

Matching Capital Structure Ratios Against Corporate Financial Performance: An Empirical Study Of Multinational Breweries In Nigeria

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Abstract

The wave of mergers and acquisitions that swept through the Nigerian business landscape in the last two decades has drastically reduced the number of multinational breweries, leading to the emergence of 'the big three', all with apparently impressive capital profile necessary for survival in the new economic scenario characterized by stiff competitive pressures. However, a critical component of every corporation's capital profile is its **capital structure** which calibrates the mix of **debt** and **equity** employed in the funding of its operations. The criticality of capital structure is underscored by its putative impact on the fundamental goal of financial management which is maximization of share holders' wealth. Financial managers, therefore, often seek to match financial ratios related to their firms' capital structure against established financial performance proxies because of this supposed link between them. This study empirically analyses the relationship between **Capital Structure Ratios**, the supposed **predictors** of **Corporate Financial Performance** - herein operationalized as **Return on Assets**. Data obtained from the annual reports and accounts of the three multinational breweries listed in the Nigerian Stock Exchange were analyzed and a total of three hypotheses tested, using the ordinary least square method. Our findings revealed positive relationship between **Total Debt to Equity Ratio** and **Return on Assets**, as well between **Short-term Debt to Total Assets Ratio** and **Return on Assets**. **Long-term Debt to Total Assets Ratio**, on the other hand, did not relate significantly to **Return on Total Assets**. This could be attributed to the rebasing of the values of these debts which were mainly in foreign currency, given that the exchange rate steadily nosedived within the period under review (2018 – 2023). In the light of this, we recommend that multinational breweries reduce the long-term debt component of their capital structure profile, and instead resort more to short-term debts, retained earnings, and issuing of more shares through bonus and right issues. Additionally, managers should properly match their companies' capital structure to prevent overmatching and mismatching of financial resources and the consequential negative impact on their long-term operations.

Key Words: Capital structure Ratios, Long-term Debts, Short-term Debts, Total Debts, Total Assets, Equity

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I. Introduction

Every business enterprise seeks to maximize its value, which can be accomplished by cutting costs and identifying sources of funding that can most effectively permit this goal. The sources of financing could be external, through short-term and long-term debts, or otherwise through the owners' capital and allied internal sources. Companies usually use a combination of external and internal resources to finance their operations, a mix that ultimately defines their capital structure formation. While companies face different decision-making processes, the decision-making for the financing of various projects and processes is one of the most important decisions. An optimal capital structure, with several sources of financing (debt and equity), facilitates financing and makes it possible to achieve organizational goals and raise the company's corporate value. The management of corporations (multi-national breweries inclusive) should, therefore, always strive to maintain an optimal capital structure in order to operate their business at the desired level of efficiency. On the other hand, to assess how much a multi-national company has increased in value or has developed over the years would require an evaluation of its financial performance, namely the use of capital assets and income generation.

Financial performance is viewed as the outcome of an enterprise's capital mobilization, use, and management (Dinh and Pham. 2020). It consists of instruments used to assess a company's total financial standing over time. These instruments can be compared between enterprises in the same industry or between aggregated

industries or sectors (Okonkwo et al., 2017). Financial performance is a vague phenomenon that can be assessed in a variety of ways. Financial performance can be evaluated using accounting indices like Return on Assets (R.O.A), and Return on Equity (R.O.E). Financial management literature is replete with scholarly positions on how a firm chooses its capital structure and how that decision affects the firm's financial performance. The combination of internal and external financial sources determines whether a company succeeds or fails (Opoku Asante, 2022). According to Omukaga (2017). Inadequate capital structure decisions to finance a company's activities can result in liquidation, a financial crisis, or bankruptcy. Given the level of competition and technological advancement in Nigeria's Brewery industry, it is essential that businesses in this sector adopt an ideal capital structure that can ensure their survival. Besides, it is imperative that businesses in this industry continue to perform at their highest potential in order to ensure the long-term development and prosperity of the economy. The capital structure of a firm refers to the arrangement of various financial resources used to finance operations and capital expenditure (Dahiru and Dogarawa, 2016). These funding options include long-term and short-term loans, as well as equity financing through the use of preferred stock, common stock, and retained earnings. A corporation's major claims on its assets, which include different kinds of stocks and debts, are referred to as its capital structure.

Many studies have been carried out on the link between capital structure and financial performance globally, several of which were done in Africa including Nigeria. While these studies focused on different industries (Anozie et al., 2023; Ahmad et al., 2022; Prekazi et al., 2023), none of them examined the link between capital structure and financial performance of multi-national breweries in Nigeria. This knowledge gap is what this study attempts to fill, using data of 5 years interval {2018 to 2023}.

Statement of the problem

The financial performance challenges faced by Nigerian multinational breweries underscore the need for innovative solutions. The success of multi-national breweries in emerging countries, particularly Nigeria, has been hampered by financial constraints. The foundation for defining the optimal capital structure of business sectors in Nigeria is the development and strengthening of various financial markets. The multi-national breweries, according to Kennon (2019), is characterized by a large number of businesses operating in a highly competitive and deregulated environment. Businesses in Nigeria are faced with financial considerations about the best capital structure composition for the company, and these decisions are crucial to the company's profitability. Investors in Nigeria rarely consider the importance of the complexities of the capital structure mix and how that mix affects the firm's performance. The multi-national breweries operating in Nigeria are not exempted from this menace and their inability to institute a proper capital structure will lead to stagnation and struggles in terms of profitability. On this note, the researcher will be looking at how short-term debt to total assets ratio, long term debt to total assets ratio, and debt to equity ratio will enhance financial performance in the context of multinational breweries operating in Nigeria.

Aims and objectives of the study

The aim of this study is to find out the relationship between capital structure and financial performance of multi-national breweries in Nigeria.

To achieve this aim, the specific objectives outlined are to;

- i.To determine the effects between short term debt to total assets ratio and return on assets of multi-national breweries in Nigeria.
- ii.To find out the effects between long term debt to total assets ratio and return on assets of multi-national breweries in Nigeria.
- iii.To determine the effects between debt-to-equity ratio and return on assets of multi-national breweries in Nigeria.

Research Questions

- i.What is the relationship between short term debt to total assets ratio and return on assets of multi-national breweries in Nigeria?
- ii.What is the relationship between longerm debt to total assets ratio and return on assets of multi-national breweries in Nigeria?
- iii.What is the relationship between debt-to-equity ratio and return on assets of multi-national breweries in Nigeria?

Research Hypotheses

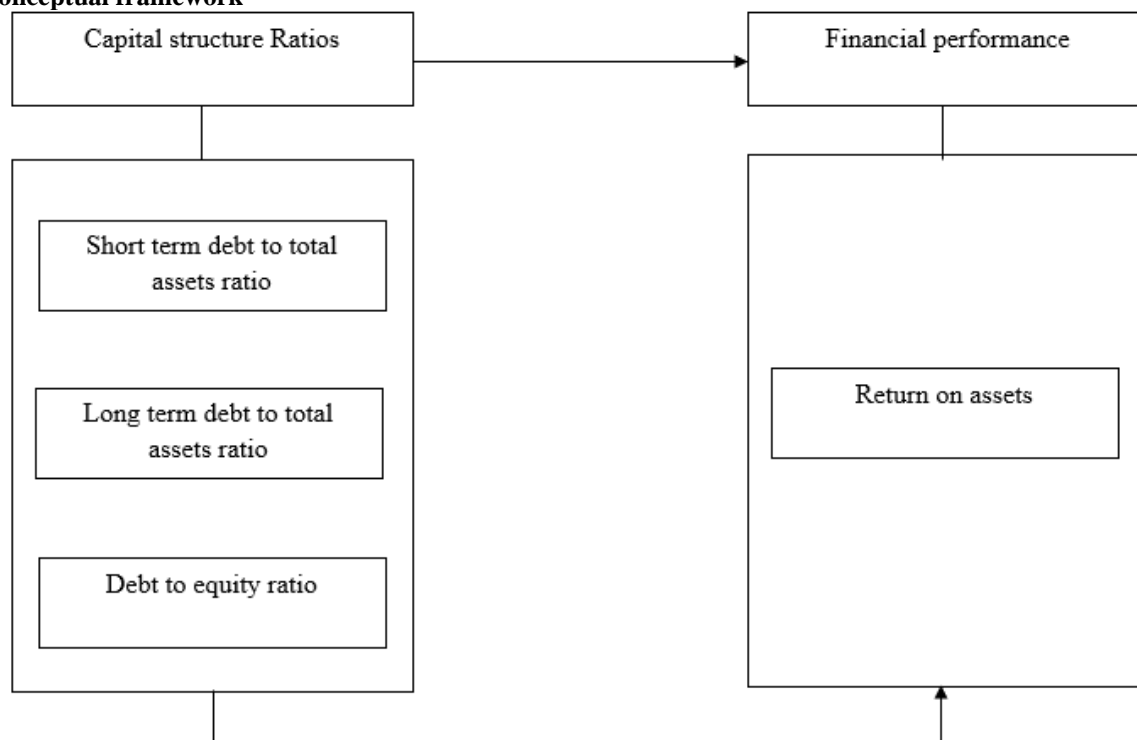
Ho1: There is no significant relationship between short term debt to total assets ratio and return on assets of multi-national breweries in Nigeria.

Ho2: There is no significant relationship between long term debt to total assets ratio and return on assets of multi-national breweries in Nigeria.

Ho3: There is no significant relationship between debt-to-equity ratio and return on assets of multi-national breweries in Nigeria.

II. Literature Review

Conceptual framework



Source: Researchers' conceptualization (2024), based on dimensions and measures adopted from the study of Obumneme et al., (2023)

Concept of capital structure

Capital structure refers to the debt-equity mix (Ngatno, Apriatni, & Youlianto, 2021) or the combination of long and short-term debt and equity capital (retained earnings, ordinary and preference shares, etc.). The capital structure of a firm is comprised of equity capital or debt or a combination of both (Kirmi, 2017). According to Ngatno, Apriatni, and Youlianto (2021) the capital structure has been conceptualized across different contexts and countries by different scholars. Basically, it is a term used in corporate finance to describe the mix of a company's long-term debt, some short-term debt, common and preferred equity (Gharaibeh, 2015). The capital structure is a strategic management decision which reflects the level of profitability and returns to shareholders. Capital structure captures the risk and return on investment and financing decisions. The capital structure of a firm refers to the arrangement of various financial resources used to finance operations and capital expenditure (Dahiru and Dogarawa, 2016). In financial terms, it refers to the method a company selects to use to finance its assets using a suitable ratio of debt to equity. In the financial statements of business firms, it serves to illustrate the proportionate relationship between debt and equity (Bello et al. (2020).

Concept of financial performance

Financial performance is one of the widely discussed concepts in the strategic competitiveness literature and is key to measuring organizations' survival. The financial performance is recognized by many as the end result of activities or goals of almost every profit-oriented organization (Mugo, Wanjau, & Ayodo, 2012). Financial performance indicates a firm's growth as it relates to profitability, growth rate, and status of shares, sales, net profit, and operating profit margin (Huang, Savita, & Zhong-jie, 2022). Financial performance is a critical indicator of a bank's ability to manage its resources effectively and sustain profitability over time. It is typically measured through a combination of profitability ratios, efficiency ratios, liquidity metrics, and asset quality indicators. These factors reflect the bank's operational success, financial health, and capacity to generate revenue while controlling costs (Olokoyo et al., 2019; Kamau & Ochieng, 2020). Profitability, as a central aspect, is often assessed through ratios like return on assets (ROA) and return on equity (ROE), which provide insights

into how well a bank utilizes its assets and capital to generate profit. Efficiency ratios, such as cost-to-income ratios, help gauge how effectively a company controls its operating expenses relative to its revenue, thereby indicating its competitiveness in a dynamic market (O'Reilly & Li, 2021; Tetteh & Akwasi, 2021).

Theoretical review

Pecking Order Theory (PoT) This study is anchored on Pecking Order Theory (PoT). The theory was originally formulated by Donaldson in 1961 but later modified by Myers and Majluf in 1984. The theory suggests that managers prefer internal financing to debt financing and equity as a last resort (Adair & Adaskou, 2015). PoT argues that firms generally follow 'sequential funding choice' (Jaisinghani & Kanjilal, 2017) in decisions as to external or internal financing to employ (Shubita & Alsawalhah, 2012). This implies that managers rank the various alternatives, before selection and would normally prefer internal financing to external financing. PoT suggests that more profitable firms are highly likely to use internal financing than other less profitable firms and therefore seek external financing. PoT posits that the management would prefer internal funding to external financing (Gusfriyanto & Sihombing, 2024). The majority of firms prefer financing new investments and projects using internal funds before the use of debt. Internal financing is a cheaper alternative to external funding as it eliminates transaction costs (Tolani & Pandya, 2024). Therefore, in the pecking order theory of financing structure, companies do try to relate profit and growth opportunities to their long-term target dividend pay-out ratios to minimize the need for external funds.

Based on the above line of argument, Myers opine that an optimal financing structure may be difficult to determine as equity appears to be the top and the bottom of the 'pecking order' based on the choice. Internal funds incur no flotation costs and require no disclosure of the firm's proprietary financial information that may include potential investment opportunities and gains expected to accrue as a result of undertaking such investments. Pecking order theory is about managerial preference; that is, a pecking order of alternative sources of finance that firm faces (Chen & Chen, 2011). Firstly, firms chose internal finance that is using profits from prior years. Secondly, if there is no internal funds are unavailable or insufficient, which borrowing option will the firm utilise e.g., credit institutions such as banks. Thirdly, only as the last option will the firm issue new shares.

Empirical review

Ngatno, Apriatni, and Youlianto (2021) conducted a study in Indonesia involving 506 Microfinance Institutions (MFIs) in 2019, employing moderated regression analysis. Their findings revealed that long-term debt to total assets exhibited a negative but non-significant relationship with Return on Assets (ROA) and Return on Equity (ROE), while total debt to total assets and short-term debt to total assets displayed a positive association with ROA and ROE. These results were consistent with the correlation analysis and multiple regression outcomes.

Prenaj et al., (2024) conducted a study on the impact of Capital Structure on Company Performance: empirical evidence from Kosovo. The study is based on data from 50 non-listed companies in Kosovo for the period 2015–2020. The financial statements of companies were used to generate data for this research. Regression methods 'pooled OLS', 'fixed effects (FE)', and 'random effects (RE)' were used in estimating the model, and the Housman test was performed to test the fixed effects against the random effects model. Through dependent, independent, and control variables, the performance of companies is studied. The Kosovar non-listed companies use two accounting-based measures of financial performance: return on assets (ROA) and return on equity (ROE). The results of empirical tests indicate that a capital structure composed of short-term debt, long-term debt, and total debt is negatively influencing the performance of the companies measured by ROA. On the other hand, capital structure affects the company's performance positively, except for long-term debt, which has no significant impact on the company's performance as measured by ROE. Based on the results, we can conclude that the choice of capital structure, in general, has a weak impact on the financial performance of non-listed companies in Kosovo, especially long-term debt, which has no significant impact on return on equity

In Nigeria Aghaebe and Oranefo (2024) conducted a study titled capital structure and financial performance of consumer goods firms listed in Nigeria. The study adopted the ex-post facto research design and the population comprised of twenty-one listed consumer goods firms in Nigeria. The sample was purposively selected a sample size of 16 firms from the consumer goods sector of the Nigerian Exchange Group (NGX), from 2012-2022. The data were obtained from annual reports of the firms included in the sample. The data were analyzed using descriptive tools, correlational and regression analyses. The pooled ordinary least square regression technique was used in testing the hypotheses of the study. The results showed that: short term debt to equity ratio has a significant negative effect on the return on assets of consumer goods firms listed in Nigeria in Nigeria (p-value = 0.0003); long term debt to equity ratio has a non-significant positive effect on return on assets of consumer goods firms listed in Nigeria in Nigeria (p-value = 0.6002); total debt to equity ratio has a non-significant negative effect on return on assets of consumer goods firms listed in Nigeria in Nigeria (p-value = 0.4628). In conclusion, a high leverage ratio indicates a mismatch between short-term obligations and the firm's inability to generate sufficient cash flow.

III. Methodology

The study adopted the ex-post facto research design, and being a quantitative study, relied on secondary panel data from Audited Financial Statement (AFS) of selected multi-national breweries in Nigeria from 2018-2023. The study population comprises of Three (3) Nigerian multinational breweries. quoted in Nigerian stock exchange. The sample for the study was derived from the three (3) multinationals breweries. The sample size was selected using purposive sampling technique and covered a period of five (5) years (2018-2023) within which data of breweries quoted in Nigerian Stock Exchange were computed from their 2023 annual reports and accounts. The names of the breweries are: Nigerian Breweries PLC (Heineken Group), International Breweries PLC (ABInBev Group formerly SABMiller Group) and Guinness Nigeria PLC (Diageo Group later Tolaram Group from 2024) This is as a result of major consolidation of Breweries which happened in Nigeria through acquisitions in recent years. The study relied on secondary data. Four different sets of data were collected, namely: Short term debt to Total assets ratio, Long-term debt to Total assets ratio, Debt to Equity ratio and Return on Assets. To assess the descriptive statistical characteristics of the data, measures such as mean, standard deviation, minimum, and maximum values were employed. Additionally, the study employed pooled ordinary least square (OLS) regression analysis as an inferential statistical tool for testing the hypotheses formulated earlier. The decision rule is based on the sign and significance of the computed *t*-statistic from the regression output. If the *p*-value of the *t*-statistic < .05 (the chosen *alpha* level) the null hypothesis is rejected; and, the variable is postulated to have a significant effect.

The performance proxies, utilized in the study: Return on Assets (ROA) are to be regressed on short term debt-to-equity, long term debt-to-equity and total debt-to-equity (independent variables), as identified from prior literature as follows: $ROA = f(\text{short-term debt to equity, long-term debt to equity, total debt to equity})$. The 'static linear models' of the above expression is presented in the equations below as follows:

$ROA = \alpha_0 + \eta_1 STDTA + \eta_2 LTDE + \eta_3 TDETE + \mu_i + \dots$ Eq. (1) Where: ROA (Return on Assets), STDTA (Short-term Debt to Total Assets), LTDE (Long-term Debt to Total Assets), TDETE (Total Debt to Total Equity).

IV. Results

This section focuses on the presentation and analysis of data, test of hypotheses and discussion of finding generated from the study. It involves a systematic and objective statistical presentation and analysis of all the collected data for the study.

Data presentation

The data obtained for the purpose of this research work is used to empirically investigate the link between capital structure and financial performance of multi-national breweries in Nigeria. 2018 - 2023. The dimensions of the independent variables are short term debt to total assets ratio, long term debt to total assets ratio, debt-to-equity ratio, the measure for the criterion variables are return on assets.

Table 4.2: Descriptive statistics of short term debt to total assets ratio, long term debt to total assets ratio, debt-to-equity ratio and return on assets Nigeria from 2018-2023.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Short term debt to total assets	5	368.80	3834.30	599.2056	2004.30341
Long term debt to total assets	5	234.60	732.20	3445.0434	257.85463
Debt to equity ratio	5	3438.00	662.40	498.4475	200.45692
Return on assets	5	3122.01	6321.32	327.874	3005.32131
Valid N (list wise)	5				

This above table shows the descriptive statistics of all employed variables of the study which evaluated the trends of all 5 years observations (2018-2023). It can be seen from the table that the mean which represents the average of variables overboard shows varying output for all four employed variables. The long term debt to total assets can be witnessed to have the highest level of mean of 3445.0434 and standard deviation of 257.85463, followed by short term debt to total ratio on its mean level of 599.2056 and standard deviation of 2004.30341. This is followed by debt to equity ratio which was identified by the mean of 498.4475 and standard deviation of 200.45692, while return on assets had the least value of 327.874 with a standard deviation of 3005.32131 as shown in the table above.

Statistical test of hypotheses

Test of Hypotheses

Each of the hypotheses in this study was tested based on the results obtained from the simple regression analysis. The regression analysis conducted using E-views statistical package version

Hypothesis One

The null hypothesis states that short term debt to total assets ratio has no significant effect on the return on assets of multi-national breweries in Nigeria. The data that relates to this hypothesis is presented in Table 4.3.

Table 4.3: Regression Results of Hypothesis one

Dependent Variable: ROA (₦'B)				
Method: Least Squares				
Date: 18/03/25 Time: 18:45				
Sample: 2018-2023				
Included observations: 5				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	54888.83	11741.31	4.674847	0.0000
STD TAR (%)	878.3557	463.3227	-1.895775	0.0656
R-squared	0.086406	Mean dependent var		38040.00
Adjusted R-squared	0.062364	S.D. dependent var		50113.87
S.E. of regression	48526.06	Akaike info criterion		24.46630
Sum squared resid	8.95E+10	Schwarz criterion		24.55074
Log likelihood	-487.3259	Hannan-Quinn criter.		24.49683
F-statistic	3.593963	Durbin-Watson stat		0.420611
Prob(F-statistic)	0.045614			

Source: Researchers' Computation using E-views 10.0 (2025)

From the results in Table 4.3, the regression line can be written as follows:

$$ROA_t = 54888.83 + (-878.3557) STD TAR_t + e_t$$

The above equation implies that if the independent variable (STD TAR) were held constant, the return on assets (ROA) will grow on an average rate of ₦54888.83 billion from 2018 to 2023. Furthermore, the results indicated that short term debt to total assets ratio (STD TAR) exhibited positive relationship with the Return on assets (ROA) with a coefficient of 878.3557%. This means that if other factors remain unchanged, an increase in short term debt to total assets ratio (STD TAR) will lead to an increase in return on assets (ROA) by 878.3557%.

The statistical significance of the above relationships was given by the p-value associated with each of the variables. Since this study t-test is based on the 95% level of confidence, a variable is said to have significant effect if its p-value is less than 0.05. Therefore, with the p-value of 0.0456, short term debt to total assets ratio (STD TAR) is said to have a significant effect on return on assets (ROA). The R-squared value of 0.086406 indicates that about 8.6406% variation in return on investment (ROA) is accounted for by the independent variable of this study.

In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.025614 which implies that the independent variable have a significant effect on the dependent variable. Therefore, the null hypothesis which states that short term debt to total assets ratio has no significant effect on the return on assets of multi-national breweries in Nigeria was accepted.

Hypothesis Two

The null hypothesis states that long term debt to total assets ratio has no significant effect on the return on assets of multi-national breweries in Nigeria. The data that relate to this hypothesis is presented in Table 4.4

Table 4.4: Regression Results of Hypothesis Two

Dependent Variable: ROA(₦'B)				
Method: Least Squares				
Date: 18/03/25 Time: 18:45				
Sample: 2018-2023				
Included observations: 5				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34418.79	7846.947	4.386265	0.0001
LTD TAR (%)	-1613.011	806.3199	2.000460	0.0426
R-squared	0.095278	Mean dependent var		38040.00
Adjusted R-squared	0.071469	S.D. dependent var		50113.87
S.E. of regression	48289.87	Akaike info criterion		24.45654
Sum squared resid	8.86E+10	Schwarz criterion		24.54098
Log likelihood	-487.1308	Hannan-Quinn criter.		24.48707
F-statistic	4.001842	Durbin-Watson stat		0.487704
Prob(F-statistic)	0.042633			

Source: Researchers' Computation using E-views 10.0 (2025)

From the results in Table 4.4, the regression line can be written as follows:

$$ROA_t = 34418.79 + 1613.011 LTD TAR_t + e_t$$

The above equation implies that if the independent variable (LTDTAR) were held constant, the return on assets (ROA) will grow on an average rate of ₦34418.79 billion from 2018 to 2023. Furthermore, the results indicated that long term debt to total assets ratio (LTDTAR) exhibited negative relationship with the return on assets (ROA) with a coefficient of -1613.011%. This means that if other factors remain unchanged, an increase in long term debt to total assets ratio (LTDTAR) will lead to a decrease in return on assets (ROA) by 1613.011%.

The statistical significance of the above relationships was given by the p-value associated with each of the variables. Since this study t-test is based on the 95% level of confidence, a variable is said to have significant effect if its p-value is less than 0.05. Therefore, with the p-value of 0.042633, long term debt to total assets ratio (LTDTAR) is said to have a significant effect on return on assets (ROA). The R-squared value of 0.095278 indicates that about 9.5278% variation in return on assets (ROA) is accounted for by the independent variable of this study.

In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.042633 which implies that the independent variable has a significant effect on the dependent variable. Therefore, the null hypothesis which states that long term debt to total assets ratio has no significant effect on return on assets of multi-national breweries in Nigeria was rejected.

Hypothesis Three

The null hypothesis states that debt-to-equity ratio has no significant effect on return on assets of multi-national breweries in Nigeria. The data that relate to this hypothesis is presented in Ta 4.5.

Table 4.4: Regression Results of Hypothesis Three

Dependent Variable: ROA(₦'B)				
Method: Least Squares				
Date: 18/03/25 Time: 18:45				
Sample: 2018-2023				
Included observations: 5				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DERC	49965.29	12769.45	3.912877	0.0004
(₦)	86.32448	72.72195	1.187048	0.02426
R-squared	0.035755	Mean dependent var		38040.00
Adjusted R-squared	0.010380	S.D. dependent var		50113.87
S.E. of regression	49853.09	Akaike info criterion		24.52026
Sum squared resid	9.44E+10	Schwarz criterion		24.60470
Log likelihood	-488.4051	Hannan-Quinn criter.		24.55079
F-statistic	1.409084	Durbin-Watson stat		0.346378
Prob(F-statistic)	0.0242576			

Source: Researchers' Computation using E-views 10.0 (2025)

From the results in Table 4.5, the regression line can be written as follows:

$$ROA_t = 49965.29 + (-86.32448) DERC_t + e_t$$

The above equation implies that if the independent variable (DERC) were held constant, the return on assets (ROA) will grow on an average rate of ₦49965.29 billion from 2018 to 2023. Furthermore, the results indicated that debt on equity ratio (DERC) exhibited positive relationship with the return on assets (ROA) with a coefficient of ₦86.32448. This means that if other factors remain unchanged, an increase in debt on equity ratio (DERC) will lead to an increase in return on assets (ROA) by ₦86.32448.

The statistical significance of the above relationships was given by the p-value associated with each of the variables. Since this study t-test is based on the 95% level of confidence, a variable is said to have significant effect if its p-value is less than 0.05. Therefore, with the p-value of 0.02426, debt to equity ratio (DERC) is said to have a significant effect on return on assets (ROA). The R-squared value of 0.035755 indicates that about 3.5755% variation in return on assets (ROA) is accounted for by the independent variable of this study.

In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.02426 which implies that the independent variable has significant effect on the dependent variable. Therefore, the null hypothesis which states that debt to equity ratio has no significant effect on return on assets of multi-national breweries in Nigeria was rejected.

V. Discussion Of The Findings

From Hypothesis One, the findings on the coefficient of 878.3357 showed that a unit increase in short term debt to total assets ratio (STDTAR) would increase return on assets (ROA) by a factor of 878.3357% from 2018 to 2023. This suggests that changes in short term debt to total assets ratio (STDTAR) have a direct positive effect on return on assets (ROA) from 2018 to 2023. Besides, the relationship is statistically significant. In the light of this, the null hypothesis which states that short term debt to total assets ratio have no significant effect on return on assets of multi-national breweries in Nigeria was rejected since the probability of 0.0456 is less than 0.05. The findings of this study are not exactly in-line with the study conducted in Nigeria by Aghaebé and Oranefo (2024). results showed that: short term debt to equity ratio has a significant negative effect on the return on assets of consumer goods firms listed in Nigeria in Nigeria (p-value = 0.0003); long term debt to equity ratio has a non-significant positive effect on return on assets of consumer goods firms listed in Nigeria in Nigeria (p-value = 0.6002); total debt to equity ratio has a non-significant negative effect on return on assets of consumer goods firms listed in Nigeria in Nigeria (p-value = 0.4628).

From Hypothesis Two, the findings on the coefficient of 1613.011 showed that a unit increase in long term debt to total assets ratio (LTDTAR) would decrease return on assets (ROA) by a factor of -1613.011% from 2018 to 2023. This suggests that changes in long term debt to total assets ratio (LTDTAR) has a direct relationship with return on assets (ROA) from 2018 to 2023. The relationship is statistically significant. In the light of this, the null hypothesis that long term debt to total assets ratio has no significant effect on the return on assets of multi-national breweries in Nigeria is rejected since the probability of 0.042633 is lesser than 0.05. The result is consistent with the findings from the study conducted by Prenaj et al., (2024) on impact of Capital Structure on Company Performance: empirical evidence from Kosovo. Result showed that capital structure affects the company's performance positively, except for long-term debt, which has no significant impact on the company's performance as measured by ROE.

From Hypothesis Three, the findings on the coefficient of 86.32448 showed that a unit increase in debt to equity ratio (DER) would increase return on assets by a factor of 86.32448 from 2018 to 2023. This suggests that changes in debt to equity ratio (DER) has a direct relationship with return on assets (ROA) from 2018 to 2023. The relationship is statistically significant. In the light of this, the null hypothesis which states that debt to equity ratio has no significant effect on return on assets of multi-national breweries was rejected since the probability of 0.0242576 is lesser than 0.05. The findings of this study are in line with Okoye (2015) who revealed that exchange rate fluctuation has negative and insignificant effect on return on asset.

VI. Conclusion

The aim of this study is to ascertain the relationship between capital structure and financial performance of multi-national breweries in Nigeria (2018-2023) to achieve the aim of the study, 3 objectives were formulated which was also tested using ordinary least square method. Data for this work was secondary data and was obtained from published audited financial statements (AFS) of the companies. The major explanatory variables used in this study are short term debt to total assets ratio, long term debt to total assets ratio and debt to equity ratio which are all the dimensions of the study while return on assets was used as the measure. All the hypotheses tested showed a positive significant effect between each other except for hypotheses one which shows a negative significant effect with each other. In conclusion, capital structure can enhance financial performance of multi-national breweries in Nigeria.

VII. Recommendations

Based on the research the following recommendations were made:

- i. Multi-national brewery businesses should reduce their long-term debt ratios because doing so has a negative impact on their performance. This can be accomplished by issuing more shares through bonus and right issues, taking out more short-term debt, and raising revenue. It can also be accomplished by increasing retained earnings.
- ii. Before making an investment, prospective investors should pay close attention to how Nigeria's multi-national breweries' capital structures changed over the years, since this factor typically affects the predicted rate of return.
- iii. Lastly, managers should properly match their capital structure to prevent overmatching and mismatching of financial resources; failure to do so will negatively affect the company's long-term operations, leading to layoffs and a decline in revenue.
- iv. Managers should forecast the movement of the foreign exchange rates before making long term off-shore borrowing decision for MNB in Nigeria.

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