy: evidence from Nigerian banking industry. *Research Journal of Finance & Accounting* (2013;5(6).

Aziz.S. (2019). Effect of Debt Financing on Firm Performance: A Study on Non-financial Sector of Pakistan. Journal of Economics and Commerce, 2 (1), 8-15.

Chadha, S. & Sharma, A. K. (2015). Capital structure and firm performance: evidence from India. SAGE Publication, 19 (4), 295-302. 14. Chen, J. (2004). Determinants of capital structure of Chinese-Listed companies. *Journal of Business Research*, 57(12), 1341 - 1351 15.

Charles, U. D. &Aondofa, K. (2019). The effect of debt financing on the profitability of listed agricultural companies in Nigeria. *Research Journal of Economics and Business Studies. Vol. 6(11).*

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research, 52 (12)* 1341–1351.

Dahiru, I., Dogarawa, A. B., & Haruna, M. A. (2016). Effect of capital structure on financial performance of listed manufacturing firms in Nigeria. *Nigerian Journal of Management Technology and Development, A publication of Faculty of Management Technology, Abubakar Tafawa Balewa University, Bauchi.*

Ebaid, I. E. (2009). The Impact of Capital-Structure choice on Firm Performance: Empirical Evidence from Egypt. *The Journal of Risk Finance, 10*(5), 477-487.

Galille, L. (2020). Advantages and Disadvantages of Debt Financing. Retrieved on March 30, 2021. From: https://vittana.org/19-advantages-and-disadvantages-of-debt-financing. *Bingham International Journal of Accounting and Finance (BIJAF)* Vol. 2, No. 1, ISSN: 2735 - 9476Page 404

Graham, J. & Harvey, C. (2001). Theory and practice of corporate finance: evidence from field. *Journal of Finance Economic*, 60, 187 - 243. 20.

Harelimana, J. B. (2017). Effect of debt financing on business performance: A comparative study between I&M Bank and Bank of Kigali, Rwanda. Global Journal of Management and Business Research, 17(2), 37-45.

Hernández-Cánovas, G., & Koëter-Kant, J. (2008). Debt Maturity and Relationship Lending: An Analysis of European SMEs. *International Small Business Journal*, 26(5), 595–617. https://doi.org/10.1177/0266242608094031

HMDN Somathilake, (2020). - the effect of debt financing on corporate profitability: special reference to manufacturing companies listed in colombo stock exchange. - *International Journal of Current Research in Science Engineering & Technology*

Jaramillo, F., Schiantarelli, F. (2017). Access to long term debt and effects on firms' performance: *lessons from ecuador.*

Khan, A. (2012).The relationship of capital structure decisions with firm performance: a study of the engineering sector of Pakistan. *International Journal of Accounting and Financial Reporting, 2(1), 45 – 262.*

Kirimi, P. N., Simiyu, J. & Dennis, M. (2017). Effect of debt finance on financial performance of savings and credit cooperative societies in Maara Sub-county, Tharaka Nithi County, Kenya. *International Journal of Accounting, Finance and Risk Management,* 2(3), 113-130.

Kishore, M. (2009). *Financial Management 7th Edition.* New delhi: Taxmann PublicationsLtd.

Lin, C., Ma, Y., Malatesta, P., & Xuan, Y. (2013). Corporate ownership structure and the choice between bank debt and public debt. *Journal of Financial Economics*, *109*(2), 517-534.

Lucey, B.M. & Zhang, Q. (2011). Financial integration and emerging markets capital structure. *Journal of Banking & Finance*, 35(5), 1228-1238. 19.

MacKie-Mason, J. K. (1990). Do taxes affect corporate financing decisions?. *The journal of finance*, *45*(5), 1471-1493.

Magoro, K. &Abeywardhana, D. (2017). Debt capital and financial performance: A study of South African companies. *International Journal of Scientific Research and Innovative Technology*, 4 (4), 71-84.

Makanga, A.M. (2015). The effect of debt financing on the financial performance of companies listed at the Nairobi Securities Exchange. A research project presented in partial fulfillment of the requirements for the award of Master of Business Administration, School of Business*, University of Nairobi,* 1-69. 23.

Miller, T. (2019). Debt financing: Definition and Examples. Available @ https://www.thestreet.com/personal-finance/debtfinancing-14913324

Muchiri, S. (2016). Capital Structure and Financing of SMEs: Australian Evidence". *Journal of Accounting and Finance, 43*, 123 – 47.

Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information those investors do not have. *Journal of Financial Economics, 13*,187-221.

Nenu, E. A., Vintilă, G., & Gherghina, Ş. C. (2018). The impact of capital structure on risk and firm performance: Empirical evidence for the Bucharest Stock Exchange listed companies. *International Journal of Financial Studies*, *6*(2), 41.

Oguna, A. (2014). Examining the effect of capital structure on financial performance: a study of firms listed under manufacturing, construction and allied sector at the Nairobi Securities Exchange. *Available online at http://erepository.uonbi.ac.ke/handle/11295/78432 31.*

Olokoyo, F. O. (2013). Capital structure and corporate performance of Nigerian quoted firms: a panel data approach" African Development Review, 23(3), 358-369 *Journal of Accounting and Financial*

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Management E-ISSN 2504-8856 P-ISSN 2695-2211 Vol 7. No. 3 2021 www.iiardjournals.org

Onaolapo, A. A. & Kajola, S. O. (2010). Capital structure and firms' performance: the Nigeria experience. *European Journal of Economics, Finance and Administrative Science*, 25, 72-74. 41.

Ong Tze San & Boon Heng. (2011). Capital structure and corporate performance of Malaysian construction sector. *International Journal of Humanities and Social Science*, 1(2), 28-36.

Onoja, E. E. & Ovayioza, S. P. (2015). Effects of debt usage on the performance of small scale manufacturing firms in Kogi State of Nigeria. *International Journal of Public Administration and Management Research*, 2(5), 74-84. 35.

Patrick, A. (2013). The impact of capital structure on firms' performance in Nigeria", Munich\ Personal RePEc Archive, Paper No. 45986, posted 8, 20:10 UTC.

Podder B. Determinants of profitability of private commercial banks in Bangladesh: *An empirical study*; 2012

Pradhan, P., Shyam, R., & Khadka, N. (2017). The effect of debt financing on profitability of Nepalese commercial banks. *Radhe Shyam and Pradhan, Prof. Dr. Radhe Shyam and Khadka, Nitesh, (September 27, 2017)*.

Salawu, R. (2017). An empirical analysis of the capital structure of selected quoted companies in Nigeria, *The International Journal of Applied Economics and Finance,* 16 -18.

Sheikh, A. & Wang, Z. (2011). Determinants of capital structure: An empirical study offirms in manufacturing industry of Pakistan. *Journal of Managerial Finance*, 37,117-133.

Tausee, S., Lohano, H. D. & Khan, S. A. (2013). Effect of debt financing on corporate financial performance: Evidence from textile firms in Pakistan. Pakistan Business Review, 13, 903-916.

Tudose, M.B. (2012). Capital structure and corporate performance. *Economy Transdisciplinarity Cognition,* 15(2), 76-82. 44.

Usman, H.A., Samaila, I. N., & Dalhat, B.S. (2018). Capital structure and performance of deposit money banks in Nigeria. *NDIC Quarterly*, 33, 49-76.

Utile, J., Ikya E., &Akwuobu , F. S. (2016). Effect of financial structure on the performance of cement manufacturing companies in Nigeria, *Journal of Business and Organizational Developmen*t *8*, (2) 230-341.

Vengesai, E. and Kwenda, F. (2018), "The impact of leverage on discretionary investment: African evidence", *African Journal of Economic and Management Studies*, Vol. 9 No. 1, pp. 108-125. https://doi.org/10.1108/AJEMS-06-2017-0145

Zeitun, R. & Tian, G. (2007). Capital structure and corporate performance: evidence from Jordan. *Australian Accounting and Finance Journal,* 1(4), 40-67.

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