

CORPORATE CHARGES AND PROFITABILITY OF PHARMACEUTICAL FIRMS IN NIGERIA

¹Egbo, Jude Sunday

²Nnado Ifeanyi Celestine

³Ugwoke, Edith Nkem

⁴Oshim, Judethadeus Chukwuebuka

⁵Onah, Chinyere Esther

^{1,2,3,4&5}Department of Accountancy, Enugu State University of Science and Technology, Enugu

²Corresponding Author & email addresses: ifeanyi_eck@yahoo.com; +2348038113063

ABSTRACT

The study examined the connection between corporate charges and profitability of listed pharmaceutical firms in Nigeria for a period of 10 years 2015-2024. The specific objectives of the study include to: ascertain the effect of advertising cost, audit fees and interest expense on return on equity of these pharmaceutical firms. The study adopted an *ex post facto* research design. Secondary data was extracted from audited annual reports of the selected pharmaceutical firms in Nigeria. Multiple regression (Panel Least Squares) technique was used for the data analysis. It was revealed that advertising cost has a negative and non-significant effect on return on equity of Pharmaceutical firms in Nigeria judging with (t-cal -0.417840, Coef. -4.098708, p-value = 0.6785 > 0.05), audit fee has positive and non-significant effect on return on equity of Pharmaceutical firms in Nigeria judging with (t-cal 0.509915, Coef. 2.899806, p-value = 0.6132 > 0.05) and interest expense has negative and non-significant effect on return on equity of Pharmaceutical firms in Nigeria judging with (t-cal -0.059236, Coef. -2.317709, p-value = 0.9531 > 0.05). These imply that all the variables cannot be used to predict return on equity of Pharmaceutical firms in Nigeria. The Adjusted R-squared of 0.575126 suggests that the model has a moderate fit, meaning that while the independent variables explain a significant portion of the variability in the dependent variable, there is still about 42.5% of the variation that is not accounted for by the model. It is recommended that pharmaceutical firms in Nigeria should re-evaluate their advertising strategies and ensure that such expenditures are targeted, cost-effective, and aligned with measurable performance outcomes, rather than assuming they will automatically boost profitability. Further, firms should continue to maintain appropriate audit practices for transparency and regulatory compliance, but without over-investing in audit expenditures with the expectation of financial returns; and these firms should adopt prudent debt management practices, limit excessive borrowing, and explore more cost-efficient financing options to safeguard profitability and maintain financial stability.

Keywords: Corporate charges, Profitability, Advertising, Audit, and Interest charges, ROE

1. INTRODUCTION

1.1 Background of the Study

The ever-increasing cost of doing business for companies around the world has put pressure on finance managers to analyze cost scenarios and develop a robust cost strategy to take the profitability of their companies at maximum. The growth of any company is largely determined by how well it can manage its costs. This is partly because to be able to maximize profit, cost must be reduced to the barest minimum. Every aspect of an organization's cost structure must be carefully examined to eliminate unnecessary discretionary and non-value adding costs, while yet retaining its competitive position. Firms with strong financial management practices are better positioned to navigate financial challenges and enhance profitability despite high corporate charges. Research has shown that firms with effective cost control mechanisms and optimal debt-equity structures tend to perform better financially (Ibrahim & Eze, 2024). This highlights the importance of adopting sound financial management strategies in the pharmaceutical sector.

Corporate charges play a significant role in shaping the profitability of pharmaceutical firms in Nigeria. These charges, which include interest expenses, audit fee, advertising and other financial obligations, directly affect a firm's cost structure and overall financial performance. The pharmaceutical sector is highly capital-intensive, requiring substantial investment in research, production, and distribution. Given the rising cost of operations and regulatory constraints in Nigeria, firms must effectively manage their financial obligations to maintain profitability. Prior studies have shown that excessive financial charges can erode earnings, limiting the ability of firms to reinvest in product development and market expansion (Adegbite et al., 2023). Thus, understanding the effect corporate charges on profitability is crucial for strategic financial planning in the pharmaceutical industry. In any business organization, the goal of most organizations is to achieve maximum profit. Michael (2021) opines that since management is concerned with the profitability which is one of the tools to evaluate the business performance especially in a pharmaceutical company, the need of increasing sale will arise and this will eventually lead to increase in production capacity and as a result lead to increase in cost. Thus, the need for cost control and cost reduction is required to achieve maximum profit in competitive market where demand is affected by the price of goods and services.

Interest expenses play a critical role in determining the return on equity (ROE) of pharmaceutical firms in Nigeria. ROE measures a firm's profitability relative to shareholders' equity and is a key indicator of financial performance. When pharmaceutical firms rely heavily on debt financing, they incur high-interest expenses, which reduce net profits available to shareholders. Given the high cost of borrowing in Nigeria, excessive interest payments can significantly erode earnings, leading to a decline in ROE. Studies have shown that firms with high financial leverage often experience reduced profitability due to the burden of interest expenses, as they must allocate a significant portion of their earnings to debt servicing rather than reinvesting in business expansion (Okonkwo & Ibrahim, 2024). Thus, a poorly managed capital structure with excessive debt financing can weaken shareholder returns and overall firm performance. However, strategic debt management can also enhance ROE if interest expenses are kept at an optimal level. When firms use debt financing effectively, they can

invest in profitable ventures that generate returns higher than the cost of debt, thereby improving ROE. This is particularly relevant for pharmaceutical firms that require substantial capital for research, development, and production. Firms that strike a balance between debt and equity financing can maximize their profitability while minimizing the negative impact of interest expenses (Ibrahim & Eze, 2024). Therefore, prudent financial management, including efficient debt utilization and cost control, is essential for Nigerian pharmaceutical firms to optimize their ROE and sustain long-term growth.

Audit fees can impact the return on equity (ROE) of pharmaceutical firms in Nigeria by influencing financial transparency, investor confidence, and overall cost structures. A higher audit fee often signifies rigorous financial scrutiny, which enhances the credibility of financial statements and attracts investors. This can lead to increased market valuation and shareholder confidence, ultimately improving ROE. However, excessive audit fees can also strain a firm's financial resources, reducing net income available to shareholders and negatively affecting ROE (Adebayo & Okonkwo, 2024). Smaller pharmaceutical firms, in particular, may struggle with high audit costs, limiting their ability to allocate funds for expansion and innovation. Therefore, while audit fees contribute to good corporate governance and financial integrity, firms must balance their audit expenditures to maximize shareholder returns without incurring unnecessary financial burdens (Olawale & Ibrahim, 2023).

Advertising costs, as a corporate charge, can significantly influence the return on equity (ROE) of pharmaceutical firms in Nigeria by affecting brand visibility, market share, and revenue generation. Effective advertising strategies can enhance consumer awareness and increase product demand, leading to higher sales and profitability. When advertising expenditures generate sufficient revenue growth, the firm's net income improves, positively impacting ROE by increasing returns to shareholders (Okafor & Adeyemi, 2024). However, excessive advertising costs without a proportional increase in revenue can strain financial resources and reduce net profit margins, ultimately lowering ROE. Therefore, pharmaceutical firms must strategically allocate advertising budgets to ensure a balance between promotional investments and financial returns while maintaining cost efficiency (Ogunleye & Salisu, 2023). It is in view of the importance of corporate charges on decision-making process of pharmaceutical firms that the researcher embarked on this study to examine corporate charges and profitability of pharmaceutical firms in Nigeria.

1.2 Problem Statement

The problems of corporate charges on the profitability of pharmaceutical firms in Nigeria are multifaceted, as these charges often lead to increased operational costs and reduced earnings. High interest expenses, audit fees, advertising costs place a heavy financial burden on these firms, limiting their ability to invest in essential areas such as research, quality improvement, and expansion. Moreover, the unstable economic environment, coupled with fluctuating exchange rates and inflation, further exacerbates these challenges, making it difficult for pharmaceutical firms to plan long-term and sustain profitability. These financial pressures can hinder innovation, reduce competitiveness, and

ultimately impact the availability and affordability of essential medicines in the country. The problems of advertising costs on the return on equity (ROE) of pharmaceutical firms in Nigeria stem from the substantial financial outlays required to promote products in a highly competitive and regulated market. While advertising is essential for brand awareness and market penetration, excessive spending on marketing campaigns without a corresponding increase in sales revenue can erode profit margins, thereby reducing the net income available to shareholders. Additionally, the strict regulations governing pharmaceutical advertising in Nigeria may limit the effectiveness of these campaigns, leading to suboptimal returns on investment. This mismatch between advertising expenses and actual financial returns can weaken the firm's overall efficiency in using shareholders' equity to generate profit, ultimately lowering ROE.

Audit fees pose significant problems for the return on equity (ROE) of pharmaceutical firms in Nigeria by adding to the overall administrative and compliance costs, which directly reduce net income. These fees, though necessary for ensuring financial transparency and regulatory compliance, can be particularly burdensome for firms already grappling with high operational costs and economic instability. When audit expenses consume a considerable portion of earnings without contributing to revenue generation, the profitability available to shareholders diminishes. Consequently, the efficiency with which equity is used to generate returns declines, leading to a lower ROE and making it harder for firms to attract and retain investors in a competitive industry.

Interest expense presents a major problem for the return on equity (ROE) of pharmaceutical firms in Nigeria, as it reduces the amount of net income available to equity shareholders. Many pharmaceutical companies rely on borrowed capital to finance operations, research, and expansion due to limited access to equity funding. However, high interest rates in Nigeria increase the cost of servicing these debts, thereby significantly reducing profitability. When a large portion of earnings is used to cover interest payments, it limits reinvestment opportunities and dampens shareholder value. This financial strain ultimately leads to a lower ROE, reflecting poor efficiency in utilizing equity capital to generate returns, and potentially discouraging future equity investment in the sector. In light of these considerations, there is a compelling need for empirical research aimed at investigating corporate charges and profitability of pharmaceutical firms in Nigeria.

1.3 Research Objectives

This study examined the responsiveness of profitability of pharmaceutical firms in Nigeria to corporate charges via the impact of advertising costs, audit fees and interest expenses on return on equity.

2. REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Corporate Charges

Corporate charges refer to the various financial obligations that companies must bear during their regular operations. These charges encompass both fixed and variable costs such as interest expenses, taxes, administrative costs, audit fees, and regulatory compliance expenses. They represent a

significant part of a firm's financial structure and must be met irrespective of profit levels. In Nigeria, where the business climate is often unstable due to inflation, currency volatility, and fluctuating regulatory policies, corporate charges can be especially burdensome for firms, particularly those in capital-intensive sectors like pharmaceuticals. Pharmaceutical companies in Nigeria operate in a heavily regulated industry. This means they incur substantial costs in maintaining compliance with government standards, procuring certifications, and ensuring drug safety and efficacy. These requirements come with financial obligations that are classified under corporate charges. For example, firms are required to undergo regular inspections, maintain good manufacturing practices, and pay for renewals of licenses and patents, all of which are costly (Oinkio, 2023). These recurring expenses, though necessary, strain company finances and reduce funds available for other growth-enhancing activities.

2.1.2 Advertising Cost

Advertising costs refer to the expenses that companies incur to promote their products and services, ensuring brand awareness and driving consumer behavior. These expenses can include media campaigns, promotional events, digital marketing, sponsorships, and other forms of outreach aimed at increasing product visibility. For pharmaceutical firms, advertising is particularly important due to the competitive nature of the market, the need for brand differentiation, and regulatory compliance. In Nigeria, advertising in the pharmaceutical industry involves meeting the requirements set by the National Agency for Food and Drug Administration and Control (NAFDAC), adding complexity to the overall cost structure. Pharmaceutical firms invest heavily in advertising to gain market share, but whether this investment generates a return on equity (ROE) is influenced by multiple factors. This means that companies must bear significant costs to meet legal standards, which may increase their overall advertising expenses compared to firms in other sectors. As a result, pharmaceutical companies must not only be strategic in their advertising but also ensure compliance with government policies, which further affects their financial performance (Adebayo, 2023).

2.1.3 Audit Fees

Audit fees refer to the payments made by companies to external auditors for services related to the review and evaluation of financial statements, accounting practices, and overall financial health. In Nigeria, pharmaceutical firms, like other businesses, are required by law to undergo independent audits to ensure transparency, accuracy, and compliance with relevant financial reporting standards and regulations. The fees paid to auditors can vary based on the complexity and size of the firm, as well as the scope of the audit. Pharmaceutical companies in Nigeria, due to the nature of their operations and the strict regulatory environment, often face complex auditing processes, which can result in higher audit fees (Olusanya & Adewale, 2022). Audit fees are an essential aspect of corporate governance, as they contribute to ensuring that financial statements are credible and that shareholders, regulators, and other stakeholders can trust the reported financial performance of the

company. For pharmaceutical firms, compliance with national and international accounting standards such as the International Financial Reporting Standards (IFRS) is critical. This compliance requires rigorous audits to verify financial data, including revenue, expenses, inventory, and compliance with industry-specific regulations. As pharmaceutical firms expand and become more complex in their operations, audit fees tend to increase due to the need for more extensive checks and audits (Olusanya & Adewale, 2022).

2.1.4 Interest Expense

Interest expenses refer to the costs incurred by a company when it borrows funds, typically in the form of loans or credit lines, from financial institutions or other creditors. These expenses represent the cost of borrowing, calculated as a percentage of the principal amount borrowed. In the context of pharmaceutical firms in Nigeria, these costs can arise from various types of debt, including short-term loans for working capital needs, long-term debt for capital expenditures, or even bonds issued to raise funds. The interest paid on these borrowings is a significant element of financial management, impacting the overall financial health of pharmaceutical companies (Bello & Udom, 2022). In Nigeria, pharmaceutical firms often rely on debt financing due to the capital-intensive nature of their operations, especially in areas such as research and development (R & D), manufacturing, and regulatory compliance. These activities require significant capital investments, which may not always be fully funded through internal cash flows. As a result, pharmaceutical companies in Nigeria frequently engage in debt financing to meet their funding needs. However, this reliance on debt also means that pharmaceutical firms are burdened with interest expenses, which can impact their profitability and return on equity (ROE) (Bello & Udom, 2022).

2.1.5 Profitability

Profitability refers to a firm's ability to generate earnings compared to its expenses and other relevant costs incurred during a specific period. For pharmaceutical firms in Nigeria, profitability is a core indicator of financial health and operational efficiency. Given the competitive and highly regulated nature of the pharmaceutical industry, firms must maintain strong profit margins to sustain growth, fund research and development, and expand market reach. Profitability in this sector is often influenced by various internal factors such as cost management, production efficiency, marketing strategy, and pricing policy, as well as external factors including regulatory frameworks, exchange rate volatility, and healthcare policies (Okeke & Uzochukwu, 2022).

2.1.6 Return on equity

Return on Equity (ROE) is a critical financial ratio used to assess the profitability of a firm in relation to the equity invested by its shareholders. It is calculated by dividing net income by shareholders' equity and is expressed as a percentage. In the pharmaceutical industry in Nigeria, ROE is widely recognized as a key indicator of financial performance, as it reveals how efficiently a company is utilizing the capital provided by shareholders to generate profit. A high ROE implies effective

management and strong financial health, while a low ROE suggests inefficiencies in asset or capital usage (Okoye & Onyekwelu, 2022).

2.2 Theoretical Reviews

The theoretical review for this study was centered on the *trade-off theory*. This study was anchored on the trade-off theory because it explains how pharmaceutical firms in Nigeria balance the benefits of tax shields from corporate charges like interest expenses, advertising cost and audit fee against the potential costs to profitability, aiming to achieve an optimal capital structure.

2.2.1 Trade-Off Theory

The *Trade-Off Theory*, developed by *Kraus and Litzenberger (1973)*, posits that firms aim to balance the benefits and costs of debt to determine their optimal capital structure. The theory suggests that while debt offers advantages such as tax deductibility of interest (which enhances profitability), it also imposes costs like the risk of bankruptcy and agency costs associated with financial distress. Therefore, firms "trade off" between these opposing forces to reach a capital structure that maximizes firm value and, by extension, profitability. In the context of **pharmaceutical firms in Nigeria**, the Trade-Off Theory becomes particularly relevant due to the industry's capital-intensive nature. These firms often incur substantial corporate charges, including **interest expenses, audit fees, and advertising costs**, which are essential for maintaining compliance, public visibility, and operational transparency. However, if these charges are not well-managed, they can erode profit margins. For example, excessive borrowing increases interest expenses, and while these are tax-deductible, they can also heighten the risk of financial distress if revenues do not grow proportionally.

The theory further explains that a firm may tolerate a certain level of corporate charges if the returns from such investments outweigh the costs. For instance, **advertising costs** can lead to greater market share and revenue, and **audit fees** can enhance investor confidence. However, once these charges exceed a firm's optimal level, the negative impact on profitability becomes more pronounced. Thus, according to the Trade-Off Theory, each firm should determine the "equilibrium point" where the marginal benefit of a corporate expense equals its marginal cost. Moreover, Nigerian pharmaceutical firms operate in an environment with economic uncertainties, including inflation, exchange rate volatility, and regulatory fluctuations. These factors make managing corporate charges even more critical. The *Trade-Off Theory*, therefore, offers a useful lens for analyzing how firms can strategically manage these costs to avoid undermining profitability.

2.3 Empirical Reviews

2.3.1 Advertising cost and Return on equity

Ibrahim and Bako (2020) explored on *Impact of Marketing Expenses on Profitability of Quoted Healthcare Companies in Nigeria*. The study focused on the North-Central zone, with a population

of 10 healthcare and pharmaceutical companies. Using a census method, all 10 firms were studied. The study utilized a quantitative methodology with time-series data spanning 2010 to 2018, analyzed using correlation and regression analysis. Findings revealed that advertising costs have a weak but positive influence on ROE. The authors concluded that most firms underinvest in advertising, affecting their market competitiveness and profitability. They recommended increased investment in targeted advertising strategies to improve financial outcomes.

2.3.2 Audit fees and Return on equity

Gichunge (2021) examined the effect of audit fees on organizational performance of medium sized manufacturing enterprises in Nairobi Kenya. Primary data was collected using a semi-structured questionnaire. Results showed that the manufacturing enterprises have not fully adopted formal strategic management and that administrative/legal factors and competition influence adoption of strategic management. Similarly, a study conducted by Ogbadu (2021) examined and outlined the roles and benefits of Overhead Control Techniques. Secondary data and primary data were utilized in this study while ANOVA was adopted as the analytical technique. The finding showed that there is need to recognize the materials management function and it has been suggested that for a firm to achieve profitability, the goal of materials management outlined should be properly carried out.

2.3.3 Interest expense and Return on equity

Adebayo and Omotoso (2024) conducted a study on *the Impact of Interest Expenses on Return on Equity of Pharmaceutical Firms in Nigeria*, examining firms listed on the Nigerian Exchange Limited. The population of the study included 11 pharmaceutical firms, and a sample size of 6 firms was selected using judgmental sampling. The study employed a descriptive research design and analyzed secondary data from financial reports between 2015 and 2020. The analytical techniques used were regression and correlation analyses. The findings indicated that interest expenses had a negative impact on return on equity, highlighting that higher interest payments on debt led to a decline in profitability. The study concluded that pharmaceutical firms should adopt effective debt management strategies, including reducing debt levels and interest rates, and recommended greater focus on equity financing to improve ROE.

3. METHODOLOGY

This research work employed *ex-post facto* in looking at connection between corporate charges and profitability of pharmaceutical firms in Nigeria. It focused on the first-tier of Nigerian Pharmaceutical industry using panel data drawn from audited annual reports and accounts of these sampled firms for a ten year period 2015–2024. The population consists of all seven quoted pharmaceutical firms as at November 30 2025. However, the study purposely drew a sample of only four pharmaceutical firms with international acclaim: GlaxoSmithKline Consumer Nigeria Plc (GSK Nigeria), Fidson Healthcare Plc, May & Baker Nigeria Plc and Neimeth International Pharmaceuticals Plc given their current extensive operations and comparable asset base.

Model Specification: The comprehensive model is specified as follows:

$$ROE_{it} = \beta_0 + \beta_1 AC_{it} + \beta_2 AF_t + \beta_3 IE_t + \varepsilon_t$$

Where: ROE = Return on equity

AC = Advertising Cost

AF = Audit Fee

IE = Interest Expenses

β_0 = coefficient (Constant) to be estimated

β_1 - β_3 = parameters of the independent variables to be estimated

ε = Error Term

t = current period

4. RESULTS

Table 4.1: Descriptive / Summary Statistics for the Variables

	<i>ROE</i>	<i>ADV._COSTS</i>	<i>AUDIT_FEES</i>	<i>INTEREST_EXPENSES</i>
Mean	0.106268	435550.8	15334.67	587682.9
Median	0.122467	227746.5	11500.00	211874.0
Maximum	0.510927	2260368.	45000.00	5493822.
Minimum	-0.708499	2103.000	6065.000	108.0000
Std. Dev.	0.230328	510611.7	8867.536	990438.2
Skewness	-1.892940	1.503235	1.521823	3.333768
Kurtosis	7.691269	5.282216	4.939898	16.22571
Jarque-Bera	60.56815	23.74562	21.71165	365.6258
Probability	0.000000	0.000007	0.000019	0.000000
Sum	4.250701	17422033	613387.0	23507315
Sum Sq. Dev.	2.068996	1.023413	3.074509	3.834513
Observations	40	40	40	40

Source: Author's Computation from Eviews 10.0, 2025

Table 4.1 showed the components used to ascertain the normality of the study variables. They include; skewness, kurtosis and probability of the Jarque – Bera Statistics. The table showed that the **skewness value** of return on equity $-1.892940 < 1$ which indicates that it is normally distributed, the skewness value of advertising cost $1.503235 > 1$, audit fee $1.521823 > 1$ and interest expenses $3.333768 > 1$ which indicates that it is abnormally distributed because its skewness values > 1 . In summary, the **skewness** values in the descriptive statistics help us understand the direction and extent of asymmetry in the distribution of each variable. **ROE** has a skewness of **-1.8929**, which indicates a strong **negative skewness**, the data is skewed to the left, meaning that a few firms have extremely low or negative ROE values, which pull the distribution's tail leftward. On the other hand,

Advertising Cost (1.5032), Audit Fee (1.5218), and Interest Expenses (3.3338) all show **positive skewness**, suggesting that the majority of firms have relatively low values for these variables.

The table showed that the *kurtosis value* of return on equity $7.691269 > 3$ which indicates that it is abnormally distributed, advertising cost $5.282216 > 3$ which indicates that it is abnormally distributed, audit fee $4.939898 > 3$ which indicates that it is abnormally distributed and interest expenses $16.22571 > 3$ which indicates that it is abnormally distributed. Therefore, the kurtosis values tell us about the "peakedness" or tail thickness of the distributions. A normal distribution has a kurtosis of 3. ROE has a kurtosis of 7.6913, indicating a leptokurtic distribution with heavy tails and more extreme values than normal. Advertising Cost (5.2822) and Audit Fee (4.9399) also have leptokurtic distributions, suggesting moderate extremities in the data. However, Interest Expenses has a very high kurtosis of 16.2257, which is indicative of an extremely peaked distribution with numerous outliers. This implies that the distribution of interest expenses is not only skewed but also contains extreme values that significantly deviate from the mean.

The table showed that the probability value of return on equity $0.000000 < 0.05$ which indicates that it is abnormally distributed, advertising cost $0.000007 < 0.05$ which indicates that it is abnormally distributed, audit fee $0.000019 < 0.05$ which indicates that it is abnormally distributed and interest expenses $0.000000 < 0.05$ which indicates that it is abnormally distributed. Therefore, *the Jarque-Bera test and its Probability* (Prob.) values assess whether the data is normally distributed. All variables have very low probability values ($p < 0.05$), ROE (0.000000), Advertising Cost (0.000007), Audit Fee (0.000019), and Interest Expenses (0.000000). These results strongly reject the null hypothesis of normality, indicating that the distributions of all four variables are not normally distributed.

The mean of Return on Equity (ROE) is 0.1063, indicating that, on average, firms generate about 10.63% profit on shareholders' equity. The mean Advertising Cost is ₦435,550.80, suggesting that firms spend, on average, this amount on advertising-related activities. The mean Audit Fee of ₦15,334.67 shows the average amount paid for auditing services across the firms. Lastly, the mean Interest Expenses of ₦587,682.90 reflect the typical cost incurred by firms in servicing their debts. These mean values represent overall average behavior.

In contrast, *the median values* offer insight into the midpoint of the data distribution, providing a more reliable measure of central tendency when data are skewed. The median ROE is 0.1225, which means that half of the firms have a return on equity greater than 12.25%, and the other half have lower returns. The median Advertising Cost is ₦227,746.50, significantly lower than the mean, suggesting that most firms spend less on advertising and a few high spenders inflate the mean. Similarly, the median Audit Fee of ₦11,500.00 and median Interest Expenses of ₦211,874.00 are also lower than their respective means, indicating that the majority of firms incur relatively modest

costs in these areas. These median figures suggest that the data for advertising, audit, and interest expenses are positively skewed due to a few firms with exceptionally high values.

Table 4.2: Panel Least Squares (PLSs) Regression

Dependent Variable: ROE

Sample: 2015 2024

Periods included: 10

Cross-sections included: 4

Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ADVERT COST	-4.098708	9.807608	-0.417840	0.6785
AUDIT FEE	2.899806	5.679806	0.509915	0.6132
INT. EXPENSES	-2.317709	3.908708	-0.059236	0.9531
C	0.081135	0.078419	1.034626	0.3077
Root MSE	0.226568	R-squared	0.607576	
Mean dependent var	0.106268	Adjusted R-squared	0.575126	
S.D. dependent var	0.230328	S.E. of regression	0.238824	
Akaike info				
criterion	0.068456	Sum squared resid	2.053322	
Schwarz criterion	0.237344	Log likelihood	2.630872	
Hannan-Quinn criter.	0.129521	F-statistic	0.091601	
Durbin-Watson stat	0.462167	Prob(F-statistic)	0.964200	

Source: Author's Computation from Eviews 10.0, 2025

Table 4.2 indicated that a unit change in advertising cost and interest expenses will decrease return on equity by -4.098708, and -2.317709 respectively. However, a unit change in audit fee increase return on equity by 2.899806. That is, return on equity is influenced negative by advertising cost and interest expenses while positively by audit fee in varied proportions. The *Durbin-Watson statistic of 0.4622* indicates the presence of *strong positive autocorrelation* in the residuals of the regression model. The statistic ranges from 0 to 4, with a value around 2 suggesting no autocorrelation, values below 2 indicating positive autocorrelation, and values above 2 indicating negative autocorrelation. Since 0.4622 is significantly less than 2, it implies that the residuals are highly correlated with each

other over time, violating one of the key assumptions of ordinary least squares (OLS) regression. *The Adjusted R-squared* is 0.575126. The adjusted R^2 reveals that about 58% of the variations in return on equity could be explained by advertising cost, audit fee and interest expenses while about 42% could be explained by other factors capable of influencing return on equity which were not considered in this study. The F-statistic, a measure of the combined influence of all explanatory variables, is 0.092 and the corresponding p-value = 0.964. That is, the overall effect of the explanatory variables on the regressand is very weak statistically and not significant.

5. CONCLUSION

This study examined the effect of corporate charges, specifically advertising cost, audit fee, and interest expenses on the profitability of pharmaceutical firms in Nigeria, using Return on Equity (ROE) as the profitability measure. The findings revealed that advertising cost and interest expenses both had negative and non-significant effects on ROE, while audit fee had a positive but also non-significant effect. These results suggest that none of the selected corporate charges showed a statistically significant influence on profitability, implying that such expenditures, within the observed period, did not directly enhance or reduce the financial performance of the firms in a meaningful way. In light of these findings, the study concludes that corporate charges, although necessary for operational and governance purposes, do not necessarily guarantee improved profitability for pharmaceutical firms in Nigeria. This underscores the importance for firm managers and stakeholders to carefully evaluate the cost-benefit implications of these charges and focus on other strategic areas such as innovation, product development, and market expansion to improve shareholder value. The study also highlights the need for further research, possibly incorporating a broader set of financial variables and a longer time frame, to deepen understanding of the financial dynamics within Nigeria's pharmaceutical sector.

6. RECOMMENDATIONS

- i. Pharmaceutical firms in Nigeria should re-evaluate their advertising strategies and ensure that such expenditures are targeted, cost-effective, and aligned with measurable performance outcomes, rather than assuming they will automatically boost profitability.
- ii. Firms should continue to maintain appropriate audit practices for transparency and regulatory compliance, but without over-investing in audit expenditures with the expectation of financial returns.
- iii. Pharmaceutical firms should adopt prudent debt management practices, limit excessive borrowing, and explore more cost-efficient financing options to safeguard profitability and maintain financial stability.

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