ANUK COLLEGE OF PRIVATE SECTOR Accounting Journal

VOL. 2 NO. 4 DECEMBER, 2025

A Publication of College of Private Sector Accounting
ANAN University Kwall, Plateau State, Nigeria.

Published December, 2025.

Web Address: https://www.anukpsaj.com, Email: anukpsaj@gmail.com

Printed by:
MUSSAB Printers,
NB, 9 Muri road by gwari road, Kaduna State, Nigeria.
Phone contact: 07038776658,
Email: meetsuleiman009@gmail.com

Structure of Manuscript

Manuscripts must be typed on A size paper with 12 font size (Times New Roman), not more than 15 pages, double-spaced, and in English. The file name should include the corresponding author's name and a keyword from the title.

Sequence of Manuscript

I. Title page
II. Abstract (150-250 words)
III. Keywords (3-5)
IV. Introduction
V. Literature Review
VI. Methodology
VII. Results and Discussion
VIII. Conclusion and Recommendations
IX. References (APA 7th Edition)
X. Appendices (if necessary)
XI. Author Biographies (optional)

Plagiarism Policy

ANUK is committed to maintaining high standards through an indept peer-review process with sound ethical policies. Any infringements of professional ethical codes, such as plagiarism; including self-plagiarism, fraudulent use of data, are seriously frowned at by the journal with zero tolerance.

ANUK implements the Code of Conduct of the Committee on Publication Ethics (COPE), and uses the COPE Flowcharts for Resolving cases of suspected plagiarism or any publication misconduct.

In order to avoid plagiarism cases with the ANUK, the following guidelines must be strictly adhered to by authors:

Authors should ensure that they have written entirely original works, and if authors have used the work and/or words of others that this has been appropriately cited or quoted.

An author should not, in general, publish manuscripts describing essentially the same research in more than one journal or primary publication. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behavior and is unacceptable.

Proper acknowledgment of the work of others must always be adhered to. Authors should cite publications that have been influential in determining the nature of the reported work.

Editorial Team

Members Editorial Board

TABLE OF CONTENT

TABLE OF CONTENT

TABLE OF CONTENT

EFFECT OF SPECIFIC ATTRIBUTES ON SHAREHOLDERS' WEALTH OF LISTED MANUFACTURING COMPANIES IN NIGERIA

AYOBAMI AKOFE SAMOTU
ANAN University Kwall, Plateau State

MUSA ADEIZA FAROUK
ANAN University Kwall, Plateau State

ABSTRACT

This study investigates the effect of firm attributes on shareholders' wealth of listed manufacturing companies in Nigeria. The main objective was to determine how firm characteristics; profitability, leverage, liquidity, and audit fee affect shareholders' wealth. The research employed an ex post facto design, drawing on secondary data from audited annual reports and Nigerian Exchange Group (NGX) fact books covering the period 2013–2023. Drawing on panel data and applying robust Ordinary Least Squares (OLS) regression, the analysis revealed that leverage has a negative and statistically significant effect, suggesting that higher debt levels adversely influence the dependent variable. In contrast, audit factor and firm size exhibit positive and statistically significant relationships, implying that stronger audit-related attributes and larger organizational scale enhance the outcome variable. However, profitability and liquidity do not display statistically significant effects within the estimated model.These findings highlight that while firm attributes remain critical in shaping shareholder value, the role of investment decision as a moderator is not uniform but rather contingent on the specific attribute under consideration. Based on the findings, the study recommends that firms should adopt prudent leverage policies to mitigate the adverse effects of excessive debt financing. Emphasis should be placed on strengthening audit quality and governance mechanisms, given their positive contribution to the outcome variable. Additionally, managers may consider well-structured growth and scaling strategies, as firm size demonstrates a beneficial impact. These measures can enhance organizational stability, credibility, and overall performance. Policymakers and regulators may also encourage stronger audit frameworks and responsible financing practices to support corporate sustainability. The study contributes to knowledge by creatively expanding the empirical literature through sector-specific evidence, and innovatively suggesting that investment policies can both strengthen and weaken firm attribute–wealth relationships. The results further provide theoretical validation for agency theory, while underscoring the need for firm-level policy innovations in corporate governance.

Keywords: *Specific Attributes, Investment Decision, Shareholders Wealth, Audit fee and Liquidity*

1.1 Introduction

The maximization of shareholders' wealth has long been a critical objective for firms globally. Shareholders' wealth, representing the level of investment and returns on equity stakeholders' stakes in a firm, is foundational and critical to the existence of limited liability companies. The importance of maximizing shareholders' wealth has been extensively argued by scholars. Mustapha et al. (2023) posits that shareholder value is the primary goal of a company, even though other stakeholders have claims on it. This underscores the necessity of value-based management to support value creation concepts and address essential issues for business owners (Aina and Jacob, 2024). The emphasis on shareholder value aligns with the broader objective of enhancing firm performance and ensuring long-term sustainability, as firms that prioritize shareholder wealth tend to implement strategies that improve overall efficiency and competitiveness.

At a global level, the relationship between firm

attributes and shareholders' wealth has been the subject of extensive research. Firm attributes, which include profitability, liquidity, capital structure, and corporate governance, have been identified as key determinants of a firm's value and performance (Abubakar, et al., 2022). These attributes are often studied to understand their influence on the financial health and success of companies across different industries and regions. The role of investment decisions in moderating these relationships is also gaining attention, as strategic investments can enhance or mitigate the effects of these attributes on shareholders' wealth. This global perspective highlights the universal applicability of these attributes and the critical role they play in shaping the financial outcomes of firms (Akenroye et al., 2022; Mustapha et al., 2023).

Finally, investment decisions which involve the allocation of resources to different projects and assets, play a crucial role in determining a firm's growth and long-term success. These decisions can moderate the relationship between firm attributes and shareholders' wealth by either enhancing or diminishing the effects of these attributes (Serlindawati & Chairunisa, 2024). For instance, profitable investment opportunities can amplify the positive effect of profitability and liquidity on shareholder value. Conversely, poor investment choices can negate the benefits of good corporate governance and a well-structured capital mix. The strategic alignment of investment decisions with firm attributes is essential for optimizing shareholder value and achieving sustainable growth (Ranti & Agus 2022; Santosa, et al. 2020).

The Nigerian manufacturing sector serves as a pivotal force in the country's economic landscape, contributing significantly to industrial output, employment generation, and export potential. As a key driver of economic growth, Nigerian listed manufacturing companies face multifaceted challenges that effect their financial performance and overall sustainability. These challenges stem from diverse sources, including regulatory dynamics, market volatility, technological advancements, and global economic fluctuations. Despite its critical role, the sector grapples with optimizing firm attributes such as profitability, liquidity, capital structure, and corporate governance to enhance shareholders' wealth effectively (Serlindawati & Chairunisa, 2024). Within this context, the research gap becomes apparent in the lack of a comprehensive understanding of how these interrelated firm attributes collectively influence shareholders' wealth in Nigerian manufacturing firms. Previous research has often been limited by focusing on a single sector, such as banking or service sectors, and has failed to consider a broad range of firm attributes across various manufacturing sectors. For instance, Abubakar, Miko, & Abdullahi (2022) focus on deposit money banks, while Fali, Ibenre, & Mustapha (2019) emphasize Islamic banking. Additionally, the effect of economic policy uncertainty on investment and profitability has been explored in other contexts but not sufficiently in Nigeria (Faridatul & Agus, 2024; Luo & Zhang, 2020; Hundal, Sarbassova, & Staroshvetckii, 2020). The current study fills this empirical gap by encompassing a diverse range of firm attributes and examining their effect across various manufacturing sectors in Nigeria. Furthermore, by investigating the moderating effect of investment decisions, the study introduces a new dimension that has been underexplored, thus providing a more comprehensive empirical analysis.

Previous research has often been limited by focusing on a single sector, such as banking or service sectors, and has failed to consider a broad range of firm attributes across various manufacturing sectors. For instance, Abubakar, Miko, & Abdullahi (2022) focus on deposit money banks, while Fali, Ibenre, & Mustapha (2019) emphasize Islamic banking. Additionally, the effect of economic policy uncertainty on investment and profitability has been explored in other contexts but not sufficiently in Nigeria (Faridatul & Agus, 2024; Luo & Zhang, 2020; Hundal, Sarbassova, & Staroshvetckii, 2020). The current study fills this empirical gap by encompassing a diverse range of firm attributes and examining their effect across various manufacturing sectors in Nigeria. Furthermore, by investigating the moderating effect of investment decisions, the study introduces a new dimension that has been underexplored, thus providing a more comprehensive empirical analysis.

By addressing these gaps, the current study on the moderating effect of companies' investment decisions on the relationship between firm attributes and shareholders' wealth of Nigerian listed manufacturing companies will make significant contributions to the literature. It will provide a localized, comprehensive, and empirically robust analysis that is both theoretically insightful and practically relevant.

1.2 Objectives of the Study

The main objective of the study is to examine the moderating effect of investment decision on the relationship between specific attributes and shareholders' wealth of listed manufacturing companies in Nigeria. The Specific Objectives are to:

i. assess the effect of profitability on shareholders' wealth in Nigerian listed manufacturing companies;
ii. evaluate the effect of liquidity on shareholders' wealth in Nigerian listed manufacturing companies;
iii. determine the influence of leverage on shareholders' wealth in Nigerian listed

manufacturing companies;

iv. ascertain the effect of audit fee on shareholders' wealth in Nigerian listed manufacturing companies;

2.0 Literature Review and Hypotheses Development

2.1 Conceptual Review

This section serves to contextualize the study within broader academic discourse while laying the groundwork for examining specific variables and their interrelationships in subsequent analyses.

2.1.1 Shareholders' Wealth

Shareholders' wealth is defined as the present value of the expected future returns to the owners (shareholders) of the firm. This wealth is realized through management's ability to increase sales, earnings, and free cash flow, which in turn leads to an increase in dividends and capital gains for the shareholders (Adam, 2021). Essentially, shareholder value is the value delivered to the equity owners of a corporation, reflecting the firm's potential to generate future returns. These returns can come in the form of stock price appreciation or increased dividend payments, representing the tangible financial benefits to shareholders (Aina & Jacob, 2024).

The concept of shareholders' wealth hinges on the present value of expected future returns, which includes periodic dividend payments and proceeds from the sale of stock. This wealth is typically measured by the market value of the firm's common stock (Mustapha et al., 2023). The market value of a firm's stock serves as a primary indicator of shareholders' wealth, encapsulating investors' perceptions of the company's current performance and future prospects. A higher stock price generally signals a more valuable company, thereby enhancing shareholders' wealth.

2.1.2 Firm-Level Attributes

Firm-level attributes encompass critical aspects that define a company's financial health and operational efficiency. These attributes, including profitability, liquidity, capital structure, and corporate governance, are essential metrics used to evaluate a firm's performance and strategic resilience. Profitability measures the ability to generate earnings, liquidity ensures the ability to meet short-term obligations, capital structure influences risk and financial flexibility, and corporate governance ensures transparency and ethical conduct. In the current study, these attributes are examined within Nigerian listed manufacturing companies to explore their collective effect on shareholder wealth.

2.2 Empirical Studies Review

2.2.1 Profitability and Shareholders' Wealth

Serlindawati and Chairunisa (2024) provide valuable insights into the relationship between company profitability and firm value within the manufacturing sector of Indonesia's consumer goods industry. Their study, spanning from 2017 to 2021 and involving a sample of 18 companies out of 72. However, the study also reveals that liquidity does not significantly affect company value, pointing to specific empirical and domain gaps that warrant further exploration. Mudzakkir and Laila (2024) contribute significant insights into the relationship between profitability and firm value within Indonesia's coal mining sector, using indicators such as Return on Assets (ROA), Debt-to-Equity Ratio (DER), and Current Ratio (CR), and measuring firm value with Tobin's Q. Their findings underscore the positive effect of profitability and leverage on firm value, while liquidity's influence is deemed insignificant. Rafli et al. (2023) provide valuable insights into the effect of profitability on firm value within Indonesia's manufacturing sector, drawing from financial data spanning 2017 to 2021 from companies listed on the Indonesia Stock Exchange. Their study highlights significant positive effects of profitability and leverage on firm value, contrasting with liquidity's negative and insignificant influence. Despite these findings, several gaps emerge that necessitate careful consideration when applying their results to the Nigerian consumer goods sector. The study hypothesized based on the above review.

Ho_1: Profitability does not have a significant effect on shareholders' wealth of listed manufacturing companies in Nigeria.

2.2.2 Liquidity and Shareholders' Wealth

Serlindawati and Chairunisa (2024) contribute valuable insights into the relationship between liquidity and company value within the manufacturing sector of Indonesia's consumer goods industry. Their study, however, presents several gaps that warrant further investigation, particularly in the context of Nigerian consumer goods companies. Mudzakkir and Laila's (2024) study on liquidity ratios and company value in Indonesia's coal mining sector offers valuable insights into financial dynamics within a specific industry context. However, the research also highlights several gaps that could benefit from further exploration, particularly in relation to the consumer goods sector in Nigeria. An empirical gap identified in their study is the sector-specific focus on coal mining companies. While the findings provide detailed insights into liquidity's effect on company value within the coal mining sector, these results may not translate directly to the consumer goods industry in Nigeria. Rafli et al. (2023) contribute significant insights into the relationship between liquidity, profitability, leverage, and firm value within the manufacturing sector in Indonesia. However, their study also reveals several gaps that warrant further exploration, especially in the context of the Nigerian consumer goods sector. The study hypothesized

therefore:

Ho_2: Liquidity does not have a significant effect on shareholders' wealth of listed manufacturing companies in Nigeria.

2.2.3 Leverage and Shareholders' Wealth

Akintomide, Nwaobia, and Ogundajo (2021) contribute to understanding the relationship between financing decisions and shareholder wealth maximization within Nigerian non-financial firms. Their study, utilizing an ex post facto research design over a decade, highlighted significant effects of different financing options on market value added. Rafiuddin and Rafiqul's (2020) study provides valuable insights into the relationship between capital structure, leverage, and firm performance within the service sector firms listed on the Australian Stock Exchange (ASX). By employing a panel regression approach over an eleven-year period, the study explores various firm-level characteristics and their effects on key performance metrics such as return on assets, return on equity, operating margin ratio, and return on capital employed. Ezejiofor, Nwakoby, and Okoye's (2019) study provides insights into the financial dynamics of publicly traded food and beverage companies in Nigeria, focusing specifically on the effect of debt-to-equity ratio on earnings per share (EPS) and return on equity (ROE). Using an ex post facto research design over a decade from 2009 to 2018, they employed both descriptive statistics and inferential regression analysis to investigate these relationships. While their findings contribute significantly to understanding capital structure decisions within the Nigerian food and beverage sector, several gaps in the literature remain to be addressed, particularly concerning broader implications for manufacturing companies in Nigeria. Based on the review above, the study hypothesized that:

Ho_3: Leverage does not significantly influence shareholders' wealth of listed manufacturing companies in Nigeria.

2.2.4 Audit Fee and Shareholders' Wealth

In exploring the determinants of audit fees within the Sub-Saharan African context, Munisi (2023) presents a significant contribution to the literature by examining how various ownership structures influence audit pricing in non-financial firms. The study utilizes an unbalanced panel dataset of 531 firm-year observations across eleven Sub-Saharan African countries, including Nigeria, over the period 2005 to 2009. By focusing on internal governance mechanisms—specifically managerial, concentrated, government, and foreign ownership—the study provides insights into how ownership characteristics affect audit fee levels, particularly in weak institutional environments. While the research adopts a panel regression technique, it relies heavily on pooled OLS estimation rather than more refined panel data estimators that account for firm-level heterogeneity or potential endogeneity concerns. Emovon and Ogbonmwan (2024) examined the effect of Audit Firm Characteristics on Audit Quality of Quoted Deposit Money Banks in Nigeria, primarily aimed to examine how various characteristics of audit firms—specifically audit firm size, audit fee, and auditor independence—affect audit quality among listed deposit money banks in Nigeria. To achieve this objective, the authors employed a panel regression technique using the Feasible Generalized Least Squares (FGLS) method, analyzing data from 13 deposit money banks over a 10-year period spanning 2013 to 2022. The study found that audit firm size and audit fee exerted a positive and significant effect on audit quality, whereas auditor independence had no significant impact. The study hypothesized based on the review that:

Ho_4: Audit Fee does not significantly affect shareholders' wealth in listed manufacturing companies in Nigeria.

2.3 Theoretical Framework

This study is anchored on a multi-theoretical framework that provides a comprehensive foundation for understanding the relationship between audit fees and shareholders' wealth in listed manufacturing companies in Nigeria. The selection of theories is guided by the complexity of corporate decision-making and the multifaceted roles that audit, governance, capital structure, and stakeholder interests play in influencing firm value. Specifically, the framework draws on agency theory. The theory offers a unique lens through which the variables of the study such as audit fees, profitability, liquidity, leverage, and investment decisions are interpreted. Therefore, this theoretical underpinnings help to explain the mechanisms through which internal financial and governance-related actions impact shareholder wealth, particularly within the dynamic context of Nigeria's manufacturing sector over the 2013–2023 period.

Agency theory, originally developed by Jensen and Meckling (1976), addresses the principal-agent problem that arises when there is a separation between ownership and control in a firm. Shareholders (principals) entrust managers (agents) with the responsibility of making decisions on their behalf. However, agents may pursue personal interests that diverge from the goals of shareholders, leading to agency costs. These costs can include suboptimal investment decisions, overconsumption of perks, and poor financial management. One of the key mechanisms for reducing these conflicts is monitoring, for which audit fees serve as a proxy. In

theory, higher audit expenditures suggest better oversight and a reduction in information asymmetry between managers and shareholders.

This study examined audit fees as one of the variables and found no significant statistical relationship with shareholders' wealth. However, within the agency theory framework, this could be interpreted as an indication that investors might not view audit expenses alone as a strong governance signal unless complemented by other transparency measures. Furthermore, the study introduced investment decision as a moderating variable, revealing its capacity to enhance or diminish the effects of other firm attributes. From the agency perspective, this reinforces the importance of managerial accountability in capital allocation. If investment decisions are made with shareholder value in mind rather than for personal or prestige-seeking motives agency conflicts are minimized, and firm valuation is enhanced.

3.0 Methodology

The research design adopted for this study is primarily an ex post facto research design, which is well-suited for investigating the moderating role of investment decisions on the relationship between firm attributes and shareholders' wealth in listed manufacturing companies in Nigeria. The population for this study comprises all 57 listed manufacturing companies in Nigeria. These companies are publicly traded on the Nigerian Exchange (NGX) and represent a diverse range of sectors within the manufacturing industry, including but not limited to food and beverage, textiles, chemicals, and automotive. Given the comprehensive nature of the population, a purposive sampling technique is employed to select a representative sample of manufacturing companies for the study. The sample consist of manufacturing companies listed on the Nigerian Exchange that meet the following criteria:

i. Manufacturing companies that have been listed on the Nigerian Exchange for a minimum of 11 years to 2023. This is to ensure the availability of sufficient financial data for analysis.
ii. Manufacturing companies that have published annual financial reports for more than 11 years to 2023, including income statements, balance sheets, and cash flow statements.

However, after applying specific criteria, the sample was refined. 13 manufacturing companies were listed within the last 10 years and were excluded from the sample due to the requirement for a minimum of 7 years of financial data for analysis. Additionally, 4 listed manufacturing companies had less than 11 years of financial reports available in the online and were excluded from the sample. As a result of the sample selection process, the final sample size consisted of 44 manufacturing companies. This represents approximately 77% of the total listed manufacturing companies on the NGX. The selected sample is deemed representative of the manufacturing sector in Nigeria.

The methods of data collection for this study are designed to gather comprehensive and reliable information from secondary sources, focusing on financial and operational data crucial to examining the moderating effect of investment decisions on firm attributes and shareholders' wealth in Nigerian listed manufacturing companies. The main sources of data include annual reports and financial statements of the selected companies. The data analysis for this study involves employing advanced quantitative techniques. To ensure the reliability and validity of the findings, several diagnostic procedures are adopted throughout the data analysis process. Multicollinearity testing is crucial to identify and address issues where independent variables are highly correlated, potentially distorting regression coefficients. Heteroscedasticity testing is another critical aspect of the analysis, aimed at assessing whether the assumption of equal variance in regression errors (homoscedasticity) holds true.

3.2 Model Specification

The study examines how investment decisions moderate the relationship between firm attributes and shareholders' wealth within Nigerian listed manufacturing companies. The model is specified as follows:

Model 1:

$$SHWEALTH_{it} = \beta_0 + \beta_1 PROFAT_{it} + \beta_2 LIQAT_{it} + \beta_3 LEVAT_{it} + \beta_4 AUDFAT_{it} + \beta_5 FSIZE_{it} + \varepsilon_{it} \quad \ldots\ldots(1)$$

Model 2:

$$SHWEALTH_{it} = \beta_0 + \beta_1 PROFAT_{it} + \beta_2 LIQAT_{it} + \beta_3 LEVAT_{it} + \beta_4 AUDFAT_{it} + \beta_5 INVDEC_{it} + \beta_6 FSIZE_{it} + \varepsilon_{it}$$

Model 3:

$$SHWEALTH_{it} = \beta_0 + \beta_1 PROFAT_{it} + \beta_2 LIQAT_{it} + \beta_3 LEVAT_{it} + \beta_4 AUDFAT_{it} + \beta_5 (INVDEC \times PROFAT)_{it} + \beta_6 INVDEC_{it}\ \beta_7 (INVDEC \times LIQAT)_{it} + \beta_8 (INVDEC \times LEVAT)_{it} + \beta_9 (INVDEC \times AUDFAT)_{it} + \beta_{10} FSIZE_{it} + \varepsilon_{it}$$

Where: SHWEALTH represents Shareholders' Wealth, PROFAT represents the Profitability Attribute, LIQAT represents the Liquidity Attribute, LEVAT represents the Leverage attribute.

AUDFAT represents the Audit fee attributes, INVDEC represents Investment Decision, FSIZE represents Firm Size, ε captures unobserved factors affecting shareholders' wealth, i represent the firms/companies, t represent the time/period of study

Table 1 Variable Definition and Measurements

Variable	Code	Measurement	Source
Dependent			
Shareholders' Wealth	**SHWEALTH**	Natural Logarithm of Market Capitalization (Share Price *No. of Shares)	Aina and Jacob, (2024)
Independent			
Profitability	**PROFAT**	Profit after Tax divided by total assets	Adenle et al. (2023)
Liquidity	**LIQAT**	Net Current Assets (Current Assets – Inventory divided by current liabilities)	Aina and Jacob, (2024)
Leverage	**LEVAT**	Long-term liabilities divided by Total Assets	Kok et al. (2023)
Audit Fee	**AUDFAT**	Natural logarithm of Audit Remuneration	Mustapha et al. (2023)
Control			
Firm Size	**FSIZE**	Natural logarithm of total Assets	Leni, et al. (2021)

Source: Author's compilation, 2024

4.1 Results and Discussion

This section provides the preliminary analysis of the dataset through descriptive statistics and correlation analysis. The descriptive statistics summarize the characteristics of the variables used in the study, including the dependent variable, shareholders' wealth, which is now proxied by market capitalization as well as the independent variables: profitability, liquidity, leverage, audit fee, and firm size. The statistical summaries include measures of central tendency (mean), dispersion (standard deviation), and range (minimum and maximum values), offering insight into the general behaviour and variability of each variable.

Furthermore, the correlation analysis is conducted to examine the linear associations among the variables using Pearson correlation coefficients. This analysis not only indicates the direction and strength of relationships among the variables but also helps to detect potential multicollinearity, which is essential for the validity of subsequent regression results. Tables 4.1 and 4.2 present the outcomes of the descriptive and correlation analyses, respectively.

Table 2: Descriptive Statistics

Variables	Min	Max	Mean	Std. Dev.	Swilk	Sktest
SHWEALTH	6.37	22.2	15.8	2.515	0.00000	0.0104
PROFAT	-6.29	6.17	0.017	0.485	0.00000	0.0000
LIQAT	0.12	65.3	5.95	31.77	0.00000	0.0000
LEVAT	0.04	8.97	0.08	0.425	0.00000	0.0000
AUDFAT	5.99	13.45	9.51	1.486	0.00056	0.5729
INVDEC	0	1	0.17	0.384	0.00004	0.0000
FSIZE	10.29	21.68	16.34	2.258	0.00112	0.0166

Source: Descriptive Statistic Results Using STATA 13

The analysis of shareholders' wealth reveals a minimum value of 6.37 and a maximum of 22.20, with a mean of 15.8. This suggests that, on average, Nigerian listed manufacturing firms provide their shareholders with moderate levels of wealth, though there are wide disparities among firms. The standard deviation of 2.515 indicates some variability across companies, implying that while some firms consistently generate high wealth for their shareholders, others struggle. Practically, this reflects the uneven performance of the Nigerian manufacturing sector, where only a few firms are able to deliver sustained returns in terms of share price growth and dividends.

Profitability ranges from a minimum of -6.29 to a maximum of 6.17, with an overall mean of 0.017. This

value, being close to zero, indicates that most firms operate around the breakeven point, with some experiencing significant losses and others generating moderate profits. The relatively small standard deviation of 0.485 shows that profitability across the sample does not deviate widely. In practice, this portrays the Nigerian manufacturing sector as operating under tight margins, reflecting structural challenges such as high production costs, infrastructural deficits, and stiff competition. Weak profitability undermines the ability of firms to consistently enhance shareholder wealth.

Liquidity exhibits a striking range, from a minimum of 0.12 to a maximum of 65.3, with a mean of 5.95. The wide variation is further highlighted by a very large standard deviation of 31.77, suggesting extreme differences in how firms manage their short-term financial obligations. While some firms hold very high liquidity buffers, others maintain minimal liquidity. From a practical standpoint, this indicates inefficiencies in working capital management. Firms with excessively high liquidity may be missing out on investment opportunities, while those with little liquidity risk defaulting on obligations. Both extremes can ultimately affect shareholder wealth creation.

The leverage ratio ranges between 0.04 and 8.97, with a mean of 0.08. This implies that, on average, listed manufacturing firms in Nigeria rely very little on debt financing. The low standard deviation of 0.425 shows that the majority of firms adopt a conservative approach to leverage. In practice, this reflects the high cost of borrowing in Nigeria as well as firms' preference for equity financing. While low leverage minimizes the risk of financial distress, it also limits the tax shield advantages of debt that could otherwise enhance shareholder value.Audit fees range from 5.99 to 13.45, with an average of 9.51 and a standard deviation of 1.486. This indicates that most firms incur moderate audit costs, with some variation depending on firm size and complexity. In practice, audit fees are often associated with governance quality, as firms that invest in higher-quality audits may be signaling stronger corporate governance and transparency to investors. Such practices can foster investor confidence and positively affect shareholder wealth. However, excessively high audit fees without corresponding improvements in governance efficiency may place unnecessary pressure on firm resources.

Investment decision, which is captured as a binary variable, ranges between 0 and 1, with a mean of 0.17. This shows that only about 17% of the firms, on average, made positive investment decisions during the period under review. The standard deviation of 0.384 indicates little variation, suggesting that most firms are conservative in making new investments. In practical terms, this underlines the cautious stance of Nigerian manufacturing firms in expanding operations or embarking on new projects. Such conservatism may be due to economic uncertainty, poor infrastructure, and limited access to capital. While risk aversion protects firms from potential losses, it also restricts opportunities to enhance shareholder wealth through profitable investment ventures.

Firm size ranges from 10.29 to 21.68, with a mean of 16.34 and a standard deviation of 2.258. This shows that the sample consists of both small and large manufacturing firms, with most firms clustering around medium to large sizes. Larger firms are expected to enjoy economies of scale, stronger market presence, and greater investor confidence, which can translate into higher shareholder wealth. Conversely, smaller firms may face constraints in accessing resources and capital, limiting their ability to create value for shareholders.

The Shapiro–Wilk and Skewness/Kurtosis tests generally indicate non-normality across most variables, as shown by the p-values close to zero. This implies that the data are not normally distributed, which is common in financial datasets due to extreme values and outliers. From a methodological perspective, this suggests the need to adopt robust regression techniques or transformations to obtain valid and reliable results.

Table 3: Correlation Matrix

	SHWEALTH	PROFAT	LIQAT	LEVAT	AUDFAT	INVDEC	FSIZE
SHWEALTH	1						
PROFAT	.1438*	1					
LIQAT	-.0191	-.0537	1				
LEVAT	-.1655*	.2439*	-.0079*	1			
AUDFAT	.7567*	.1040*	.0275	-.0089	1		
INVDEC	.2280*	-.1721*	.1062*	.1129*	-.1275*	1	
FSIZE	.8266*	.1354*	-.0270	.0270	.8554*	-.2029*	1

Source: Correlation Matrix Results Using STATA 13

*. Correlation is significant at 0.01 or 0.05 level (2-tailed).

The correlation results show that shareholders' wealth is positively and significantly associated with profitability (r = 0.1438), audit fee (r = 0.7567), investment decision (r = 0.2280), and firm size (r = 0.8266). This indicates that firms with higher profitability, larger size, and stronger governance through audit quality, as well as those that make sound investment decisions, tend to create more wealth for shareholders. Conversely, leverage is negatively correlated with shareholder wealth (r = -0.1655), suggesting that excessive reliance on debt reduces wealth creation. Liquidity, however, shows a very weak and insignificant negative correlation (r = -0.0191), implying that holding liquid assets alone does not guarantee higher shareholder value.

Profitability is positively correlated with leverage (r = 0.2439), firm size (r = 0.1354), and audit fee (r = 0.1040), indicating that profitable firms are more likely to access debt financing, operate on a larger scale, and spend moderately on audit services. On the other hand, profitability is negatively correlated with investment decision (r = -0.1721), suggesting that despite being profitable, many Nigerian firms are reluctant to channel earnings into new investments. Liquidity also shows a weak negative correlation with profitability (r = -0.0537), highlighting inefficiencies in converting liquid resources into earnings.

Liquidity exhibits weak and mostly insignificant relationships with other variables. It is slightly positively associated with investment decision (r = 0.1062), suggesting that more liquid firms are somewhat more inclined to invest, though the effect is modest. Its correlation with shareholder wealth (r = -0.0191), profitability (r = -0.0537), leverage (r = -0.0079), and firm size (r = -0.0270) is either negative or negligible, indicating that liquidity does not play a dominant role in driving shareholder wealth among listed manufacturing firms.

Leverage is positively correlated with profitability (r = 0.2439) and investment decision (r = 0.1129), which implies that more profitable firms are able to attract debt financing and are more inclined to invest. However, leverage shows a significant negative correlation with shareholder wealth (r = -0.1655), indicating that excessive debt burdens reduce returns to shareholders. Its relationship with other variables, such as audit fee (r = -0.0089) and liquidity (r = -0.0079), is very weak, suggesting minimal direct impact.

Audit fee is strongly and positively correlated with shareholder wealth (r = 0.7567) and firm size (r = 0.8554), showing that larger firms with stronger governance structures tend to pay higher audit fees and, in turn, generate greater wealth for shareholders. Audit fee is also positively related to profitability (r = 0.1040), implying that profitable firms invest slightly more in audit quality. However, it is weakly and negatively related to investment decision (r = -0.1275), which may suggest that firms prioritizing audit expenditure tend to be conservative in their investment choices.

Investment decision is positively correlated with shareholder wealth (r = 0.2280), liquidity (r = 0.1062), and leverage (r = 0.1129), suggesting that firms making investment commitments are generally more capable of generating wealth, better positioned in terms of liquidity, and able to attract debt financing. However, its negative correlations with profitability (r = -0.1721), audit fee (r = -0.1275), and firm size (r = -0.2029) indicate that even profitable and larger firms are not always aggressive in making new investments, possibly reflecting a cautious approach in Nigeria's challenging business environment.

Firm size shows a very strong positive correlation with shareholder wealth (r = 0.8266) and audit fee (r = 0.8554), confirming that larger firms with greater resources and higher governance spending tend to create more value for shareholders. It is also positively correlated with profitability (r = 0.1354) and leverage (r = 0.0270), though the relationships are weak. Interestingly, firm size is negatively associated with investment decision (r = -0.2029), implying that larger firms may prefer stability and consolidation over aggressive investment expansion.

4.2 Robustness Tests

This section presents the result from robustness tests conducted. The robustness tests included multicolinearity test, heteroscedascticity test and normality test of error term.

i. Multicolinearity Test: This was conducted to check whether there was a correlation between the independent variables of the study. The variance inflation factor (VIF) and tolerance test conduct was used to test for multicolinearity in all the three regressions. The variance inflation factor and tolerance estimated were found to be consistently smaller than ten and one respectively for all the three regressions (unmoderated, low levered and high levered) (See Appendix B). To further substantiate this claim, the mean VIF of 1.21 and 1.22 which is smaller than ten (10) for all the regressions indicate that multicolinearity was not a problem (Tobachnick & Fidell, 1996).

ii. Heteroscedasticity Test: From the result obtained from the heteroscedasticity tests conducted for all the regressions indicate that their chi-square

values of (3.84, 2.54, 0.17) respectively were small since the P values were more than 5%, The P-value were of (0.0501, 0.1108 and 0.6776) respectively were all higher than 5% except the first regression indicating heteroskedasticity was present in the first model and absent in the last two models of the study. This therefore, makes it possible for the interpretation of ordinary least square (OLS) because of the non-violation of one of the classical assumptions of OLS for model II and III. However, for model one, steps were taken to correct it by estimating a robust standard error, conducting a normality of the error term and subsequently Generalised Least Square Regression Model and the hausman specification tests suggested Robust OLS for interpretation.

iii. Normality of the error term (Kernel Density): Normality of the error term were conducted using the kernel density estimate. It was found that most of the residual of the error term showed that they were tolerably mild and as such a high level of normality of the error term were attained. For the model I, II and II, the kernel density estimate for skewed to the left, though still showing some level of normality of the error term. In Model II for both unmoderated and model, the kernel density estimate shows that the unmoderated model is normally distributed which is neither skewed to the right or left, but for the moderated model, it was shown that the error term is normally distributed except that it is slightly skewed to the right. For the model III, the normality for error term was skewed to the right in the moderated model. Therefore, the kernel density estimate for normality of error term looks tolerably mild as it shows normality of the error term even though both were skewed to the right. (See Appendix C).

4.3 Summary of Regression Results

This section discusses the first model of the study where the Firm attributes variables (Shareholders' Wealth, Profitability, Liquidity, Leverage, Audit fee, Bank size and Investment Decision as moderator) were examined against Shareholders' Wealth of listed Deposit Money Banks in Nigeria. It also discusses the strength and significant of relationship between the independent variables.

Table 3: Summary of Robust OLS Regression (Modell I)

Variables	Coeffi	Z-Stat	Prob
Constant	0.881	1.45	0.147
profat	0.013	-0.03	0.973
liqat	-0.001	-0.56	0.575
levat	-0.782	-6.25	0.000
audfat	0.261	2.63	0.009
fsize	0.769	9.70	0.000
R^2			0.7100
F-Statistics			338.98
Prob.			0.0000

Source: Result output from STATA 13

The R^2 value of 0.7100 indicates that about 71% of the variations in shareholder wealth are explained by the independent variables (profitability, liquidity, leverage, audit fee, and firm size). This demonstrates a strong explanatory power of the model. The F-Statistic value of 338.98 with Probability value of 0.0000 shows that it is highly significant, confirming that the model is overall statistically valid and that the independent variables jointly explain shareholder wealth.

The coefficient of profitability is positive ($\beta = 0.013$), but its effect is statistically insignificant ($p = 0.973$). This result suggests that, contrary to expectations, profitability does not significantly drive shareholder wealth among listed firms in Nigeria. A possible reason could be that profits are not always translated into shareholder returns, as firms may reinvest them internally or use them to cover inefficiencies. This aligns with studies in emerging markets where weak dividend policies dilute the impact of profitability on shareholder value. Traditional value creation theories (residual income, dividend valuation) predict a positive relationship between profit and shareholder wealth because earnings drive dividends and expected cash flows. Agent-principal theory also suggests profits should increase shareholder value if managers distribute or invest prudently. In many emerging-market studies the profit and share value link is often weaker than expected. Firms may report profits that are retained, invested inefficiently, or used to smooth earnings, reducing their signalling value. In practice, weak dividend policies, earnings quality issues, and earnings management can decouple reported profitability from market valuation, especially in contexts with low investor confidence and weak capital markets. The insignificance suggests managers cannot rely solely on reported profitability to create immediate shareholder wealth. Policymakers and regulators should emphasize transparent profit reporting and credible dividend/payout policies.

Liquidity shows a negative coefficient (β = -0.001), but the relationship is not statistically significant (p = 0.575). This indicates that liquidity does not directly influence shareholder wealth. Practically, while firms may hold liquid assets for operational needs, excess liquidity that is not deployed into profitable investments may fail to enhance value creation for shareholders. This aligns with the notion that "cash hoarding" in uncertain markets, such as Nigeria's, may signal inefficiency rather than strength. Liquidity can have ambiguous effects. Working-capital theory suggests adequate liquidity supports operations and reduces distress risk (positive effect), whereas agency/asset-inefficiency views imply excess liquidity is value-destroying (negative effect). Empirical results vary by setting; in some markets, liquidity positively predicts firm value; in others, excess cash is linked to lower returns (cash hoarding). Firms should avoid excessive cash holdings that are idle. Corporate treasury policies should focus on optimal working capital and maintaining enough buffer for operations but actively deploying surplus into profitable investments or returning it to shareholders.

Leverage has a negative and highly significant coefficient (β = -0.782, p = 0.000). This means that as debt levels increase, shareholder wealth significantly decreases. In practice, excessive reliance on debt financing imposes high interest and repayment obligations, which reduce returns to shareholders. This finding supports agency cost theory, which argues that high leverage increases financial risk and conflicts between debt holders and shareholders, ultimately eroding shareholder wealth. Trade-off theory and pecking-order theory give competing predictions. Moderate leverage can increase value via tax shields; agency-cost theory warns excessive debt raises distress costs and agency conflicts, lowering value. In many emerging markets with high interest rates, volatile markets, and weak bankruptcy infrastructure, debt is riskier and less value-enhancing than in developed markets. Prior empirical work in similar contexts often reports negative or ambiguous leverage value relationships. Nigerian firms face high borrowing costs, currency and macro risks, so high leverage tends to erode shareholder returns. Managers should carefully calibrate debt levels; conservative capital structures may be optimal. Lenders and regulators should work to reduce financing frictions (e.g., through better credit markets, lower real interest rates, improved legal enforcement) so that debt can be used productively.

Audit fee shows a positive and statistically significant relationship with shareholder wealth (β = 0.261, p = 0.009). This implies that firms that spend more on quality audit services tend to enjoy improved shareholder wealth. In practice, higher audit fees may reflect stronger external monitoring, transparency, and credibility of financial reports, which boost investor confidence and enhance market valuation. This supports stakeholder theory, which emphasizes the importance of corporate governance mechanisms in creating long-term value. From agency theory and signaling theory, higher audit spending may indicate better external monitoring, higher audit quality, and stronger transparency which reduce information asymmetry and increase investor confidence and valuation. Many empirical studies find that audit quality or higher audit spend correlates with higher market valuation or lower cost of capital. In practice, larger and better-governed firms invest in higher-quality audits; investors reward such transparency. Firms should consider investing in audit quality as part of a broader governance strategy. Regulators and stock exchanges could encourage or require higher audit standards for listed firms.

Firm size has a strong positive and highly significant coefficient (β = 0.769, p = 0.000). This suggests that larger firms create more wealth for shareholders compared to smaller firms. Larger firms benefit from economies of scale, stronger market presence, and easier access to finance, which translate into higher shareholder returns. This finding aligns with resource-based theory, as larger firms possess more resources and capabilities that enhance competitive advantage and value creation. Resource-based and scale-economy theories predict that larger firms have more resources, market power, diversified operations, and better access to capital, all of which support higher valuation. This finding is common especially where larger firms often have higher market capitalization and may attract stronger investor confidence. In Nigeria, size may proxy for diversification, better governance, and capacity to navigate infrastructural and macro challenges. Size advantages matter for value creation; managers of growing firms should leverage scale benefits while maintaining governance. For investors, firm size may be a signal of stability in an otherwise risky environment.

Based on the regression output you provided, here is a clear and academically appropriate conclusion and recommendation section you can use or adapt for your study.

5.0 Conclusion and Recommendations

Based on the findings of the study, it is concluded that at the individual variable level, leverage (levat) exhibits a statistically significant and negative relationship with the dependent variable (β = –0.782, p < 0.01). This finding suggests that higher leverage levels are associated with a reduction in the outcome variable, implying that excessive reliance on debt financing may adversely affect firm performance (or the specific dependent variable used in your study).

Conversely, audit factor (audfat) shows a positive and statistically significant effect ($\beta = 0.261$, $p < 0.01$), indicating that improvements in audit-related measures contribute positively to the dependent variable. Similarly, firm size (fsize) has a strong positive and statistically significant influence ($\beta = 0.769$, $p < 0.01$), suggesting that larger firms tend to perform better (or achieve higher values of the dependent variable).

However, profitability (profat) and liquidity (liqat) are not statistically significant ($p > 0.05$), implying that within this model, they do not exert a meaningful influence on the dependent variable. Overall, the findings highlight leverage, audit factors, and firm size as key determinants within the model.

Based on the empirical findings, the following recommendations are proposed:

i. Since leverage has a significant negative effect, firms should exercise caution in their financing decisions. Management should aim to maintain an optimal capital structure and avoid excessive debt levels that may increase financial risk and negatively impact performance.

ii. Given the positive and significant role of audit factors, organizations should invest in high-quality auditing systems, internal controls, and compliance mechanisms. Strong audit practices can enhance transparency, credibility, and operational efficiency.

iii. The positive impact of firm size suggests that firms may benefit from expansion strategies, such as market development, mergers, or operational scaling, provided such growth is efficiently managed.

iv. Although profitability and liquidity were not significant in this model, firms should not disregard them. Future research may consider alternative measurements or longer time horizons to better capture their effects. Regulators and policymakers may encourage prudent leverage policies and stronger audit regulations to promote financial stability and corporate governance effectiveness.

REFERENCES

Abubakar, I., Miko, N.U. & Abdullahi, M. (2022). Firm attributes and financial performance of listed deposit money banks in Nigeria. *Gusau Journal of Accounting and Finance,* 3 (2), 1-16.

Aina, H. E. and Jacob, Z. (2024). Effect of Financial Policies on Shareholders' Wealth of Quoted Insurance Companies in Nigeria. *International Journal of Economics, Business and Management Research*, 8(5), 1-13.

Akenroye, C.T., Adegbei, F.F., Owolabi, S.A. (2022). Firm attributes and financial performance of quoted companies: Evidence from Nigeria. *Caleb International Journal of Development Studies*, 5 (1), 7-32

Akintomide, A., Nwaobia, A.N. & Ogundajo, G. O. (2021) Financing decision and shareholders' wealth maximization of Nigeria listed companies. *Business & Finance Journal*, 12(1),19-35

Denle O. E., Ajiboye O. O., Ojuade G. A., Sulaiman A. A., Adeoye L. A. and Ayeni, F. T. (2023). The Influence of Firm Attributes on Financial Performance of Listed Nigeria Consumer Goods Firms: A Moderating Effect of Leverage. *TSU-International Journal of Accounting and Finance (TSUIJAF)*. 2(2), 17-31.

Ezejiofor, R.A., Nwakoby, N.P. & Okoye, J.A. (2019). Financial leverage and shareholders' wealth: An empirical analysis of foods and beverages firms in Nigeria. *International Journal of Application or Innovation in Engineering & Management,* (IJAIEM), 8(12), 138-147

Fali, I. M., Ibenre, N.A., & Mustapha, L.O. (2019). Leverage and financial performance of Islamic banking in Nigeria. *The International Journal of Business & Management,* 7(7), 198–206.

Faridatul, M. and Agus, M. (2024). Investment Decisions' Impact on Corporate Value: Analyzing Profitability, Leverage, Company Size, and Age Moderation Effects. *International Journal of Social Science and Business,* 8(1),105-116

Hundal, S., Sarbassova, E. & Staroshvetckii, N. (2020). The impact of capital structure and board of directors' characteristics on investment decisions and performance of Nordic firms. In A. Kostyuk, M. J. C. Guedes, & D. Govorun (Eds.), Corporate Governance: Examining Key Challenges and Perspectives, 66-71. Sumy Ukraine; Virtus Press.

Kok, W.C., Lau, W.Y. & Yip. T.M. (2023). Nexus between financial leverage and board independence of public listed firms: Is there any stylized fact? *Journal of Indonesian Economy and Business,* 38 (1), 81-91.

Leni Y., Ikaputera, W., Maya S., and Nugraha N., (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value with Firm Size as Moderating Variable. *Advances in Economics, Business and Management Research,* 220, 88-92.

Luo, Y., & Zhang, C. (2020). Economic policy uncertainty and stock price crash risk. *Research in International Business and Finance*, 51, 101112. doi: 10.1016/j.ribaf.2019.101112

Mustapha, A.A., Suleiman S. and Tijjani, M.S. (2023). Firm Attributes and Shareholder's Wealth of Listed Deposit Money Banks in Nigeria. *Gusau Journal of Accounting and Finance (GUJAF),* 4(2), 47-66.

Rafiuddin, A. & Rafiqul, B. (2020). Capital structure and firm performance in Australian service sector firms: a panel data analysis. *Journal of Risk and Financial Management,* 13(214)1-16.

Rafli Irham A. S., and Imron R. (2023). The Effect of Profitability, Leverage, and Liquidity on Company Value. Assets: *Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak,* 7(2), 72–80. https://doi.org/10.30741/assets.v7i2.1071

Ranti D. and Agus S. (2022). The Effect of Profitability, Liquidity, And Leverage on Firm Value with Dividend Policy as Intervening Variable: (Case Study on Finance Sector in Indonesian Stock Exchange 2016-2020 Period). *International Journal of Economics, Business and Accounting Research,* 6(2), 863-876.

Santosa, P. W., Aprilia, O., & Tambunan, M. E. (2020). The intervening effect of the dividend policy on financial performance and firm value in large Indonesian firms. *International Journal of Financial Research,* 11(4), 408–420. https://doi.org/10.5430/ijfr.v11n4p408

Serlindawati and Chairunisa, (2024). The Effect of Dividend Policy, Liquidity and Profitability on Company Value. *Asian Journal of Economics, Business and Accounting,* 24(5), 469-475.

Setyabudi, T. (2021). The Effect of Institutional Ownership, Leverage, and Profitability on Firm Value with Dividend Policy as an Intervening Variable. *Journal of Business and Management Review,* 2(7), 457–469. https://doi.org/10.47153/jbmr27.1632021