

DETERMINANTS OF CAPITAL STRUCTURE IN NIGERIA: EVIDENCE FROM BREWERIES INDUSTRY

¹KOLAPO Funso Tajudeen Ph.D

ORCID: 0000-0003-1694-683X

²AYORINDE Babatunde Femi

^{1&2}Department of Finance

Faculty of Management Sciences

Ekiti State University, Ado-Ekiti

³OWOEYE Segun Daniel Ph.D

Department of Banking and Finance

Federal University of Agriculture, Abeokuta, Ogun State

Owoeyesd@funab.edu.ng

ORCID: 0000-0002-0589-8943

Email: funsho.kolapo@eksu.edu.ng, ayorinde68@gmail.com

ABSTRACT

This study examined Nigeria's brewery capital structure from 2019 to 2024. ROI was the dependent variable in this research, with debt and equity capital as independent variables. The study used panel data analysis to estimate. Hausman test showed that the fixed effect model was better for the investigation. The result revealed that debt financing, equity financing and retained earnings in Nigeria has low impact on ROI. Return on investment (ROI) in Nigeria was negatively related with debt financing, equity financing and retained earnings demonstrating that capital structure indices has negative impact on Nigerian brewers' performance. Stockholdings may boost ROI if handled appropriately, therefore organisations should review them. Management of listed firms should consider their whole asset base when choosing a capital structure.

Keywords: Debt Financing, Equity Financing, Firm Size and Return on Investment

INTRODUCTION

The capital structure decisions of breweries could not be motivated by rules (Banabo & Aganaba, 2024). Recent empirical studies point to several factors perhaps affecting it (Mohammad & Nishiyama, 2019). Recent years has seen significant importance of capital structure choices for corporate value. Therefore, the company should follow this approach using debt and equity to raise its value and apply debt and equity to support its operations. Should this structure be orderly and capital expenses drop, the company might value increase (Banabo & Aganaba, 2024). Since it influences shareholder return and risk, managers' most crucial choice is about capital structure (Pandey, 2010). Lack of capital structure ready might lead to problems with cash management and company operations. Researchers in accounting and finance have lately concentrated on how a company's capital structure influences its financial performance and the selection of funding structure for a company depends on this. The percentage of a company's financing from long-term securities investments defines its capital structure, which is how it uses its several cash sources to fund operations and large projects. A corporation's capital structure consists of long-term shares

mixed with loan capital. Financial managers aim to increase shareholder wealth by finding the optimal combination of financial resources and deploying them to maximise value. True, a company's capital structure should fit its demands.

Investors and shareholders must understand how capital structure affects brewery enterprises' performance due to the sector's critical relevance to Nigeria's economy. Capital structure choices, notably equity or debt financing, strongly influence the connection and end outcomes over time. These actions influence shareholder risks and rewards, affecting share price. Equity financiers invest in a firm (Mutie & Willy,

2019). Equity financing equals a company's assets minus its liabilities. Most equity financing comes from personal savings or asset sale. Moral hazard and information asymmetry make companies utilise retained savings. Breweries seek extra investment later on to develop and prosper.

Gearing, not leverage, is favoured for debt financing, according to Ibe and Pibowei (2022). Longer-term debt, shorter-term loans, and loans with interest payments due within the reporting period are usually included. It omits interest-free accrued costs and accounts payable. When the debt-to-asset ratio is close to 1, owners obtain approximately the same financing from debt and assets. These leverage ratios may be better understood by comparing firms in the same sector. If its debt-to-equity ratio is higher than industry average, this cement firm may be riskier. According to the CFA Institute (2019), highly leveraged or geared organisations are frequently less solvent, although leverage and solvency are negatively connected. Debt-heavy firms are considered more financially secure than highly leveraged ones (CFA Institute, 2019). A firm with low financial leverage uses less debt to fund its assets, whereas one with high debt uses more borrowed money. A higher debt-to-equity ratio increases risk since a firm must pay interest on its debt but not dividends. A company that loads more debt might find it difficult to meet its financial needs or seize fresh prospects.

Studies must look at how the capital structures of Nigerian brewers affect earnings. The National Bureau of Statistics (NBS, 2023) reports that food, beverages, and tobacco are the main brewery goods sold in Nigeria. Top sales in the sector include bread and sugar. The government has supported manufacturing in numerous sectors by cutting the cost of locally produced items and services and making imported, smuggled ones extremely expensive or unavailable. Research (Banabo & Aganaba, 2024) reveals that a company's financial structure effects its performance. The best capital mix and benefits come from owner-managed firms, according to Vu et al. (2018) and Elmagrhi et al. (2018). Migliori et al. (2018) believe that owner-run organizations should have a separate financial structure than non-owner-run businesses. Modigliani and Miller (1958) and Cheng et al. (2010) claim that capital structure does not impact a company's bottom line, contrary to prevalent belief. Ahmad, Hassan, and Abubakar (2022) discovered a negative connection, but Olaniyan and Lawal (2020), Adesuloro (2021), Banabo and Aganaba (2024), and Oluwadare and Chukwuka (2025) found a positive one. Ajayi and Obisesan (2020) and Akinrinola, Tomori, and Audu (2023) claimed the connection was negligible. Some argue a company's capital structure doesn't impact its finances. This highlights the relevance of financial structure for firm success. Another major takeaway from this debate is the significance of financial framework in obtaining

success. This subject is inadequately discussed in the literature. Past research yielded contradicting findings as their emphasis on developed nations is different. The general applicability of such studies is questioned as emerging nations have different political, economic, legal, social, and cultural conditions. I think research on capital structure, corporate performance, and management ownership have been overlooked in underdeveloped nations like Nigeria. This problem needs to be investigated to get new information on how capital structure influences value and performance of Nigerian companies. There is little study in this field, and anecdotal evidence is contradicting. This study investigates the financial performance of Nigerian brewers under debt financing, equity financing and retained earnings. The general goal is to investigate features of Nigerian capital structure.

Literature Review

Conceptual Literature

Capital Structure

The capital structure - the combination of equity and liabilities a firm employs to fund its assets - is an essential corporate finance choice (Gul & Cho, 2019). Many equity stockholders determine publicly listed companies' ownership structures. Assets and finance sources that enable a corporation to invest in physical assets make up its capital structure. A company's capital includes funding for fixed assets, inventory, accounts receivable, and liquid assets like cash or marketable securities (Banabo & Aganaba, 2024).

Economists define capital as everything that can be produced to make money. Information is the fourth production component after labour, capital, and finance (Abeywardhana, 2015). Thus, every firm needs capital. Abbadi and Abu-Rub (2016) define a company's capital structure as the linkages between its financial sources.

Equity Financing

Equity funding, a major revenue source, boosts corporate success (Banabo & Aganaba, 2024). Equity funding may come from retained earnings, personal savings, gifts from board members, partners, and friends, deferred income, and business cash flows, according to Njagi, Kimani, and Kariuki (2017). Business angels, or angel investors, are rich people who invest in entrepreneurs' enterprises when they sense growth and return potential. Equity investors are residual claimants and must allocate resources efficiently. Direct control may increase company performance (Caroline & Willy, 2015). As family enterprises, many smaller organisations may not engage in growth plans. If given the alternative, SMEs would choose internal resources over external loans. They would retain more power and autonomy. They also noted that small and medium-sized firm (SME) owners may choose financing solutions with minimal to no influence on the business, such as personal savings and retained profits.

Debt Financing

Another term for debt finance is debt lending. A company's technique to borrow money for operations. The borrower must return principle and interest later. The debt-to-asset ratio shows how much debt a business utilises for financing (CFA Institute, 2019). According to the financial risk assessment ratio, a company's assets may not cover its debts and interest (Casmir, 2019). Unsecured creditors may lose in liquidation, and debt-to-assets ratio is one method to quantify it. External loan finance considerably affects businesses' productivity and growth (Gomis & Khatiwada, 2016). In certain countries, debt financing is called gearing instead of leverage. Heavily leveraged organisations tend to have weaker solvency. If a firm utilises less debt than a bigger, more leveraged one, investors trust it more. The debt-to-equity ratio increases risk since a corporation must pay interest on its debt but not dividends on its equity. When a corporation takes on more debt, it risks not meeting promises or responding fast to new possibilities. According to the CFA Institute (2019), a higher asset-to-equity ratio indicates greater debt financing.

Retained Earnings

One primary and internal source of working capital of a quoted brewery is the Retained Earnings. The management of short-term assets and short-term liabilities available to a company for financing the daily operations of the business is gaining incremental interest (Pibowei *et al.*, 2021). Oxford dictionary of economics define retained earnings as part of a company profits which is not paid out in taxes, or dividends but is ploughed back into a business (John *et al.*, 2013; Pibowei *et al.*, 2021). Oxford dictionary of finance and banking, also defined as retained earnings as the net profit available for distribution less, any distribution made, that is, the amount kept within the company, when your company earns a profit, you can do two things with the money: pay your shareholders a dividend or retain the earnings. Each year, quarter, or month – you add your profits for the period to the retained earnings account, or subtract your losses and dividends (Sherman, 2019; Pibowei *et al.*, 2021). It may be used to finance fixed investment, to finance takeovers of other firms, to extend credit to customers, to pay off loans, or to increase liquid assets (John *et al.*, 2013). Retention of earnings is also an alternative to external borrowing, or raising equity capital through issue of shares for financing new investment (John, *et al.*, 2013; Pibowei *et al.*, 2021). Retained earnings is recorded in the profit and loss reserve (Jonathan *et al.*, 2008). Within the shareholders' equity section of the balance sheet, retained earnings are the balance left over from profits, or net income that is set aside to be used to pay dividends, reduce debt, or reinvest in the company (Clark, 2020; Pibowei *et al.*, 2021). Retained earnings forms a major part of working capital, and liquid resources, an absence of which would lead to accumulated losses, which could negatively affect profit for the year after income tax deductions, and returns attributable to shareholders for distribution. In the event of a net

loss, the loss is carried over into retained earnings as a negative number and is deducted from any balance in retained earnings from prior periods (Clark, 2020).

As a result, a negative stockholders' equity could mean a company has incurred losses for multiple periods, so much so, that the existing retained earnings, and any funds received from issuing stock were exceeded (Clark, 2020). Accumulated deficit, or retained loss, crops up on the balance sheet when the company's debts are more than its profits. If the company is newly open, or taking on

debt to expand, it may be taking a retained loss now for higher profits later (Sherman, 2019). However, accumulated losses over several years could result in a negative shareholder equity, which is a red flag for stock investors. It is apparent that if the balance in the Accumulated loss account is not cleared-out, future profits would only be used to progressively reduce the loss.

Financial Performance

A company's bottom line matters to investors, stakeholders, and the economy. Profit is what investors want. If the firm succeeds, investors may gain more. Financial success for a firm may imply more money for employees, better products and services for consumers, and more positivity. Good business practices boost the economy, creating new jobs and personal wealth. A company's success depends on how effectively it utilises its resources to fulfil its goals. How successfully a corporation utilises its resources to fulfil its objectives determines its success. According to Suleiman (2013), a company's performance is based on its strategy or objective achievement. Financial performance measures a company's ability to convert assets into cash via operations. Financial success, according to Dinh and Pham (2020), is how successfully a corporation makes money from its main assets. Leon (2013) argues this statement gives a complete financial picture of a corporation. Strategic management and organisational theory underpin financial performance studies. Legally registered businesses' efficiency is one criterion of "financial performance". The financial world is divided over financial success because it means various things to different individuals. A complete definition of financial performance is needed to analyse a company's performance.

Return on Investment (ROI)

ROI is one approach to evaluate an investment. Businesses may assess investments and pick the one with the greatest long-term value using this method (Giles & Capel, 2014). Njoku (2017) defines ROI as a company's ability to convert capital investments—including short-term assets and long-term debt—into a net return. Investments are long-term shareholder equity and liabilities, whereas returns are profits after interest and taxes. According to Brealey et al. (2015) and Van Horne (2018), return rate is net operating profit divided by total assets. Net operational profit before interest and taxes determines this rate. To calculate return on sales, we divide pre-tax profit by total sales and present as a percentage. This statistic shows a company's profitability. Glyn et al. (2018) define ROI as a project's average profit divided by its capital expenditure. ROI is profit after taxes/total assets. This ratio is meaningless alone. Brealey et al. (2015) suggest measuring a company's ROI to determine profitability. ROI is calculated by dividing an investment's annual income by its entire investment, represented as a percentage. Return on investment (ROI) is a profitability performance measure used by banks, investors, and business analysts to evaluate a company's resource utilisation and financial soundness or compare investment performance. It is crucial for allocating fresh investment funds.

Theoretical Review

Trade-off Theory

Myers created "trade-off theory" in 1984 to describe tax-bankruptcy. Some researchers apply it to practically all neoclassical corporate leverage models that use cost-benefit analysis to assess debt.

According to Kim (1978), capital structure decisions affect performance. The trade-off technique suggests weighing the benefits and downsides of different financing options to identify the optimum equity-debt mix (Margaritis & Psillaki, 2010). When bankruptcy costs arise, the trade-off theory takes them into account. It details the benefits and downsides of debt financing, including tax incentives and bankruptcy and financial difficulty (Kraus & Litzenberger, 1973). These costs occur in actual economic settings, however Moh'dzira (2017) claims they are small compared to tax savings since they are compensatory.

Pecking Order Theory

Donaldson (1961) and Myers and Majluf (1984) expanded on Donaldson's pecking order theory of capital structure and financial decisions. The declaration advises companies to emphasise internal finance before external borrowing. Equity is the final alternative for fundraising since it requires the least effort. Thus, local funds are employed initially, followed by debt, and then equity is offered when debt issuance is doubtful (Myers, 2001). Pecking-order theory shows how costly asymmetric information is. It indicates that firms first use existing resources, then debt, and last equity. This supports performing as little labour as possible. This theory suggests that organisations should prioritise internal resources and debt over equity when seeking external investment. The kind of debt a corporation selects shows its external financing needs. The pecking order concept by Myers (1984) suggests that stock is not the best way to raise funds. When they issue new shares, investors believe management thinks the firm is expensive, allowing managers to capitalise on this overvaluation. The new share offering may be undervalued by investors.

Empirical Review

Akpogheli and Okolie (2026) examined how the capital structure of a select publicly listed Nigerian industrial businesses affects their performance from 2015 to 2024. Panel ordinary least squares (POLS) was used to estimate the series' stationarity, and ADF and PP unit root tests were used to assess it. The study found that equity and debt had advantages, but debt explained ROA differences. Equity was negative and debt was positive, although both explained the chosen businesses' earnings per share differences. Equity was negatively correlated with debt and positively correlated with dividend per share, although neither was statistically significant. The results show that equity and debt financing leverage returns and maximise assets best. Companies should use smart methods to boost earnings and reduce share count. Debt and equity financing costs, tax advantages, and financial leverage may boost shareholder value.

Oluwadare and Chukwuka (2025) studied capital structure and financial performance. The study examined GPM, ROCE, ROA, and ROE in Nigerian banks and enterprises. Results indicate a modest positive association between capital structure and gross profit ($R^2 = 0.147$) and a low correlation with net profit ($R^2 = 0.108$) utilising quantitative approaches, such as regression analysis. This shows that capital structure changes explain just a tiny amount of financial

performance variation. Despite the weak links, the study showed that capital structure optimisation may enhance profitability, especially in banking, where leverage greatly impacts financial results. Capital structure has less impact on operational profit and other profitability metrics, but it nevertheless affects a company's financial performance, notably ROA and ROE. Business managers should carefully evaluate their capital structure choices due to the possible negative implications on borrowing capacity and profitability.

Sunday and John (2024) utilised Panel Least Squares Regression to analyse how capital structure affects Nigerian manufacturing firm performance from 2006 to 2022. The Panel Least Square Regression showed that the independent factors significantly improved Nigerian manufacturing firms' profitability. At 5% significance, equity and debt financing had positive coefficients. To provide adequate capital, manufacturing business management was advised to sell shares to the public or present owners and secure extra loan instruments. Maintaining an appropriate capital structure requires vigilance when making financial choices.

Banabo and Aganaba (2024) examined the association between capital structure and financial performance of publicly listed Nigerian brewers using business size as a moderator. The study employed census sampling and correlational research to estimate. Listed Nigerian breweries' financial performance is favourably (although insignificantly) connected with their capital structure. Equity financing increases ROI somewhat, according to the research. Asset and investment returns are favourably connected with debt financing, although barely. Firm size moderates capital structure and financial performance for publicly listed Nigerian beer firms, but only somewhat.

Akinrinola, Tomori, and Audu (2023) examined Nigerian publicly listed industrial companies' financial performance and capital structure during 2011–2020. The panel least squares multiple regression investigation found no statistically significant relationship between Nigerian manufacturing businesses' total debt to total equity and return on assets. Second, the analysis found no evidence for the long-term debt-to-total asset ratio.

Ahmad, Hassan, and Abubakar (2022) examine how capital structures influenced publicly listed Nigerian industrial businesses' bottom lines during 2017–2021. Multiple regression was used to estimate return on assets, which was favourably impacted by total equity, short-term debt, and total debt ratios and adversely affected by long-term debt ratio.

Adesuloro (2021) examined how capital structure affects Nigerian manufacturing firms using correlation and ordinary least squares regression analysis. According to the research, a one percent increase in capital structure increases profitability by 0.9 percent in Nigerian manufacturing enterprises. The study found that capital structure hurts Nigerian manufacturing firms' liquidity. For every percentage loss in capital structure, liquidity drops 20%. Capital structure improved the performance of a subset of Nigerian manufacturing companies throughout the research period. The study found that capital structure hurts Nigerian manufacturing firms' liquidity. For every percentage loss in capital structure, liquidity drops 20%. Thus, Nigerian manufacturing firms should use equity funding more than cash to boost performance.

Ajayi and Obisesan (2020) examined Nigerian firms' performance and capital structure from 2013 to 2017. The results supported the classic capital structure idea that leverage is crucial to a company's performance. This research estimated using static panel analysis. Strongly adverse link between leverage and performance.

Olaniyan and Lawal (2020) examined Nigerian firms' capital structure and performance from 1988 to 2017. Panel data analysis showed a high positive association between capital structure and Nigerian company success.

Research Methods indicate your research design, population, sample.

The study adopted the model that is built based on the modification of the model used in the study carried out by Banabo and Aganaba (2024). The model is expressed as

$$ROI = F(DF, EQF, RE)..... 1$$

This model can, for simplicity, be stated in the econometric form of equation as depicted equation 2

$$ROI = \beta_0 + \beta_1DF + \beta_2EQF + \beta_3RE + \mu..... 2$$

Where;

- ROI = Return on Investment
- DF = Debt Financing
- EQF = Equity Financing
- RE = Retained Earning
- μ = Error Term

Data Analysis and Interpretation

This research examined Nigeria's brewing industry's capital structure using many empirical approaches. This research uses Nigeria Exchange Group-listed brewers' yearly financial statements as secondary sources. The investigation will last six years, from 2019 to 2024. This research employed panel regression using ordinary least squares to obtain the optimal effect model. Pooled regression, fixed effects, random effects, and Hausman test were used. This study's independent variables were debt finance, equity financing, and firm size, while ROI was the dependent variable.

Table 1: Regression Estimation Result

Dependent variable: LNROE

Variable	Coefficient	Std. Error	T-Statistic	Prob.
LNDF	0.637169	0.258775	2.462252	0.0208
LNEQF	-0.584127	0.284525	-2.052991	0.0503
LNRE	-0.123823	0.181762	-0.681238	0.5017
C	-2.684045	2.634242	-1.018906	0.3176
R-Squared	0.214103			

Adjusted R-Square	0.123423
F-Statistics	2.361073
Prob(F-Statistics)	0.094504
Durbin-Watson Stat	3.142414

Source: *EvIEWS 10* (2026)

Table 1 shows the association between LNROE, the dependent variable, and LNDF, LNEQF, and LNRE, the independent variables. According to the constant parameter's coefficient, the return on investment would fall by -2.684045 units if all other variables were maintained constant (i.e., at zero). The positive and significant correlation between debt financing and return on investment to the tune of 0.637169 unit which implies that an increase in debt financing leads to an increase in ROI. Also, equity financing was found to be negative and insignificantly related to return on investment to the tune of -0.584127 which implies that a unit increase in equity financing will leads to decrease in return on investment and lastly, retained earning was found to be negative and insignificantly related to return on investment to the tune of -0.123823 which implies that a unit increase in retained earnings will reduce return on investment by the same unit.

Table 2: Fixed Effect

Dependent variable: LNROI

Variable	Coefficient	Std. Error	T-Statistic	Prob.
LNDF	-0.118568	0.889113	-0.133355	0.8951
LNEQF	-0.583607	0.336654	-1.733551	0.0970
LNRE	-0.112424	0.275271	-0.408413	0.6869
C	11.40471	16.69807	0.682996	0.5017
Fixed effect (cross)				
CHAMP BREW PLC-C	11.40471			
INTERNATIONAL BREW-C	11.40471			
NIGERIAN BREW-C	11.40471			
GOLDEN GUINNESS BREW PLC-C	11.40471			
GUINNESS NIG PLC-C	11.40471			
R-Squared	0.243771			
Adjusted R-Squared	0.003153			
F-Statistics	1.013102			
Prob (F-Statistics)	0.000154			
Durbin-Watson Stat	3.169919			

Source: *EvIEWS 10* (2026)

As seen in Table 2, LNROI is linked with LNDF, LNEQR, and LNRE. The coefficient of the constant parameter shows that return on equity would decline by 11.40471 units if all other variables were zero. According to theory, debt financing, equity financing and retained earnings exhibit a negative and insignificantly related to ROI to the tune of -0.118568, -0.583607 and -0.11242 units respectively which implies that a unit increase in debt financing, equity financing and retained earnings will leads to decrease in ROI respectively.

Table 3: Random Effect Model

Dependent variable: LNROE

Variable	Coefficient	Std. Error	T-Statistic	Prob.
LNDF	0.637169	0.275957	2.308943	0.0292
LNEQF	-0.584127	0.303417	-1.925165	0.0652
LNRE	-0.123823	0.193830	-0.638822	0.5285
C	-2.684045	2.809149	-0.955465	0.3481
Random effect (cross)				
CHAMP BREW PLC-C	-2.684045			
INTERNATIONAL BREW-C	-2.684045			
NIGERIAN BREW-C	-2.684045			
GOLDEN GUINNESS BREW PLC-C	-2.684045			
GUINNESS NIG PLC-C	-2.684045			
R-Squared	0.214103			
Adjusted R-Squared	0.123423			
F-Statistics	2.361073			
Prob (F-Statistics)	0.094504			
Durbin-Watson Stat	3.142414			

Source: *EvIEWS 10* (2026)

Table 3 shows the association between LNROE, the dependent variable, and LNDF, LNEQF, and LNRE, the independent variables. According to the constant parameter's coefficient, the return on investment would fall by -2.684045 units if all other variables were maintained constant (i.e., at zero).

The positive and significant correlation between debt financing and return on investment to the tune of 0.637169 unit which implies that an increase in debt financing leads to an increase in ROI. Also, equity financing was found to be negative and insignificantly related to return on investment

to the tune of -0.584127 which implies that a unit increase in equity financing will leads to decrease in return on investment and lastly, retained earning was found to be negative and insignificantly related to return on investment to the tune of -0.123823 which implies that a unit increase in retained earnings will reduce return on investment by the same unit.

Table 4: Hausman Test

The Hausman test is used to test for the best effect model between the fixed effect and the random effect model.

Chi Sq. Statistics	Prob.
0.807960	0.0476

Source: *EvIEWS 10*, (2026).

Table 4 shows the fixed effect model is best for the inquiry since the Hausman test's probability value is less 5%. Thus, the fixed effect model will be the main research paradigm.

Coefficient of Multiple Determination

With a 24% R² value for fixed effects, independent factors explain 76% of the variation in the dependent variable, while the error term accounts for the remaining 76%. After corrections, independent factors may explain 24% of dependent variable variance.

Tests for Statistical Significance of Parameters (Probability -Test)

The study conduct this test to see how well each model explanatory variable explains the LNROI dependent variable. The p-value for each independent variable coefficient in the OLS regression results will indicate if the parameters are statistically significant. The test has a 95% confidence level and 5% significance.

Table 5: Summary of Probability Test-Fixed Effect

Variable	Probability Value	Decision
LNDF	0.8951	Insignificant
LNEQF	0.0970	Insignificant
LNRE	0.6869	Insignificant
C	0.5017	Insignificant

Source: *EvIEWS 10*, (2026).

As indicated in Table 5, debt financing, equity financing and retained earninggd could not explain LNROI with P-values greater than 0.05. LNROI is negatively correlated with debt financing, equity financing and retained earnings.

Test for the Overall Significance of the Research Model (F-Test)

The Test for the viability and significance of the research model adopted for this study is done using the Probability Test. The hypothesis for the test is formulated as:

H₀: There is no overall significance in the model

H₁: There is overall significance in the model

Table 6: F-Test

F-Statistics	Prob (F-statistics)
1.013102	0.000154

Source: *Eviews 10*, (2025).

The probability value of the F-statistics is less than 0.05, hence, it can be concluded that all variable captured and insignificant in explaining the behaviour of the dependent variable (LNROI) with their respective P-value more than 0.05.

Discussion of Findings

This research seeks to understand how Nigerian brewers' capital structures are affected. Debt financing, equity financing and retained earnings were negative related with ROI, even though none of the components were statistically significant. Capital structure indices has negative and insignificant impact on Nigerian brewers' performance. The fixed effect coefficient of multiple determination (R^2) of 0.243771 indicates a satisfactory fit between the model and data. An explanatory factor may explain 24% of the analysed enterprises' LNROI behaviour, whereas the error term may explain 76%. The components used to describe the dependent variable only explained 24% of the endogenous variable's behaviour. Finally, empirical data revealed that capital structure considerations has negative impact on Nigerian brewery profitability.

Conclusion and Recommendations

This study examined Nigerian brewery capital structure determinants. This was tested empirically using LNROI as our dependent variable and debt financing, equity financing and retained earnings independent variables. From 2019 to 2024, cross-sectional data was collected. The study concluded that capital structure indices has negative impact Nigerian brewers' performance. Hence, the study found that revaluating ownership structures might boost Nigerian brewers' ROI. Managers should consider the firm's whole asset base when choosing a capital structure.

REFERENCES

- Abbadi, S. M., & Abu-Rub, N. (2016). The effect of capital structure on the performance of Palestini-an financial institutions. *British Journal of Economics, Finance and Management Sciences*, 3 (2), 92-101
- Abeywardhana, D. Y. (2015). Capital structure and profitability: An empirical analysis of SMEs in the UK. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, 4, 1661-1675.
- Adesunloro, B. R. (2021). The effect of capital structure on manufacturing firms' performance in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 2 (2), 493-507.
- Ahmad, M. A., Hassan, S. U., & Abubakar, A. (2022). Impact of capital structure on financial performance of listed agricultural companies in Nigeria. *Gusau Journal of Accounting and Finance*, 3 (3), 192-204.
- Ajayi, L. B., & Obisesan, O. G. (2020). Impact of capital structure on firm performance in Nigeria. *International Journal of Economics, Commerce and Management*, 8(3), 414 – 428.
- Akinrinola, O.O., Tomori, O. G., & Audu, S. I. (2023). Capital structure and financial performance of quoted manufacturing firms in Nigeria. *International Journal of Business and Management Review*, 11 (2), 29-47.
- Banabo, K. C., & Aganaba, D. (2024). Capital Structure and Financial Performance of Listed Brewery Firms in Nigeria. *British Journal of Multidisciplinary and Advanced Studies: Business and Management Sciences*, 5 (1), 90-115.
- Brealey, R. A., Myers, S. C., Allen, F., Soria, L. N., & Izquierdo, M.Á.F. (2015). *Principios de Finanzas Corporativas*. McGraw-Hill Interamericana.
- Casmir, C. (2019). Monitoring and evaluation on effective delivery of social studies for improved academic performance. *Review of European Studies, Canadian Center of Science and Education*, 11 (1), 175-175.
- CFA Institute (2019). *Annual Report*, Fiscal Year.
- Chadha, S., & Sharma, A. k. (2015). Capital structure and firm performance: Evidence from India. *SAGE Publication*, 19 (4) 295-302.
- Dinh, H., & Pham, C. D. (2020). The effect of capital structure on financial performance of Vietnamese Listing Pharmaceutical Enterprises. *Journal of Asian Finance, Economics and Business*, 7 (9), 329-340.
- Gomis, R., & Khatiwada, S. (2016). Debt and productivity evidence from firm-level data, ILO Working Papers 994909333402676, *International Labour Organization*.
- Ibe, U, G., & Pibowei, W. E. (2022). The effect of debt management on corporate financial performance of Lafarge Africa Plc (2010-2021). Electronic copy available at: <https://ssrn.com/abstract=3893593>
- Imhanzenobe, J. O. (2019). Operational efficiency and financial sustainability of listed manufacturing companies in Nigeria. *Journal of Accounting and Taxation*, 11 (1), 17-31. doi:10.5897/JAT2018.0329
- Kim, E. H. (1978). A mean-variance theory of optimal capital structure and corporate debt capacity. *Journal of Finance*, 33 (1), 45-63.
- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 28 (4), 911–220.

- Leon, J. S. (2013). The impact of capital structure on financial performance of listed manufacturing firm in Sri Lanka. *Global journal of common wealth Management perspective*, 2 (5), 55-62.
- Margaritis, D., & Psillaki, M. (2010). Capital structure, equity ownership and firm performance. *Journal of Banking and Finance (JBF)*, 34 (3), 485-696.
- Modigliani, F., & Miller, M. (1958). The cost of capital corporate finance and the theory of Investment. *American Economic Review*, 48, 261-297.
- Muritala, T. (2012). An empirical analysis of capital structure on firms' performance in Nigeria. *International Journal of Advances of Management and Economics.*, 1 (5), 116-124.
- Mutie, J. M., & Willy, M. (2019). Effect of equity finance on financial performance of small and medium enterprises in Kenya. *International Journal of Business and Social Science*, 10 (7), 113-130.
- Myers, C. S. (1984). The capital structure puzzle. *The Journal of Finance*, 39 (3), 574-592.
- Njagi, I. K., Kimani, E. M., & Kariuki, S. (2017). Equity financing and financial performance of SMEs in Embu town Kenya. *International academic journal of economics and finance*, 2 (3), 74-91.
- Njoku, G. C. (2017). The impact of corporate governance on working capital management in Nigerian organizations.
- Olaniyan, S. O., & Lawal, S. A. (2020). Capital structure and performance of firms in Nigeria: A way out of economic recession. *British Journal of Management and Marketing Studies*, 3 (2), 50-68.
- Oluwadare, B. P., & Chukwuka, J. O. (2025). Capital structure's impact on financial performance in a selected bank in Nigeria. *Journal of Investment, Banking and Finance*, 3 (1), 01-11.
- Suleiman, W. (2013). A study of causes of poor attitude to work among workers of both public and private sectors organizations in Bauchi State-Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 3, 143-152.