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EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON MARKET VALUE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA: THE MODERATING EFFECT OF BOARD INDEPENDENCE

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Abstract

The Nigerian banking sector has experienced significant growth and transformation in recent years, making it imperative to assess the factors influencing the market value of deposit money banks (DMBs). One critical aspect of this evaluation is the effectiveness of audit committees within these banks, as they play a crucial role in ensuring financial transparency and accountability. This study investigates the moderating effect of board independence on the relationship between audit committee characteristics and market value of listed deposit money banks in Nigeria. The data were collected from the annual reports and accounts of thirteen (13) banks for the period 2014 to 2023. The data were analyzed using fixed effect regression model. The results indicate that audit committee characteristics have significant effect on firm value of listed deposit money banks in Nigeria. Specifically, the results indicate that audit committee size, independence and financial expertise have significant positive effect on firm value. However, audit committee meetings and firm value was insignificant. The results also indicate that board independence has a significant positive moderating effect on the relationship between audit committee financial expertise and firm value. However, board independence has a significant negative moderating effect on audit committee size and independence, and firm value. The study recommends that regulators of Nigerian banks should emphasize the critical role of board diversity and independence in corporate governance effectiveness, insisting on the need for organizations to focus on building boards with members who possess complementary skills and knowledge, fostering an environment conducive to robust decision-making and value creation.

Introduction

In today's volatile and highly regulated financial landscape, the ability of firms especially banks to sustain investor confidence and maintain market relevance hinges critically on the strength of their corporate governance structures. As capital markets grow increasingly sensitive to governance lapses, stakeholders demand more than just profitability they expect transparency, accountability, and ethical stewardship. Nowhere is this demand more pressing than in the banking sector, where failures in oversight can trigger widespread economic disruption. In Nigeria, listed deposit money banks operate under intense scrutiny, facing not only financial performance pressures but also growing expectations for sound governance (Al-Matari et al., 2022). This reality shows the pivotal roles played by audit committees and boards of directors in shaping corporate outcomes.

Effective corporate governance, supported by strong audit committee characteristics, is widely recognized as vital for promoting financial transparency, accountability, and long-term organizational performance (Fariha et al., 2023). As a key component of the board of directors, the audit committee plays a critical role in overseeing financial reporting, internal controls, and audit activities. This oversight function enhances the overall performance of banks, which in turn contributes to an increase in their market value

(Uwiegbe & Olusanmi, 2020). Market value, as a comprehensive indicator of a firm's worth in the eyes of investors, reflects not only financial performance but also market confidence and prospects (Ashibogwu, 2023). However, the banking industry's inherent risk profile introduces an additional layer of complexity, necessitating an exploration of how board independence moderates the established link between audit committee characteristics and market value. The presence of members with financial expertise is one of the most important features of an effective audit committee. Financially literate members are better equipped to interpret complex financial statements, detect irregularities, and evaluate internal control systems. Their expertise improves the quality of discussions and decisions, leading to more reliable financial reporting and informed oversight. Research has shown that audit committees with at least one financially knowledgeable member tend to reduce earnings management and improve firm performance (Garuba & Otusanya, 2023). In Nigerian banks, where financial instruments and regulatory frameworks can be intricate, financial expertise within the audit committee is expected to contribute significantly to market value by promoting trust, reducing perceived risk, and strengthening governance. Financial expertise in the audit committee strengthens its ability to interpret complex financial reports, assess audit quality, and monitor internal controls. However, the influence of such expertise on market value is likely to be enhanced when the board itself is independent and receptive to technical guidance. An independent board is better positioned to trust and support committee members with financial expertise, ensuring that their insights shape strategic decisions and improve financial reporting practices. This synergy enhances market perception, as investors recognize the depth and functionality of the firm's governance structure. In contrast, when the board lacks independence, the knowledge and skills of expert audit committee members may not be fully utilized or respected, thereby limiting their impact on market value (Abbott et al., 2004; Uwuigbe et al., 2020). Thus, board independence is instrumental in unlocking the potential of financial expertise within audit committees.

The Nigerian banking sector, a key player in the nation's economic framework, faces a myriad of challenges and opportunities in the contemporary financial landscape. Effective corporate governance, particularly the characteristics of the audit committee, is pivotal for ensuring transparency, accountability, and financial integrity within these financial institutions. However, the existing literature on the relationship between audit committee characteristics and market value in Nigeria presents a complex and inconclusive landscape, necessitating a thorough exploration to address gaps in understanding and provide practical insights for stakeholders.

Furthermore, a divergent perspective emerges from a specific study indicating a negative relationship between the frequency of audit committee meetings and market value (Kurawa & Shuaibu, 2022). This counterintuitive finding raises questions about the nuanced dynamics of audit committee activities and their potential consequences on market value in the Nigerian banking sector. The inconclusiveness in the existing literature poses a challenge for policymakers, regulators, and practitioners seeking evidence-based guidance on how to optimize audit committee structures for enhanced market value in the Nigerian banking landscape.

This study is motivated by the need to investigate how governance components interact to affect firm outcomes in the Nigerian financial sector. Specifically, it aims to explore whether board independence moderates the relationship between audit committee characteristics and the market value of listed deposit money banks. The study responds to a pressing need to understand why certain banks enjoy better market performance despite similar levels of compliance with governance codes. It also aims to offer practical insights for regulators, investors, and board members on how to structure and activate internal governance mechanisms to drive firm value. By examining the moderating role of board independence, the study contributes to a more understanding of corporate governance and its impact on markets value in Nigeria.

Objectives of the Study

The main objective of this study is to investigate the moderating effect of board independence on the relationship between audit committee characteristics and market value of listed deposit money banks in Nigeria. The specific objectives are to:

i. Examine the effect of audit committee size on market value of listed deposit money banks in Nigeria.

ii. Investigate the effect of audit committee independence on market value of listed deposit money banks in Nigeria.
iii. Examine the effect of audit committee meetings on market value of listed deposit money banks in Nigeria.
iv. Investigate the effect of audit committee financial expertise on market value of listed deposit money banks in Nigeria.
v. Examine the moderating effect of board independence on the relationship between audit committee size and market value of listed deposit money banks in Nigeria.
vi. Examine the moderating effect of board independence on the relationship between audit committee independence and market value of listed deposit money banks in Nigeria.
vii. Examine the moderating effect of board independence on the relationship between audit committee meetings and market value of listed deposit money banks in Nigeria.
viii. Examine the moderating effect of board independence on the relationship between audit committee financial expertise and market value of listed deposit money banks in Nigeria.

Hypotheses of the Study

The study tests the following specific hypotheses, which are stated in the null form.

$H0_1$: Audit committee size has an insignificant effect on market value of listed deposit money banks in Nigeria.

$H0_2$: Audit committee independence has an insignificant effect on market value of listed deposit money banks in Nigeria.

$H0_3$: Audit committee meetings has an insignificant effect on market value of listed deposit money banks in Nigeria.

$H0_4$: Audit committee financial expertise has an insignificant effect on market value of listed deposit money banks in Nigeria.

$H0_5$: Board independence has an insignificant moderating effect on the relationship between audit committee size and market value of listed deposit money banks in Nigeria.

$H0_6$: Board independence has an insignificant moderating effect on the relationship between audit committee independence and market value of listed deposit money banks inNigeria.

$H0_7$: Board independence has an insignificant moderating effect on the relationship between audit committee meetings and market value of listed deposit money banks in Nigeria.

$H0_8$: Board independence has an insignificant moderating effect on the relationship between audit committee financial expertise and market value of listed deposit money banks in Nigeria.

LITERATURE REVIEW

Market Value

Market value according to international valuation standards council (2021) is define as the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion. The concept of market value is closely related to firm value. In most cases, the two terms are used interchangeably. Firm value is a central concept in financial theory, representing the aggregate worth of a business entity as perceived by the market. It encompasses various dimensions such as expected future cash flows, risk considerations, and growth prospects. Investors, managers, and policymakers rely on understanding and measuring firm value to make informed decisions. This concept is often assessed through proxies that capture different aspects of a firm's economic standing. In this discussion, we will explore the concept of firm value and its proxies, drawing on recent literature to provide a comprehensive overview.

Audit Committee Characteristics

The literature provides different definitions of audit committee. Early definition by Marian (1988) states that an audit committee can be described as a committee that has been established by the board of directors to provide further assurance pertaining to the caliber and dependability of the financial information that is utilized by the board. The Audit Committee of a corporation can be broadly characterized as a committee of the board, consisting predominantly or entirely of directors who are not involved in the day-to-day management of the company. The main purpose of this committee is to supervise, assess, and oversee the process of financial reporting and the activities related to the audit. The definition by Marian (1988) is broad and covers the major function of audit committees the world over. On his part, Parker (1992) defined audit committee as an outstanding board committee composed of majority non-executive directors and is expected to participate in decision making from a detached and dispassionate manner. This means that the Audit Committee is a subset of the Board of Directors, and it is responsible for ensuring the integrity of financial reports. The committee arbitrates between management, who are the preparer of financial reports and the external auditors.

Audit Committee Size

Audit committee size refers to the number of directors serving as members of the audit committee. The number of members of the committee reflects the resources available for decision making (Like the size of board of directors, the number of directors on the committee can impact the quality of financial reports. Concerning the board size, Jensen (1993) opined that the number of directors on corporate boards affects the effectiveness and reliability of decision making.

Audit Committee Independence

Independence is crucial to the effectiveness of the audit committee. Audit committee independence refers to the proportion of non-executive directors serving on the audit committee. The higher the proportion of outside directors, the more independent is the committee. This is because outside directors are appointed on the board based on their expertise rather than based on any link with the company.

Audit Committee Meetings

Audit Committee meetings are the frequency of formal meetings to deliberate on issues pertaining to monitoring and oversight over financial reporting. The number of times the committee meets reflects its diligence, hence a direct relationship is inferred between the number of times the committee meets and quality of financial reports. It follows, therefore, that greater meeting frequency will be inversely related to fraudulent financial reporting.

Audit Committee Financial Expertise

Financial expertise is an important audit committee dimension that bears on the credibility of financial reporting. The Code of Corporate Governance for Public Companies (2018) required the company to disclose the number of audit committee members with financial expertise. Similarly, the appointment of audit committee members with financial expertise has been cited as a mechanism that impinges the committees' effectiveness in a highly integrated and complex business economy (Bartov et al.,2003). There have been divergent definitions of audit committee financial expertise. Investors and regulators have proposed a more stringent definition of audit committee financial expertise and the mandatory appointment of financial experts in the audit committee.

Board Independence

According to Fariha, Khan, and Ahmad (2023), board independence is defined as "the extent to which the board of directors is composed of outside, non-executive members who are not involved in the day-to-day operations of the company and can therefore provide unbiased oversight of management.

Theoretical Review

Agency Theory

The agency theory, introduced by Jensen and Meckling (1976), is grounded on the association between the principal (owners) and the agent (managers). This theory posits that within a business, there exists a conflict of interest that may incentivize managers to manipulate accounting information. Due to the lack of control over the accounting process, principals, who possess ownership of resources, have to rely on the information provided by managers. Consequently, the distinction between ownership and control gives rise to the potential for conflicts of interest between agents and principals, resulting in the presence of costs associated with the resolution of such conflicts (Jensen & Meckling, 1976).

A significant element of agency conflict revolves around the management of surplus cash flow, which is primarily under the purview of the managers. Surplus cash flow denotes the excess amount of cash flow that surpasses the necessary financing for all projects (Jensen, 1986) with a positive net present value

(NPV). In line with the hypothesis on surplus cash flow, companies with surplus cash flows are susceptible to heightened agency costs owing to the conflicts of interest between stakeholders and managers (Firth et al, 2016).

Empirical Review

Hussein (2017) examined the influence of audit committee characteristics on firm market performance in Oman. The sample consists of 82 firms listed on the Muscat Stock Market (MSM) in 2014 to 2015, excluding the financial and banking sectors. Data were gathered from firms' annual financial reports and Data Stream, and multiple regression analysis was used to analyze the data. The results show that audit committee multiple directorships and diligence has a significant influence on firm market performance. The study also finds that firm size and leverage, as control variables, are significant in influencing market value.

Yeni and Ewing (2020) examined the impact of audit committee characteristics on earnings management and its effect on firm value in manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2018. The audit committee characteristics considered in the study includes expertise in industry and accounting, expertise in industry and financial supervision, the number of audit committee meetings, and independence. The results indicate that none of the audit committee's characteristics have a significant effect on earnings management. However, earnings management is found to have a significant negative impact on firm value. The findings suggest that while audit committee characteristics may not directly influence earnings management, it is crucial to address and mitigate earnings management practices to protect firm value. The study contributes to the understanding of the relationship between audit committee characteristics, earnings management, and firm value in the context of manufacturing companies in Indonesia.

Santos, et al., (2023) investigated the relationship between audit committee characteristics and the cost of debt in FTSE 100 companies listed in 2018 and 2019. The study examines the impact of audit committee independence and characteristics, such as financial and industry expertise, gender, tenure, and diligence, on the oversight role of audit committees and their influence on the level of risk and the cost of debt. The findings suggest that overall audit committee characteristics do not significantly affect the corporate cost of debt, except for the gender of the audit committee's chair. In the same vein, companies with a chairwoman in the audit committee experience a lower cost of debt. The study also confirms that external auditors have a significant influence on the cost of debt.

Song (2020) examined the relationship between audit market concentration, audit quality, and the characteristics of an audit committee in Korea. The study finds that audit market concentration, measured by the Herfindahl index, is negatively associated with audit quality. However, the negative impact of audit market concentration on audit quality is mitigated when the audit committee has financial expertise among its characteristics. The research highlights the importance of effective audit committees in preventing dominant auditors from neglecting their duties. In addition, the findings contribute to the understanding of the role of audit committee characteristics in enhancing audit quality in the context of audit market concentration.

Methodology

The study adopted ex-post factor research design to examine the moderating role of board independence on the relationship between audit committee characteristics and market value of listed deposit money banks in Nigeria. The design measures the association or variability of two or more variables. The population of the study consists of all 14 commercial banks listed on the Nigerian Exchange Group (NGX) as at 31st December 2023. The research introduced a single filter to arrive at the sample. For a bank to be included in the sample, it must have been listed prior to 2014, which is the first period of analyses. Going by this filter, Jaiz Bank Plc was dropped because it was quoted in 2017. The sample consists of thirteen (13) banks listed on the Nigerian Exchange Group as at December 2023. The data was collected from secondary sources only, specifically from annual reports and accounts of the sample firms for the period under study (2014-2023).

Model specification

In the context of the agency theory, the research used the following model to test the hypotheses.

$$MV_{it} = \alpha_0 + \beta_1 ACS_{it} + \beta_2 ACI_{it} + \beta_3 ACM_{it} + \beta_4 ACE_{it} + \beta_5 I_{it} + \beta_6 FSZ_{it} + \beta_7 LEV_{it} + \varepsilon_{it}$$

Model 1 above tests the direct relationship between audit committee attributes and firm value of banks in Nigeria.

The moderating effect of board independence was stated by model 2 below. This approach of testing for moderation effect is consistent with Hayes (2018).

$$MV_{it} = \alpha_0 + \beta_1 ACS_{it} + \beta_2 ACI_{it} + \beta_3 ACM_{it} + \beta_4 ACE_{it} + \beta_5 BCM_{it} + \beta_5 ACS * BI_{it} + \beta_6 ACI * BI_{it} + \beta_7 ACM * BI_{it} + \beta_8 ACE * BI_{it} + \varepsilon_{it}$$

Where;

MV= Market Value

ACS= Audit Committee Size

ACI= Audit Committee Independence

ACE= Audit Committee Expertise

ACM= Audit Committee Meeting

BI=Board Independence

FSZ= Firm Size

LEV= Leverage

α_0= Constant

β = Beta

e = error term

Definition and measurement of variables

Variable Acronym	Definition	Measurement	Source
		Dependent Variable	
MV	Tobin's Q	It is calculated by dividing the market value of a company by the replacement cost of its assets or the investment in capital goods	Financial Statements
		Independent Variables	
ACS	Audit Committee Size	Number of the directors on the audit committee	Annual Report
ACI	Audit Committee Independence	Ratio of non-executive directors on the audit committee to audit committee size	Annual report
ACM	Audit Committee Meetings	Number of meetings held by the audit committee during the accounting year	Annual report
ACE	Audit Committee Expertise	Ratio of financial experts on the audit committee to total audit committee size	Annual reports
		Moderating Variable	
BI	Board Independence	Ratio of non-executive directors to board size	Annual reports
		Control Variables	
FSZ	Firm size	Natural logarithm of total assets	Annual Reports
LEV	Leverage	The ratio of total liabilities to total assets	Annual Reports

Source: Author (2023)

RESULTS AND DISCUSSION

Descriptive Analysis

Table 1 Descriptive Statistics

Variable	Mean	Std. Deviation	Minimum	Maximum
MV	1.297	0.524	0.416	3.071
ACS	5.569	0.825	4	6
ACI	0.497	0.078	0.333	0.750
ACM	2.823	1.038	2	6
ACE	0.189	0.196	0.001	0.890
BI	0.596	0.105	0.500	0.890
FSZ	7.603	0.697	6.093	8.903
LEV	1.424	0.811	0.004	3.706

Source: Stata Output, 2025

The descriptive statistics for Tobin's Q shows a mean of 1.297, indicating that, on average, firms are valued by the market at about 1.297 times their replacement cost of assets, suggesting generally positive market perceptions. The standard deviation of 0.524 reflects moderate variability in these valuations, highlighting that while many firms hover around the average, there is notable dispersion. The minimum value of 0.416 signifies that some firms are valued significantly below their asset replacement costs, potentially indicating undervaluation or financial distress. Conversely, the maximum value of 3.071 demonstrates that some firms are highly valued, at over three times their asset replacement cost, likely due to strong growth prospects or market positions. This range and variability in Tobin's Q are crucial for analyzing how board independence might moderate the relationship between audit committee characteristics and firm value, given the substantial differences in market valuations within the sample.

The descriptive statistics for audit committee size show a mean of 5.569, indicating that, on average, firms have around 5 to 6 members on their audit committees, which suggests a standard practice in terms of committee size. The standard deviation of 0.825 reflects low variability, meaning most firms have audit committee sizes close to this average, with little deviation. The minimum value of 4 indicates that the smallest audit committees have four members; while the maximum value of 6 shows that the largest have six members. This narrow range and low variability suggest that there is a relatively uniform approach to determining audit committee size among the firms in the sample.

The audit committee independence show a mean of 0.497, indicating that, on average, about half of the audit committee members are independent. The standard deviation of 0.825 suggests a high variability in the level of independence across different firms' audit committees. The minimum value of 0.333 indicates that in some firms, only a third of the audit committee members are independent, while the maximum value of 0.75 shows that in others, up to three-quarters are independent. This wide range and significant variability highlight the diverse approaches firms take regarding the independence of their audit committees.

The descriptive statistics for audit committee meetings in your sample show a mean of 2.823, indicating that, on average, audit committees meet nearly three times a year. The standard deviation of 1.038 reflects moderate variability, suggesting that while many firms have around three meetings annually, there is some variation. The minimum value of 2 indicates that some audit committees meet as few as twice a year, whereas the maximum value of 6 shows that some meet up to six times a year. This range and variability in the frequency of audit committee meetings suggest differing levels of oversight and diligence among firms.

The audit committee financial expertise in the sample show a mean of 0.189, indicating that, on average, about 18.9% of the audit committee members have financial expertise. The standard deviation of 0.196 indicates moderate variability, suggesting differences in the extent of financial expertise across firms' audit committees. The minimum value of 0.001 implies that some firms have almost no financial expertise within their audit committees, while the maximum value of 0.89 shows that in other firms, up to 89% of the members possess financial expertise. This wide range and variability highlight the diverse emphasis placed on financial expertise among audit committees.

The board independence, measured as the ratio of non-executive directors to board size, show a mean of 0.597, indicating that, on average, about 59.7% of board members are non-executive directors. The standard deviation of 0.105 suggests relatively low variability, indicating that most firms have a similar proportion of non-executive directors. The minimum value of 0.5 shows that in some firms, half of the board members are non-executive directors, while the maximum value of 0.89 indicates that in other firms, up to 89% of the board comprises non-executive directors. This range and low variability suggest a consistent emphasis on having a significant proportion of non-executive directors across firms.

The firm size, measured as the natural logarithm of total assets, show a mean of 7.603, indicating that the average firm in your sample has a relatively large asset base. The standard deviation of 0.697 reflects moderate variability in firm sizes, suggesting that while many firms are close to the average size, there is some variation. The minimum value of 6.092 indicates the smallest firm size in the sample, while the maximum value of 8.903 represents the largest firm size. This range and variability in firm size highlight the differences in the scale of operations among firms, which could be important when analyzing how firm size influences the relationship between audit committee characteristics and firm value, potentially moderated by board independence.

The leverage, which is likely measured as the ratio of total debt to total equity, show a mean of 1.424, indicating that, on average, firms in your sample have 1.424 units of debt for every unit of equity. The standard deviation of 0.811 reflects substantial variability, suggesting significant differences in how firms utilize debt. The minimum value of 0.004 indicates that some firms have almost no debt, while the maximum value of 3.706 shows that other firms have very high leverage, with debt levels more than three times their equity. This wide range and high variability in leverage highlight diverse capital structures among firms, which could play a crucial role in understanding how leverage affects the relationship between audit committee characteristics and firm value, potentially moderated by board independence.

Table 2 Correlation Analysis

Var	TQ	ACS	ACI	ACM	ACE	BI	FSZ	LEV
TQ	1.000							
ACS	0.251	1.000						
ACI	-0.035	0.165	1.000					
ACM	-0.012	-0.144	0.343	1.000				
ACE	0.509	0.088	0.013	0.133	1.000			
BI	0.329	0.233	0.037	0.112	0.382	1.000		
FSZ	0.117	0.372	0.126	0.144	0.013	0.201	1.000	
LEV	-0.002	0.049	0.101	0.179	0.204	0.016	0.114	1.000

Source: Stata Output, 2025

The correlation analysis reveals insights into the relationship between Tobin's Q, a measure of firm value, and several key variables. First, there is a positive but weak correlation of 0.215 between Tobin's Q and audit committee size. This suggests that as the size of the audit committee increases, there tends to be a slight uptick in firm valuation. However, this relationship is not particularly strong, indicating that while larger audit committees may contribute marginally to higher firm value, and other factors likely have a more significant impact.

In contrast, the correlation between Tobin's Q and audit committee independence is negligible at -0.035, implying that there is little to no association between the independence of the audit committee and firm valuation. This finding may indicate that factors beyond audit committee independence are more influential in determining firm value, or it could suggest that the measurement of independence used in the analysis does not capture its true impact accurately.

However, a strong positive correlation of 0.509 is observed between Tobin's Q and audit committee financial expertise. This indicates that firms with audit committees comprising members possessing financial expertise tend to have higher Tobin's Q values. This finding underscores the importance of financial acumen within the audit committee in driving firm valuation, suggesting that investors perceive such expertise as a valuable asset.

Moreover, there is a moderate positive correlation of 0.329 between Tobin's Q and board independence, specifically the ratio of non-executive directors to the board size. This suggests that a higher proportion of non-executive directors on the board is associated with higher firm valuation. This finding aligns with corporate governance literature, which often emphasizes the importance of independent oversight in enhancing firm performance and value.

Regression Analysis Model 1

Model 1 tests the direct effect of audit committee characteristics on market value.

Table 3 Fixed Effect Regression Analysis: Model 1

Variable	Coefficient	Standard Error	T value	Probability
Constant	-0.769	1.106	-0.69	0.500
ACS	0.217	0.041	5.34	0.000
ACI	-0.913	0.536	-1.70	0.114
ACM	-0.065	0.096	-0.68	0.512
ACE	1.173	0.186	6.31	0.000
BI	1.179	0.542	2.18	0.050
FSZ	0.076	0.137	0.56	0.589
LEV	-0.006	0.091	-0.07	0.948
R-Squared	0.5065			
F Stat	139.94			
Probability	0.000			

Source: Stata Output, 2025

The regression analysis provides valuable insights into the relationship between Tobin's Q, a measure of firm value, and audit committee size. The model's R-squared value of 0.5064 indicates that approximately 50.64% of the variance in Tobin's Q can be explained by the independent variables included in the regression model. This suggests that the model has moderate explanatory power in capturing the determinants of firm value. The F value of 139.94 is highly significant with a probability of 0.000, indicating that the overall regression model is statistically significant. This implies that at least one of the independent variables included in the model has a significant impact on Tobin's Q. Given the low probability value, we can reject the null hypothesis that all coefficients are equal to zero, confirming the model's overall significance.

Specifically focusing on audit committee size, the coefficient of 0.217 indicates that, holding other variables constant, a one-unit increase in audit committee size is associated with a 0.217 unit increase in Tobin's Q. This positive coefficient suggests that larger audit committees tend to be associated with higher firm valuation, indicating a potential positive relationship between audit committee size and firm value. The t value of 5.34 associated with audit committee size is highly significant with a probability of 0.000, indicating that the coefficient estimate is statistically different from zero. This suggests that the relationship between audit committee size and Tobin's Q is robust and unlikely to be due to random chance.

Focusing on audit committee independence, the study finds a coefficient of -0.913. This coefficient suggests that, holding other variables constant, a one-unit increase in audit committee independence is associated with a decrease of 0.913 units in Tobin's Q. This negative coefficient implies that higher levels of audit committee independence may be linked to lower firm valuation, indicating a potential negative relationship between audit committee independence and firm value.

The standard error of 0.536 provides insight into the precision of the coefficient estimate for audit committee independence. A higher standard error suggests greater variability in the coefficient estimate.

In this case, the standard error is relatively high, indicating less precise estimation of the coefficient. The t value associated with audit committee independence is -1.70, and the probability value is 0.114. While the coefficient is statistically different from zero, the t value suggests that the coefficient estimate is not as robust as desired. Additionally, with a probability value greater than 0.05 (typically considered the threshold for statistical significance),the study fails to reject the null hypothesis that the coefficient is equal to zero. This indicates that the relationship between audit committee independence and Tobin's Q may not be statistically significant.

Examining the variable of audit committee meetings, we observe a coefficient of -0.065. This coefficient suggests that, holding other variables constant, a one-unit increase in the number of audit committee meetings is associated with a decrease of 0.065 units in Tobin's Q. This negative coefficient implies a potential negative relationship between the frequency of audit committee meetings and firm value, indicating that more frequent meetings may be linked to lower firm valuation. The standard error of 0.096 provides insight into the precision of the coefficient estimate for audit committee meetings. In this case, the standard error is relatively low, suggesting a more precise estimation of the coefficient.

The t value associated with audit committee meetings is -0.68, and the probability value is 0.512. With a t value close to zero and a probability value greater than 0.05, the study fails to reject the null hypothesis that the coefficient is equal to zero. This indicates that the relationship between audit committee meetings and Tobin's Q is not statistically significant at the conventional levels.

In the regression analysis, the variable of audit committee financial expertise yields a coefficient of 1.173. This coefficient suggests that, holding other variables constant, a one-unit increase in the level of financial expertise within the audit committee is associated with an increase of 1.173 units in Tobin's Q. This positive coefficient implies a strong positive relationship between the presence of financial expertise in the audit committee and firm value, indicating that firms with more financially competent audit committees tend to have higher firm valuations.

The standard error of 0.186 provides insight into the precision of the coefficient estimate for audit committee financial expertise. In this case, the relatively low standard error suggests a precise estimation of the coefficient. The t value associated with audit committee financial expertise is 6.31, and the probability value is 0.000. With a high t value and a probability value of 0.000 (indicating significance at any conventional level), we reject the null hypothesis that the coefficient is equal to zero. This indicates that the relationship between audit committee financial expertise and Tobin's Q is highly statistically significant.

The regression results regarding firm size suggest a potential positive relationship with firm value, but this relationship is not statistically significant. The coefficient estimate lacks robust statistical support, as indicated by the high probability value. This suggests that firm size may not have a significant impact on firm valuation as measured by Tobin's Q in this analysis. Additional investigation or alternative measures of firm size may be warranted to further explore its relationship with firm value.

The variable of leverage yields a coefficient of -0.006. This coefficient suggests that, holding other variables constant, a one-unit increase in leverage (the ratio of total debt to total equity) is associated with a decrease of 0.006 units in Tobin's Q. This negative coefficient implies a potential negative relationship between leverage and firm value, indicating that higher levels of leverage may be associated with lower firm valuations. The t value associated with leverage is -0.07, and the probability value is 0.958. With a t value close to zero and a probability value greater than 0.05, the study fails to reject the null hypothesis that the coefficient is equal to zero. This indicates that the relationship between leverage and Tobin's Q is not statistically significant at the conventional levels.

The regression results regarding leverage suggest a potential negative relationship with firm value, but this relationship is not statistically significant. The coefficient estimate lacks robust statistical support, as indicated by the high probability value. This suggests that leverage may not have a significant impact on firm valuation as measured by Tobin's Q in this analysis. Further investigation or alternative measures of leverage may be necessary to explore its relationship with firm value.

Regression Analysis (Model 2)

The regression analysis in model 2 tests the moderating effect of board independence on the relationship between audit committee characteristics and market value (Tobin's Q). Table4 below presents the result of model 2.

Table 4: Regression Analysis Model 2

Variable	Coefficient	Standard Error	T Value	Probability
Constant	-2.933	0.623	-4.71	0.001
ACS	0.253	0.061	4.12	0.001
ACI	1.678	0.579	2.90	0.013
ACM	-0.097	0.057	-1.70	0.115
ACE	1.060	0.314	3.38	0.005
BI	6.041	0.517	11.68	0.000
ACS*BI	-0.609	0.091	-6.67	0.000
ACI*BI	-3.654	0.463	-7.89	0.000
ACM*BI	0.141	0.021	6.81	0.000
ACE*BI	-1.309	0.779	-1.68	0.119
FSZ	0.190	0.091	2.08	0.060
LEV	0.022	0.062	0.36	0.729
R-Squared	0.6284			
F Stat	6308.23			
Prob.	0.000			

Source: Stata Output, 2025

The result above provides valuable insights into the relationship between Tobin's Q, a measure of firm value, and several key variables related to audit committee characteristics and board independence. Starting with audit committee size, the coefficient of 0.253 indicates that, holding other variables constant, a one-unit increase in audit committee size is associated with an increase of 0.253 units in Tobin's Q. This positive coefficient suggests that larger audit committees tend to be associated with higher firm valuation. The high t value of 4.12 and the probability value of 0.000 indicate that this relationship is statistically significant, suggesting that the impact of audit committee size on firm value is unlikely to be due to random chance.

Moving to audit committee independence, the coefficient of 1.678 suggests that higher levels of audit committee independence are associated with an increase of 1.678 units in Tobin's Q. This positive coefficient implies that firms with more independent audit committees tend to have higher firm valuations. The t value of 2.90 and the probability value of 0.013 indicate that this relationship is statistically significant, albeit to a lesser degree than audit committee size.

Audit committee meetings, the coefficient of -0.097 suggests that more frequent audit committee meetings are associated with a decrease of 0.097 units in Tobin's Q. This negative coefficient implies a potential negative relationship between the frequency of audit committee meetings and firm value, although the relationship is weak. The t value of -1.70 and the probability value of 0.115 indicate that this relationship is not statistically significant at the conventional levels.

Audit committee financial expertise, the coefficient of 1.060 suggests that firms with audit committees comprising members possessing financial expertise tend to have higher Tobin's Q values, with a positive impact of 1.060 units. The high t value of 3.38 and the probability value of 0.005 indicate that this relationship is statistically significant, highlighting the importance of financial acumen within the audit committee for firm valuation.

Finally, examining board independence, the coefficient of 6.041 suggests that a higher ratio of non-executive directors on the board is associated with a substantial increase of 6.041 units in Tobin's Q. This strong positive coefficient indicates a significant positive relationship between board independence and firm value. The very high t value of 11.68 and the probability value of 0.000 confirm that this relationship is highly statistically significant.

The regression results underscore the importance of audit committee characteristics and board independence in influencing firm value. Larger audit committees, greater audit committee independence, financial expertise within the audit committee, and a higher ratio of non-executive directors on the board are all associated with higher firm valuations, highlighting their crucial role in corporate governance and investor perceptions of firm value.

The results of the regression analysis reveal significant interactions between audit committee characteristics and board independence, providing insights into how these factors jointly influence firm value. Starting with the interaction between audit committee size and board independence, the coefficient of -0.609 indicates that the combined effect of larger audit committees and a higher ratio of non-executive directors on the board is associated with a decrease of 0.609 units in Tobin's Q. This negative coefficient suggests that while larger audit committees and more non-executive directors on the board individually contribute to higher firm valuations, their combined effect is negative. The high t value of -6.67 and the probability value of 0.000 indicate that this interaction is highly statistically significant.

The interaction between audit committee independence and board independence, the coefficient of -3.654 suggests that the joint effect of greater audit committee independence and a higher ratio of non-executive directors on the board is associated with a substantial decrease of 3.654 units in Tobin's Q. This negative coefficient implies that while both independent audit committees and a higher proportion of non-executive directors on the board individually contribute to higher firm valuations, their combined effect is negative. The very high t value of -7.89 and the probability value of 0.000 confirm that this interaction is highly statistically significant.

The interaction between audit committee meetings and board independence, the coefficient of 0.141 indicates that the combined effect of more frequent audit committee meetings and a higher ratio of non-executive directors on the board is associated with an increase of 0.141 units in Tobin's Q. This positive coefficient suggests that while more audit committee meetings and a higher proportion of non-executive directors on the board individually contribute to higher firm valuations, their combined effect is positive. The high t value of 6.89 and the probability value of 0.000 indicate that this interaction is highly statistically significant.

Finally, examining the interaction between audit committee financial expertise and board independence, the coefficient of -1.309 suggests that the joint effect of financial expertise within the audit committee and a higher ratio of non-executive directors on the board is associated with a decrease of 1.309 units in Tobin's Q. This negative coefficient implies that while financial expertise within the audit committee and a higher proportion of non-executive directors on the board individually contribute to higher firm valuations, their combined effect is negative. The t value of -1.68 and the probability value of 0.119 indicate that this interaction is not statistically significant at the conventional levels.

CONCLUSION AND RECOMMENDATIONS

This study investigated the moderating effect of board independence on the relationship between audit committee characteristics and firm value of listed deposit money banks in Nigeria. Based on the regression analysis, the study concludes as follows:

Although the frequency of audit committee meetings may not directly correlate with firm value in certain instances, it's crucial to recognize that the effectiveness of audit committee activities extends beyond mere meeting attendance. The quality of discussions, the depth of analysis, and the proactive approach to addressing firm value issues are pivotal factors that contribute to the overall impact of audit committees on firm value. Therefore, while meeting frequency alone may not be a significant determinant of firm value, it should be considered alongside other qualitative aspects of audit committee functioning to fully understand its implications for organizational performance and investor confidence.

The significant positive effect of audit committee financial expertise on firm value underscores the critical role that specialized knowledge and skills play in enhancing corporate governance practices and ultimately driving organizational performance. This finding highlights the importance of having audit committee members with robust financial backgrounds and expertise in navigating complex financial landscapes. Their ability to provide informed oversight, effectively evaluate financial information, and make strategic decisions fosters greater transparency, accountability, and investor trust.

The significant positive moderating effect of board independence on the relationship between audit committee meetings and firm value highlights the importance of a well-structured and diverse board in enhancing the impact of audit committee activities on firm performance. It suggests that when boards are composed of individuals with varied expertise, experiences, and perspectives, they can provide better oversight and support to audit committees, thereby amplifying the positive influence of audit committee meetings on firm value.

i. The regulators of the Nigerian banks should emphasize the importance of having a diverse and robust audit committee that can effectively fulfill its oversight responsibilities. By including a greater number of members with diverse expertise and perspectives, organizations can benefit from more thorough and rigorous monitoring of financial reporting practices, which in turn instills greater confidence among investors and stakeholders.

ii. The Nigerian deposit money banks should prioritize having significant independent directors on their audit committee. This is because, prioritizing the independence of audit committees emerges as a critical component of sound corporate governance practices, essential for enhancing firm value in today's dynamic business landscape.

iii. Regulatory bodies and banking institutions should establish clear criteria for identifying candidates with the requisite financial knowledge, skills, and experience to serve effectively on audit committees. Additionally, ongoing professional development programs should be implemented to ensure that audit committee members stay abreast of emerging trends, regulations, and best practices in finance and accounting.

iv. Securities and Exchange Commission should peg audit committee meeting not to exceed four times during a financial year. There should be disclosure requirement on meeting agendas, number of directors in attendance, and their contribution to the committees' deliberation.

v. The regulators of Nigerian banks should emphasize the critical role of board diversity and independence in corporate governance effectiveness, insisting on the need for organizations to focus on building boards with members who possess complementary skills and knowledge, fostering an environment conducive to robust decision-making and value creation. The stakeholders of the Nigerian deposit money banks should focus on factors beyond board independence, such as the specific skills and competencies of audit committee members, to effectively leverage financial expertise for maximizing firm value.

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