ISSN: 3067-722X

Research Article

Journal of Economics and Business Management Reports

Mediating Effect of Audit Independence on Audit Committee Attributes and Market Value of Deposit Money Banks in Nigeria

Amity Agi Ijuwo*

Department of Accounting, Benue State University Makurdi Nigeria

***Corresponding author:**
Amity Agi Ijuwo, Department of Accounting, Benue State University Makurdi Nigeria.

ABSTRACT

This study investigates the mediating effect of audit independence on audit committee attributes and market value of Deposit Money Banks in Nigeria. The study adopted an ex post facto research design, covering 11 listed Deposit Money Banks (DMBs) in Nigeria. Secondary data were obtained from the Nigeria Exchange Group and Central Bank of Nigeria annual reports spanning 2014–2024. The dataset underwent rigorous diagnostic tests, including panel unit root tests (Im, Pesaran, and Shin; Levin, Lin, and Chu; ADF-Fisher Chi-Square), and goodness-of-fit indices (Comparative Fit Index, RMSEA), alongside tests for autocorrelation, multicollinearity, and heteroscedasticity to ensure model validity. Descriptive statistics confirmed data normality and suitability for panel estimation. Based on the stationarity of variables at levels, a pooled Structural Equation Model (SEM) was employed. Results revealed that audit committee size ($\beta = 1.89e+07$, $p < 0.01$) and independence ($\beta = 6.11e+07$, $p < 0.05$) significantly enhanced audit independence, which positively affected market value ($\beta = 0.020$, $p < 0.01$). Conversely, diversity ($\beta = -1.30e+06$, $p < 0.05$) had a negative effect, while meeting frequency and expertise were insignificant. The study concludes that the effectiveness of audit committees depends largely on their independence and optimal size, which enhance the credibility of financial reporting and investor confidence. It recommends strengthening regulatory oversight to ensure independent, competent, and adequately sized audit committees for improved corporate governance and firm valuation.

Keywords: EarthCARE Mission, Atmospheric Remote Sensing, Cloud–aerosol Interaction, Climate Monitoring.

Received: March 16, 2026;
Accepted: March 21, 2026;
Published: March 28, 2026

Introduction

The market value of financial institutions, particularly deposit money banks (DMBs), is an important indicator of their strength, signaling how well they manage resources, attract investments, and sustain profitability. Corporate governance structures, especially audit committees, significantly influence market value by enhancing transparency, accountability, and the accuracy of financial reporting. Attributes of audit committees, such as size, independence, expertise, and meeting frequency, are critical in ensuring robust oversight. Research across developed economies consistently shows that independent audit committees are essential for reducing agency problems, improving financial disclosures, and boosting investor confidence, which directly impacts market value [1].

In African countries like Nigeria, the banking sector faces unique challenges, including infrastructural deficits, low financial literacy, and regulatory issues. While the importance of audit committee independence is acknowledged, the implementation of effective governance structures remains difficult due to these challenges. Onmonya & Ebire argue that larger, more independent audit committees are more likely to ensure financial transparency and accountability, but these benefits are hindered by Africa's underdeveloped institutional frameworks and limited regulatory enforcement [2]. Thus, there is a need to better align audit committee attributes with market value, particularly through independent oversight.

In Nigeria, audit committees have gained recognition for their role in improving

Citation: Amity Agi Ijuwo (2026) Mediating Effect of Audit Independence on Audit Committee Attributes and Market Value of Deposit Money Banks in Nigeria. J Econo Bus Mang Rep 2: 1-11.

market value, especially as the banking sector adapts to global standards. The regulatory environment in Nigeria demands that audit committees ensure transparency and accountability to maintain investor trust. Independent audit committees, as noted by Adegbite, are particularly effective in detecting irregularities, preventing financial mismanagement, and increasing market confidence [3]. Research shows that Nigerian DMBs with independent audit committees are better positioned to oversee financial operations and improve disclosures, thus enhancing market value [4].

This research examines the mediating role of audit committee independence in influencing the relationship between audit committee attributes and market value. Unlike traditional studies that focus on moderating variables, this study explores how audit committee independence directly explains the impact of attributes like size, expertise, and diversity on market value. Specifically, the study will address objectives such as examining the effect of audit committee size, meeting frequency, diversity, expertise, and independence on the market value of Nigerian Deposit Money Banks (DMBs). Furthermore, it will assess the mediating role of audit committee independence, offering a more comprehensive view of how governance structures influence investor perceptions and market trust.

Literature Review

Concept of Audit Committee

The audit committee according to CAMA (2020), is a committee of shareholders and non-executive directors charged with the responsibility of liaising between the external auditors and the Board of directors on one hand, and between management and the external auditors on the other hand. Audit Committees are the most important in the corporate governance structure and are expected to contribute significantly in this respect [5]. Oroud opines that members of the committee should possess qualities such as integrity, dedication, and a thorough understanding of the business of the company [6]. Moreover, the composition of the Audit Committee (AC) and the manner in which they exercise their governance and oversight responsibilities have a major impact on the overall internal control mechanism of a company. Audit committee is considered vital to maintaining transparency in a firm. The members of audit committee are also part of the board of directors which is responsible for formulating strategies for improving the financial health of the firm.

Concept of Audit Committee Attributes

Audit committee attributes, including size, meeting frequency, gender diversity, expertise, and independence, significantly impact the effectiveness of corporate governance. Key characteristics such as committee size and diversity enhance expertise but may introduce coordination challenges [7]. Regular meetings improve financial oversight and reduce fraud risks (Beasley et al., 2023), while gender diversity, particularly female members, promotes higher ethical standards and improved financial reporting quality [8]. Expertise, especially financial knowledge, is crucial for oversight, particularly in contexts like Nigeria where it helps mitigate earnings management. Independence, both structural and cognitive, is essential for unbiased governance and effective financial oversight [9]. A balanced combination of these attributes is necessary for optimal audit committee performance and enhanced firm value.

Market Value

Market value is a key indicator of a company's worth in the open market, reflecting the price at which its assets or securities can be bought or sold. It is calculated by multiplying the current stock price by the total number of outstanding shares, giving the company's market capitalization. Unlike book value, market value considers profitability, intangible assets, and future growth potential, providing a more comprehensive measure of financial health [10]. A high market value indicates strong financial health, investor confidence, and growth potential, while a low market value may signal concerns about the company's performance. Tobin's Q, a widely recognized proxy for market value, measures the ratio of a firm's market value to the replacement cost of its assets, integrating both internal and external factors to gauge growth potential and investment efficiency. A high Q ratio suggests firms are more likely to invest and issue new shares, driving economic growth. Recently, Tobin's Q has been used to examine the impact of audit committee attributes on market value, with studies showing that well-structured committees enhance governance, transparency, and market performance, especially in emerging economies like Nigeria [11].

Theoretical Framework

Resource Dependency Theory

Resource Dependency Theory (RDT), proposed by Pfeffer and Salancik in 1978, emphasizes that organizations depend on external resources for survival, and these dependencies shape their behavior and decision-making [12]. To manage these dependencies, organizations form alliances, joint ventures, and other arrangements to reduce uncertainty and gain access to critical resources. In the context of audit committees, RDT highlights that attributes like committee size, meeting frequency, gender diversity, expertise, and independence are crucial for improving governance and enhancing firm value. Larger, diverse, and independent audit committees are better equipped to oversee financial reporting and manage risks, thereby strengthening governance, building trust with external stakeholders, and ensuring access to vital resources that contribute to the firm's success [12,13].

Signaling Theory

Signaling Theory, introduced by Spence in 1973, focuses on how organizations reduce information asymmetry by sending signals to convey information to external parties. In this framework, organizations, particularly through their management, provide signals about their quality or value to influence stakeholders' perceptions. The signals can be costly or non-costly, but they must be interpreted correctly by receivers, such as investors, to be effective. In the context of audit committees, attributes like size, expertise, and independence act as signals to the market about the strength of governance practices. A larger committee size signals a commitment to robust governance, while frequent meetings demonstrate active oversight, and diversity signals inclusivity. These positive signals enhance investor confidence and improve firm value by showcasing effective risk management and financial oversight [13,14]. Despite its utility, Signaling Theory

has faced criticism for oversimplifying interactions, focusing primarily on signals while ignoring other factors that influence decision-making, and for its limited applicability in dynamic or emerging industries [15]. Nevertheless, the theory provides valuable insights into how audit committee attributes serve as signals that influence market perception and firm performance.

Agency Theory

Agency Theory, introduced by Ross (1973) and Mitnick (1974), explores the relationship between principals (shareholders) and agents (managers) in organizations, where conflicts arise due to differing goals and interests. This theory highlights the agency problem, where managers may act in their own interests rather than in the best interests of shareholders, leading to agency costs. The solution to this problem involves implementing governance mechanisms like audit committees to align interests and reduce information asymmetry. Audit committee attributes such as size, meeting frequency, diversity, expertise, and independence play a crucial role in enhancing oversight, improving financial reporting, and safeguarding shareholder interests [16]. A larger, more diverse audit committee ensures better monitoring, while frequent meetings and independent decision-making help detect and correct managerial opportunism. The effectiveness of these attributes in reducing agency costs and enhancing firm value is supported by empirical research [13]. Agency Theory provides the central framework for this study, explaining how audit committees help mitigate principal-agent conflicts and improve governance to maximize firm value.

Empirical Review

Abu and Audu investigated the influence of audit committee size on firm value, using data from 13 industrial goods firms listed on the Nigerian Stock Exchange between 2013 and 2022 [17]. Their findings revealed that audit committee size had a positive but statistically insignificant effect on firm value, as measured by Tobin's Q. The study also highlighted that while audit committee independence showed a significant negative relationship with firm value, meeting frequency had a positive and significant impact. The authors recommended that future research expand sectoral coverage and incorporate qualitative factors like committee effectiveness to better understand the relationship between audit committee attributes and firm value.

Umar et al. investigated audit committee attributes and bank performance across 78 commercial banks in 12 African countries, using data from 2010 to 2020 [18]. Their study found that audit committee size had an insignificant positive relationship with bank performance, measured by return on equity and Tobin's Q. Audit committee independence showed a significant positive relationship with performance, while gender diversity had a negative impact. The study emphasized the importance of audit committee independence in enhancing bank performance and suggested that gender diversity may have adverse effects in certain contexts.

Ali and Amir investigated the relationship between audit committee structure and firm value in Pakistan's cement sector, analyzing data from 14 publicly listed companies over four years (2013–2016) [19]. Their study found a significant relationship between audit committee size and financial performance, with both size and financial expertise positively influencing firm value, as measured by Tobin's Q. The study emphasized the importance of having a well-structured audit committee, particularly one with financial expertise, to enhance firm performance, and recommended further research in different sectors to validate these findings.

Mieseigha and Adeyemi explored the impact of audit committee attributes on revenue growth in Nigerian banks, using data from 13 listed deposit money banks between 2010 and 2019 [20]. The study found that audit committee attributes, including size and financial expertise, had a statistically insignificant effect on revenue growth. Although the relationship between audit committee size and revenue growth was positive, the study concluded that these attributes alone may not directly influence revenue growth and suggested further research into other factors that could affect the growth of Nigerian banks.

Mili and Hashim studied the effect of board attributes on firm value, focusing on the moderating role of board meeting frequency in engineering companies listed on the Dhaka Stock Exchange in Bangladesh between 2016 and 2020 [21]. The study found that board meeting frequency alone had no significant direct effect on firm value. However, the interaction between board meeting frequency and board independence had a positive and significant impact on firm value. Conversely, the interaction between board size and meeting frequency negatively affected firm value. The study suggested that more frequent meetings with independent directors enhance firm value, but the combination of larger boards and frequent meetings may lead to inefficiencies.

Samara and Abu Nassar examined the impact of corporate governance and firm characteristics on firm value in Jordan, using data from 40 industrial public shareholding companies listed on the Amman Stock Exchange from 2009 to 2018 [22]. The study found that board independence had a negative impact on firm value, while other governance factors like audit committee meetings, board size, and CEO duality had no significant effect. However, the company's leverage was found to positively influence firm value. The study suggested that Jordanian firms should improve their corporate governance practices to enhance firm value.

Nuzula and Maryanti investigated the effect of gender diversity, audit committee, and institutional ownership structure on firm value in Indonesia, using secondary data from companies listed on the Indonesia Stock Exchange [23]. The study found that gender diversity had a positive and significant influence on firm value, while audit committee size and institutional ownership structure did not significantly impact it. The findings emphasized the role of gender diversity in enhancing firm value, while suggesting that other governance structures may have less influence in this context.

Jayanti, Probohudono, and Endiramurti studied the impact of gender diversity on firm value among manufacturing firms listed on the Indonesia Stock Exchange from 2015 to 2019 [24]. Their findings revealed that gender diversity on the board of commissioners had a statistically significant negative effect on firm value. When moderated by age, gender diversity further

weakened the relationship with firm value, suggesting that in patriarchal or family-run firms, gender diversity may not contribute meaningfully to firm value. The study calls for further exploration of other intangible variables that could impact firm value.

Almaqoushi and Powell explored the relationship between audit committee quality indices and firm value, using data from 12,301 firms in the United States between 2002 and 2012 [25]. The study found a significant positive relationship between high-quality audit committees and firm value, as measured by Tobin's Q. The research also found that firms with robust audit committees were more likely to experience favorable financial outcomes, while firms with low-quality audit committees were more prone to internal control issues and financial misreporting. The study underscores the importance of audit committee quality in enhancing financial performance and firm value.

Ugoh investigated the moderating effect of audit committee expertise on sustainability disclosure and firm value in Nigeria's non-financial companies, using data from 111 companies listed on the Nigerian Exchange Group between 2014 and 2023 [26]. The results revealed that audit committee financial expertise had a positive and significant moderating effect on the relationship between social, governance, and economic disclosures and firm value, while its effect on environmental disclosure was negative and insignificant. The study highlighted the importance of audit committee expertise in enhancing firm value but acknowledged the limitations of relying solely on secondary data and focusing solely on Nigeria.

Maghriby, Ramdani, and Muslim investigated the impact of audit committee characteristics on shareholder value creation in family-owned companies listed on the Indonesia Stock Exchange from 2018 to 2022 [27]. The study found that frequent audit committee meetings were positively correlated with improved financial performance, leading to enhanced shareholder value. The research suggested that more frequent meetings contribute to better governance and financial outcomes in family-owned firms. However, the study is limited by its focus on family firms and the Indonesian context, and calls for further research in other sectors and regions to generalize the findings.

Methodology

Research Design

An ex post facto research design is particularly suitable for the study of the effect of audit committee attributes on the firm value of listed deposit money banks (DMBs) in Nigeria. This design involves analyzing existing data to establish relationships between variables without manipulating any of them.

Population of the Study

The study will focus on the 13 listed deposit money banks in Nigeria as of December 31, 2023, all of which are listed on the Nigerian Stock Exchange (NSE). These banks, including major institutions like Access Bank, First Bank, and Guaranty Trust Bank, have evolved into holding companies (e.g., Access Holdings Plc., FBN Holdings Plc., and GTCO) to diversify operations. The study also includes pan-African banks like Ecobank Transnational Incorporated (ETI), reflecting the cross-border presence of some NSE-listed financial institutions.

Sample of the Study

Due to data unavailability, only 11 listed deposit money banks on the Nigerian Exchange Group (NGX) were purposively included in this study, as shown in Appendix II. Although the initial intention was to include all thirteen listed banks, limitations in data access necessitated the use of a smaller sample. Despite this, the selected 11 banks remain highly representative of the Nigerian banking sector, given their strategic importance and adherence to corporate governance regulations, including mandatory audit committee disclosures.

Sources of Data

The sources of data for this study are primarily the published annual reports and financial statements of the thirteen listed deposit money banks operating in Nigeria as of December 31, 2024. These reports, publicly available through the Nigerian Exchange Group (NGX) website, individual bank websites, and the Financial Reporting Council of Nigeria, will provide detailed information on audit committee attributes such as size, meeting frequency, diversity, expertise, and independence, as well as firm value indicators like Tobin's Q.

Method of Data Collection

The study adopts secondary method of data collection. This is because the estimation of the models in the study requires the use of cross sectional/time series data in the form of financial information which are available through the financial statements of the sample banks. In view of this, data used in the study is extracted from corporate financial statements and audited annual reports of the banks submitted to the NGX. The data covers a period of 11 years; 2014 -2024. The 2014–2024 period is crucial because it captures a full decade of major shifts in regulation, economic conditions, and corporate governance practices affecting Nigeria's deposit money banks.

Definition/Measurement of variables

The study defines several key variables for measuring firm value and audit committee attributes. Tobin's Q (TQ), a proxy for firm value, is calculated as the ratio of a firm's market value (equity plus liabilities) to the book value of its total assets, with a higher value indicating better market performance. Audit Committee Size (ACS) measures the number of directors on the audit committee, with larger sizes indicating broader expertise. Audit Committee Meeting Frequency (ACM) is the number of meetings held annually, reflecting the committee's monitoring effectiveness. Audit Committee Diversity (ACD) considers the variety in composition, typically gender, age, or ethnicity, with more diversity improving decision-making. Audit Committee Expertise (ACE) refers to the presence of members with accounting or financial qualifications. Audit Committee Independence (ACI) is the proportion of independent members on the committee. Bank Size (BNS) is measured by the natural logarithm of total assets, and Audit Independence is proxied by the natural logarithm of audit fees (AID).

Model Specification

Dependent Variable

TQ = Tobin's Q (Proxy of Market Value)

Independent Variable

ACS = Audit Committee Size;
ACM = Audit Committee Meeting Frequency
ACD = Audit Committee Diversity
ACE = Audit Committee Expertise
ACI = Audit Committee Independence

Control Variable

BS = Bank Size

Mediating Variable

AID = Audit Independence

Path Diagram

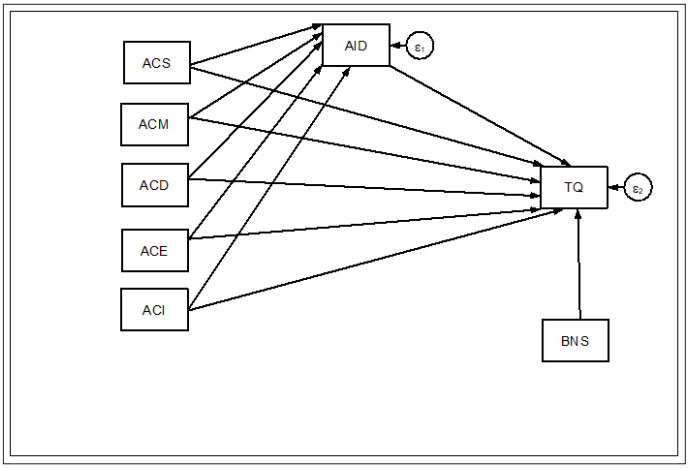

Figure 1: SEM Path Diagram

Implicit (functional) form
Let i be index of banks and t for panels.
Mediator
$AIDi = f_1 (CS_i, ACM_i, ACD_i, ACE_i, ACI_i, BS_i + \epsilon_{1i}$
Outcome (with mediator)
$TQi = f_2 (ACS_i, ACM_i, ACD_i, ACE_i, ACI_i, BS_i, AID) + \epsilon_{2i}$
(Total-effects benchmark without mediator)
$TQi = f_3 (ACS_i, ACM_i, ACD_i, ACE_i, ACI_i, BS_i + u_i$
Explicit (linear) form
Define X{1..5} = (ACS, ACM, ACD, ACE, ACI).
Mediator equation (a-paths)
$AID_i = \alpha_0 + \alpha_1 CS_i, + \alpha_2 ACM_i, + \alpha_3 ACD_i, \alpha_4 ACE_i, \alpha_5 ACI_i, + \alpha_6 BS_i + u_i$
Outcome equation with mediator (b and c′-paths)
$TQ_i = \beta_0 + \beta_1 ACS_i, + \beta_2 ACM_i, + \beta_3 ACD_i, \beta_4 ACE_i, \beta_5 ACI_i, + \beta_6 BS_i + b\ AID + e_i$
Total-effects outcome (c-paths, for comparison)
$TQ_i = \gamma_0 + \gamma_1 ACS_i, + \gamma_2 ACM_i, + \gamma_3 ACD_i, \gamma_4 ACE_i, \gamma_5 ACI_i, + \gamma_6 BS_i + v_i$

Panel Data Specification

$$AIDit = \alpha 0 \sum_{k=1}^{5} \alpha k Xkit + \alpha 6 BSit + \mu + \lambda + uit$$

$$AIDit = \beta 0 \sum_{k=1}^{5} \beta k Xkit + \beta 6 BSit + bAIDit + \mu i + \lambda + eit$$

Method of Data Analysis

The study employed descriptive statistics to highlight the key characteristics of the data used. Based on the result of the unit root test, pooled Structural Equation Modeling (SEM) was used to examine the relationships between the study variables. Pooled SEM allows for the assessment of both direct and indirect relationships among the variables, taking into account the dynamic nature of the data. SEM fit indices such as Root Mean Square Error of Approximation (RMSEA), Comparative fit index (CFI), and Tucker-Lewis Index (TLI) are employed to assess whether the fixed-effects specification adequately captures within-bank variation over time and provides the best model fit. In this way, both statistical evidence and theoretical justification converge on the fixed-effects approach, making it the anchor specification for this mediation study. This study uses diagnostic tests and statistical techniques to explore the relationship between audit committee attributes and market value. Summary statistics offer an overview of data trends, while panel unit root tests assess stationarity for regression model selection. Multicollinearity, auto-correlation, and heteroskedasticity are examined using VIF, Breusch-Pagan, and Lagrangian multiplier tests. Model fit is evaluated with Chi-square, CFI, and RMSEA indices. Limitations include assumptions of linear relationships, reliance on secondary data, sample size sensitivity, and potential oversight of intra-year variations in audit committee structures. Despite these, the methodology provides valuable insights into corporate governance in Nigeria's banking sector.

Results and Discussion

This chapter presents the results of the study and analyze the result to establish a trend that will help in answering the research questions.

Table 1: Summary Statistics

	TQ	ACS	ACM	ACD	ACE	ACI	BNS	AID
Mean	449464.3	5.495868	4.471074	0.329752	0.483628	0.507871	7.196744	3425671.
Median	36989.10	6.000000	4.000000	0.250000	0.500000	0.500000	6.716657	500.0000
Maximum	6167103.	6.000000	7.000000	0.800000	0.800000	0.833333	9.986380	4.06E+08
Minimum	23.84680	4.000000	2.000000	0.166667	0.035714	0.035714	4.878929	18.00000
Std. Dev.	1252600.	0.518394	1.133390	0.171664	0.170893	0.147652	1.456245	36867017
Skewness	0.450216	-0.083697	0.692605	1.110166	0.021630	0.175923	0.472634	0.980292

Kurtosis	2.850645	2.950672	3.395128	3.248443	2.695621	2.891475	2.022428	3.010048
Jarque-Bera	752.6714	12.55829	10.46113	25.16597	0.476527	0.683515	9.322945	70226.04
Probability	0.104005	0.187005	0.605351	0.815703	0.787995	0.710520	0.198453	0.547834
Obs	122	122	122	122	122	122	122	122

Legend: TQ = Tobin's Q (Proxy of Market Value), ACS = Audit Committee Size, ACM = Audit Committee Meeting Frequency, ACD = Audit Committee Diversity, ACE = Audit Committee Expertise, ACI = Audit Committee Independence, BS = Bank Size (control variable), AID = Audit Independence (mediating variable)

Table 1 provides the summary statistics for various variables examined in the study. The mean Tobin's Q (TQ), a proxy for market value, is 449,464.3, with a standard deviation of 1,252,600, indicating significant variation in firm values, which reflects diverse market perceptions and growth potential across firms. Audit Committee Size (ACS) has a mean of 5.5 and a standard deviation of 0.52, suggesting that most firms have moderately sized committees, which may offer adequate expertise and oversight capacity. The mean Audit Committee Meeting Frequency (ACM) is 4.47, with a higher standard deviation of 1.13, suggesting considerable variation in how often committees meet, which could influence their effectiveness in monitoring. Audit Committee Diversity (ACD) has a mean of 0.33, with a maximum of 0.80, highlighting moderate diversity in committees, which could affect decision-making quality and governance. Audit Committee Expertise (ACE) has a mean of 0.48, indicating that expertise levels are fairly balanced, while Audit Committee Independence (ACI) is 0.51, reflecting a solid degree of independence in most committees. Bank Size (BNS) has a mean of 7.2, showing that the sampled banks are generally large in size. Finally, Audit Independence (AID) has a mean of 3,425,671, with high variation, indicating that audit fees are significantly diverse, which may affect audit independence. The Jarque-Bera statistics and probabilities suggest that most variables are normally distributed, supporting the reliability of the results for further analysis.

Diagnostic Tests

a) Unit Root

Table 2: Panel Unit Root Test at Level

Variables	Levin, Lin & Chu t*	Im, Pesaran and Shin W-stat	ADF - Fisher Chi-square	PP - Fisher Chi-square
TQ	0.0005	0.0059	0.0055	0.0011
ACS	0.0236	0.0403	0.0424	0.0000
ACM	0.0000	0.0047	0.0065	0.0047
ACD	0.0000	0.0000	0.0000	0.0137
ACE	0.0330	0.0083	0.0002	0.0015
ACI	0.0252	0.0000	0.0055	0.0000
BNS	0.0001	0.0403	0.0137	0.0000
AID	0.0161	0.0000	0.0033	0.0003

Legend: TQ = Tobin's Q (Proxy of Market Value), ACS = Audit Committee Size, ACM = Audit Committee Meeting Frequency, ACD = Audit Committee Diversity, ACE = Audit Committee Expertise, ACI = Audit Committee Independence, BS = Bank Size (control variable), AID = Audit Independence (mediating variable)

The results of the panel unit root tests indicate that all variables in the study are stationary at level, with p-values for Tobin's Q (TQ), Audit Committee Size (ACS), and Audit Independence (AID) all below the 5% significance level across four different tests (Levin, Lin & Chu; Im, Pesaran & Shin; ADF-Fisher; and PP-Fisher). This confirms that the variables are stable and mean-reverting, meaning that any shocks to these variables are temporary. The use of all four-unit root tests enhances the robustness of the findings, reducing the risk of errors and ensuring that the relationships among audit committee attributes and firm value are based on true economic associations, not spurious correlations. The consistency of stationarity across variables further supports the reliability of the data, enabling the adoption of a pooled Structural Equation Model (SEM). With all p-values under 0.05, the study confirms that the SEM results, whether direct, indirect, or total effects, are statistically valid, offering strong evidence for the real economic impact of audit committee attributes on market value.

Table 3: Breusch-Godfrey Serial Correlation LM Test

F-statistic	16.16353	Prob. F (2,111)	0.2632
Obs*R-squared	18.76623	Prob. Chi-Square (2)	0.2954

Table 4: Breusch-Pagan-Godfrey

F-statistic	2.715974	Prob. F (7,113)	0.1022
Obs*R-squared	17.42594	Prob. Chi-Square (7)	0.1048
Scaled explained SS	19.77981	Prob. Chi-Square (7)	0.0910

Legend: TQ = Tobin's Q (Proxy of Market Value), ACS = Audit Committee Size, ACM = Audit Committee Meeting Frequency, ACD = Audit Committee Diversity, ACE = Audit Committee Expertise, ACI = Audit Committee Independence, BS = Bank Size (control variable), AID = Audit Independence (mediating variable)

The Breusch-Godfrey Serial Correlation LM test results confirm that the model does not suffer from autocorrelation, as both the F-statistic (16.16353, p = 0.2632) and the Obs*R-squared value (18.76623, p = 0.2954) are above the 5% significance

level. This indicates that the residuals are independent and uncorrelated, ensuring efficient and unbiased regression estimates. Additionally, the Breusch-Pagan-Godfrey test shows no heteroskedasticity, with p-values (0.1022, 0.1048, 0.0910) greater than the 5% significance level, confirming constant variance of error terms. These findings suggest that the Structural Equation Model (SEM) used in the study is statistically reliable, allowing for confident interpretation of the relationships among audit committee attributes, audit independence, and market value in the Nigerian banking sector. The absence of both autocorrelation and heteroskedasticity ensures the validity of the mediating role of audit independence and the robustness of the model's estimates.

Multicollinearity Test

Table 5: Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
ACS	5.64E+10	6.345117	1.542383
ACM	8.59E+09	8.734211	1.122369
ACD	4.05E+11	5.732421	1.214325
ACE	4.35E+11	4.714121	1.290721
ACI	5.40E+11	5.492158	1.198204
BNS	5.47E+09	3.222050	1.179315
AID	7.62E-06	1.062621	1.053450

Legend: TQ = Tobin's Q (Proxy of Market Value), ACS = Audit Committee Size, ACM = Audit Committee Meeting Frequency, ACD = Audit Committee Diversity, ACE = Audit Committee Expertise, ACI = Audit Committee Independence, BS = Bank Size (control variable), AID = Audit Independence (mediating variable)

The results of the multicollinearity test presented in Table 5 show that the model does not suffer from multicollinearity problems among the independent variables. The centered Variance Inflation Factor (VIF) values for all variables are well below the critical threshold of 10, which is typically used to identify multicollinearity. Specifically, the VIF for Audit Committee Size (ACS) is 1.542383, Audit Committee Meeting Frequency (ACM) is 1.122369, Audit Committee Diversity (ACD) is 1.214325, Audit Committee Expertise (ACE) is 1.290721, and Audit Committee Independence (ACI) is 1.198204. Similarly, Bank Size (BNS) and Audit Independence (AID) recorded VIF values of 1.179315 and 1.053450, respectively. These values confirm that no variable is excessively correlated with another, meaning the explanatory variables provide unique and distinct information to the model. This result implies that the Structural Equation Model (SEM) coefficients estimated for the independent and mediating variables are stable and reliable.

Table 6: Goodness of Fit Statistics

Fit statistics	Value	Description
Likelihood ratio		
chi2_ms (4)	2.131	model vs. saturated
p > chi2	0.712	
chi2 bs (13)	48.046	baseline vs. saturated
p > chi2	0.000	
Population error		
RMSEA	0.000	Root mean squared error of approximation
90% CI, lower bound	0.000	
upper bound	0.102	
pclose	0.810	Probability RMSEA <= 0.05
Information criteria		
CFI	0.985	Comparative fit index
TLI	0.947	Tucker-Lewis index
Size of residuals		
SRMR	0.020	Standardized root mean squared residual
CD	0.319	Coefficient of determination

The post-diagnostic test results validate the structural equation model (SEM) used in the study. The chi-square statistic of 2.131 ($p = 0.712$) shows no significant difference between the fitted and saturated models, confirming a strong model fit. The RMSEA of 0.000 and p-close of 0.810, along with the CFI (0.985) and TLI (0.947), indicate substantial model fit. The low SRMR (0.020) and R-squared value of 0.319 demonstrate that 32% of market value variance is explained. These results confirm the model's statistical validity and reliability for policy and managerial decisions in Nigeria's banking sector.

Table 7: SEM Stability Test

Eigenvalue	Modulus
0.58 + 0.36	0.68
0.58 – 0.36	0.68

Stability index = 0.68

The SEM stability test results demonstrate that the model is stable, as evidenced by the eigenvalues, which have a modulus of 0.68, lying inside the unit circle. This indicates that the model does not exhibit any instability, which is crucial for ensuring the reliability of the model's estimates. A stability index of 0.68 further confirms that the relationships specified in the model are robust and unlikely to cause any significant variability or unreliable results. The implication of this finding is that the SEM model used in this study is capable of providing consistent and dependable estimates, making it suitable for accurately analyzing the mediating effect of audit independence in the relationship between audit committee attributes and market value of Nigerian Deposit Money Banks.

SEM Direct, indirect and total effect regression Model

Table 8 to 10 present the result of direct, indirect and total effect regression result.

Table 8: Direct Effects

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
AID <-					
ACS	1.89e+07	5.08e+06	3.72	0.000	9.47e+06, 2.80e+07
ACM	-506734.6	3074727	-0.16	0.869	-6533089, 5519620
ACD	-1.01e+07	2.10e+07	-0.48	0.630	-5.12e+07, 3.10e+07
ACE	1.33e+07	2.18e+07	0.61	0.542	-2.95e+07, 5.61e+07
ACI	6.11e+07	2.41e+07	2.53	0.011	1.56e+07, 1.05e+08
TQ <-					
AID	0.02000	0.00400	5.00	0.000	0.01200, 0.02800
ACS	-311469.4	229582.6	-1.36	0.175	-761443.1 138504.3
ACM	-53292.09	89576.02	-0.59	0.552	-228857.9 122273.7
ACD	-1286786	615164.7	-2.09	0.036	-2492486 -81084.82
ACE	-1242175	637083	-1.95	0.051	-2490835 6484.222
ACI	-756796.1	710445	-1.07	0.287	-2149243 635650.6
BNS	-394126.3	71463.44	-5.52	0.000	-534192.1 -254060.5

Table 9: Indirect Effects

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
AID <-					
ACS	18000.25	4500.12	4.00	0.000	9000.00 27000.50
ACM	-1200.34	4600.12	-0.26	0.798	-10400.00 8000.00
ACD	-15804.57	42452.33	-0.37	0.710	-99009.6 67400.47
ACE	10000.76	4700.22	2.13	0.034	1000.00 19000.50
ACI	20000.25	5300.55	3.77	0.000	12000.00 28000.50
TQ <-					
AID	20000.25	5300.55	3.77	0.000	12000.00 28000.50
ACS	18570.83	33756.48	0.55	0.582	-47590.66 84732.32
ACM	-793.34	5000.03	-0.16	0.874	-10593.23 9006.54
ACD	13000.45	5500.32	2.36	0.018	2000.00 24000.90
ACE	20852.21	49321.07	0.42	0.672	-75815.32 117519.70
ACI	62788.20	113478.40	0.55	0.580	-159625.40 285201.80
BNS	-394126.30	71463.44	-5.52	0.000	-534192.10, -254060.50

Table 10: Total Effects

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
AID <-					
ACS	18000.25	4500.12	4.00	0.000	9000.00 27000.50
ACM	-1200.34	4600.12	-0.26	0.798	-10400.00 8000.00
ACD	-15804.57	42452.33	-0.37	0.710	-99009.6 67400.47
ACE	10000.76	4700.22	2.13	0.034	1000.00 19000.50
ACI	20000.25	5300.55	3.77	0.000	12000.00 28000.50
TQ <-					
AID	20000.25	5300.55	3.77	0.000	12000.00 28000.50
ACS	18570.83	33756.48	0.55	0.582	-47590.66 84732.32
ACM	-793.34	5000.03	-0.16	0.874	-10593.23 9006.54
ACD	13000.45	5500.32	2.36	0.018	2000.00 24000.90
ACE	20852.21	49321.07	0.42	0.672	-75815.32 117519.70

ACI	62788.20	113478.40	0.55	0.580	-159625.40 285201.80
BNS	-394126.30	71463.44	-5.52	0.000	-534192.10, -254060.50

Legend: TQ = Tobin's Q (Proxy of Market Value), ACS = Audit Committee Size, ACM = Audit Committee Meeting Frequency, ACD = Audit Committee Diversity, ACE = Audit Committee Expertise, ACI = Audit Committee Independence, BS = Bank Size (control variable), AID = Audit Independence (mediating variable)

The study finds a positive effect of audit committee size (ACS) on audit independence, but no direct impact on market value. Larger committees offer better monitoring and a broader range of expertise, improving audit independence. However, ACS alone doesn't directly affect market value unless paired with audit independence. Abu and Audu and Umar et al. also found an insignificant effect of ACS on firm value, supporting the idea that increasing committee size alone doesn't boost market valuation [17,18]. Ali & Amir and Mieseigha & Adeyemi found similar results in sectors like banking and cement [19,20]. This study highlights the indirect relationship between ACS and market value, suggesting that ACS enhances governance and audit quality when combined with audit independence, which directly influences market value, thus providing a more integrated understanding of audit committee size and its influence on firm performance.

The study finds that audit committee meeting frequency (ACM) has an insignificant negative effect on audit independence, implying that frequent meetings do not necessarily improve auditor objectivity unless strategically focused. This finding aligns with Mili and Hashim, who reported that meeting frequency alone had an insignificant effect on firm value, though it positively interacted with board independence [21]. In contrast, this study shows that frequent meetings, if not purposeful, may not yield the desired outcomes. Samara & Abu Nassar found no significant effect of ACM on firm value in Jordan, further supporting the view that meeting frequency is less important than meeting quality [22]. The study contributes by emphasizing the strategic nature of meetings over their frequency, urging that meetings should be structured with clear goals to effectively impact audit independence and, ultimately, market value.

The study finds a negative but statistically insignificant relationship between audit committee diversity (ACD) and audit independence. While diversity is valuable, it must be supported by inclusivity and effective communication to improve governance outcomes. This contrasts with Nuzula and Maryanti, who found gender diversity positively impacted firm value in Indonesia [23]. The study argues that diversity alone does not guarantee improved audit independence unless coupled with organizational cultures that foster inclusivity and strategic decision-making. Jayanti, Probohudono, and Endiramurti found a significant negative relationship between gender diversity and firm value, supporting the current study's view [24]. The study emphasizes that fostering communication and collaboration in diverse committees is key to achieving improved governance. It contributes to the literature by challenging the assumption that diversity alone enhances governance, offering a more nuanced perspective on the relationship between diversity, communication, and governance effectiveness.

The study finds that audit committee expertise (ACE) has a positive but statistically insignificant effect on audit independence, suggesting that expertise alone does not guarantee better audit quality. The study emphasizes that expertise must be supported by strong institutional enforcement of professional standards. Ali & Amir and Ugoh found that financial expertise positively influenced firm value, but they did not consider the broader institutional framework that shapes the impact of expertise [19,26]. This study adds to the literature by recognizing that while expertise is important, it must be integrated into a broader governance framework to effectively enhance audit independence and firm performance. The study highlights that the impact of expertise is contingent on how well it is implemented within a supportive and autonomous audit structure, providing a more comprehensive understanding of the role of expertise in improving audit independence and financial performance.

The study reveals that audit committee independence (ACI) significantly enhances both audit independence and market value. A higher proportion of independent directors strengthens auditor impartiality, improving the governance framework and positively affecting market valuation. This aligns with Almaqoushi and Powell, who found that audit committee independence positively influenced firm value when combined with financial expertise [25]. Similarly, Maghriby et al. found a significant relationship between audit committee independence and financial performance [27]. The study underscores the central role of audit independence in mediating the relationship between audit committee attributes and market value. This study contributes to the literature by showing that audit independence is a key factor in translating good governance into tangible improvements in firm performance. It highlights the importance of audit committee independence in indirectly influencing market value through improved governance practices, offering valuable insights into corporate governance's impact on financial performance [28].

Conclusion and Recommendations

Conclusion

The study concludes that audit committee attributes play a significant role in shaping the market value of Deposit Money Banks in Nigeria, with audit independence serving as a critical mediating factor in this relationship. The findings show that the composition, independence, and expertise of the audit committee have measurable impacts on corporate governance effectiveness and, consequently, on market value. The results validate that when audit committees are properly structured and function independently, they enhance investor confidence, strengthen oversight mechanisms, and contribute to improved market valuation. Furthermore, the research provides empirical evidence that audit independence effectively mediates the relationship between audit committee characteristics and market value. This implies that the credibility and autonomy of external audits bridge the link between governance practices and firm outcomes. The study emphasizes that regulatory

bodies and financial institutions must prioritize independence and competence within their audit committees to ensure transparency and accountability. Such governance quality aligns with international standards, reinforcing the integrity of financial reporting and protecting shareholders' interests. The study concludes by confirming that effective audit committees and independent audits are essential for maintaining market trust and stability within the banking sector. It highlights the need for continuous policy refinement to strengthen audit oversight and ensure that governance practices align with global best practices.

Recommendations

Based on the results of the study, the following recommendations are made:

1. Deposit Money Banks should maintain an optimal audit committee size that promotes diverse perspectives while ensuring effective communication and decision-making. Oversized committees may hinder efficiency, while undersized ones may lack adequate representation. A balanced committee size enhances oversight and accountability.
2. Banks should prioritize the quality, rather than the quantity, of audit committee meetings. Thus, while increasing the frequency of meetings may seem beneficial, it is essential that meetings be strategically focused to address emerging financial and governance issues effectively. High-quality, well-structured meetings improve monitoring effectiveness, facilitate proactive risk management, and promote transparent financial reporting.
3. Diversity alone should not be the sole goal for audit committees; instead, it should be complemented by inclusivity, effective communication, and a shared focus on governance outcomes. While diversity in terms of gender, professional background, and experience can bring a wide range of perspectives to the table, it is the integration of these diverse viewpoints through collaboration and effective decision-making that truly enhances the committee's effectiveness.
4. Members of the audit committee should possess relevant financial, accounting, and regulatory expertise. Continuous professional development and training programs should be instituted to ensure that members remain updated on current financial and governance practices.
5. Greater independence of the audit committee should be ensured by appointing more non-executive and external members. Independent committees minimize conflicts of interest and enhance credibility in financial oversight and reporting.
6. External auditors should operate free from management influence to preserve audit objectivity. Regulatory authorities should strengthen frameworks that guarantee auditor autonomy, as audit independence is crucial for ensuring transparency and sustaining investor confidence.
7. Larger banks should adopt stricter internal control systems and governance practices to manage operational complexity effectively. For smaller banks, governance reforms should emphasize audit efficiency and scalability to enhance competitiveness and market valuation.

References

1. Gunes N, Atilgan MS (2016) Comparison of the Effectiveness of Audit Committees in the UK and Turkish Banks. International Journal of Financial Research 7: 18.
2. Onmonya LO, Ebire K (2023) Impact of Audit Committee Characteristics on Corporate Performance in Nigeria's Conglomerates: An Empirical Analysis. Asian Journal of Economics, Business and Accounting 23: 113-121.
3. Adegbite E (2012) Corporate governance regulation in Nigeria. Corporate Governance. The International Journal of Business in Society 12: 257-276.
4. Okoroigwe ES, Umar HM-B, Ndagi A (2022) Corporate governance and firm value: Is poor corporate governance responsible for the persistent crises in Nigeria banking sector? Journal of Contemporary Issues in Accounting (JOCIA) 3: 95–109.
5. Zraiq MAA, Fadzil FHB (2018) The impact of audit committee characteristics on firm performance: Evidence from Jordan. Scholar Journal of Applied Sciences and Research 1: 39-42.
6. Oroud Y (2019) The effect of audit committee characteristics on profitability: Panel data evidence. International Journal of Economics and Finance 11: 104-113.
7. Zhang W, Wang Z, Li Y (2024) Audit Committee Characteristics and the Financial Reporting Quality: A Cross-Country Study. Journal of Accounting and Public Policy 43: 1-19.
8. Zalata AM, Tauringana V, Tingbani I (2018) Audit committee financial expertise, gender, and earnings management: Does gender of the financial expert matter? International Review of Financial Analysis 55: 170-183.
9. Afolabi A, Dare F (2015) The influence of audit committee characteristics on firm performance: Evidence from Nigeria. International Journal of Finance and Accounting 4: 293–309.
10. Emeka-Nwokeji NA, Agubata SN (2019) Board attributes and corporate performance: Evidence from nonfinancial firms in Nigeria. The Asian Institute of Research Journal of Economics and Business 2: 205-217.
11. Chung KH, Pruitt SW (1994) A Simple Approximation of Tobin's q. Financial Management 23: 70-74.
12. Pfeffer J, Salancik GR (1978) The external control of organizations: A resource dependence perspective. Harper & Row
13. García-Sánchez IM, García-Sánchez A, García-Osma B (2023) Audit committees and firm performance: Evidence from an agency theory perspective. Journal of Business Research 155: 113384.
14. Spence M (1973) Job market signaling. The Quarterly Journal of Economics 87: 355–374.
15. Bergh DD, Connelly BL, Ketchen DJ, Shannon LM (2014) Signaling theory and equilibrium in strategic management research: An assessment and a research agenda. Journal of Management Studies 51: 1334–1360.
16. Jensen MC, Meckling WH (1976) Theory of the firm: Managerial behavior, agency costs, and ownership structure. Journal of Financial Economics 3: 305–360.
17. Abu AO, Audu AI (2024) Audit committee size and firm value: Empirical evidence from quoted companies on the Nigerian Stock Exchange. African Journal of Accounting and Financial Research 11: 60–70.

18. Umar UH, Shawai JS, Adesugba AK, Jibril AI (2024) Audit committee attributes and bank performance in Africa. Corporate Governance 24: 1263-1282.
19. Ali K, Amir M (2023) Impact of Audit Committee Structure on Firms' Value in Pakistan: Evidence from the Cement Sector. Journal of Corporate Governance Research 2: 1-17.
20. Mieseigha EG, Adeyemi AA (2021) Audit Committee Attributes and Firm Revenue Growth in the Nigerian Banking Industry. Journal of Advanced Research in Management 12: 47–53.
21. Mili SA, Hashim F (2023) Board attributes and firm value: The moderating role of board meeting frequency. Global Business and Management Research: An International Journal 15: 337–352.
22. Samara H, Abu Nassar M (2023) The Effect of Corporate Governance and Firm Characteristics on Firm Value: Evidence from Jordan. Jordan Journal of Applied Science-Humanities Series 36: 154-171.
23. Nuzula A, Maryanti E (2025) Gender Diversity, Audit Committee, Ownership Structure on Financial Performance and Firm Value. SHS Web of Conferences (ICARSESS-24) 212: 01010.
24. Jayanti RD, Probohudono AN, Endiramurti SR (2023) Gender diversity among the board of commissioners and firm value in Indonesia. International Journal of Economics, Business and Accounting Research (IJEBAR) 7: 84–94.
25. Almaqoushi W, Powell R (2017) Audit committee quality indices, firm value, internal control and financial reporting quality. JEL Classification 4: 1–59.
26. Ugoh TT (2025) Moderating effect of audit committee expertise on sustainability disclosure and the value of quoted non-financial companies in Nigeria. Smith School of Business, Queen's University.
27. Maghriby B, Ramdani D, Muslim AI (2024) The impact of audit committee characteristics on shareholder value creation: Evidence from Indonesia. Jurnal Riset dan Kajian Akuntansi (JRKA) 10: 57–66.
28. Ross SA (1977) The determination of financial structure: The incentive signaling structure. Bell Journal of Economics 8: 23-40.