



Audit Quality and Failure Risks of Listed Deposit Money Banks In Nigeria

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Abstract

The stability of the banking sector is fundamental to economic growth and financial system resilience, particularly in developing economies such as Nigeria. However, and sadly enough, global, recent and recurring failure risks and collapses of banks which have been blamed on poor external audit qualities, are counter-productive to national economic development. Therefore, the broad objective of this study was to study the effect of audit quality on failure risks of listed deposit money banks in Nigeria between the period 2009 and 2024. This study adopted both descriptive and *ex-post facto* research designs. Using secondary data extracted from audited financial reports of 11 censored (from a population of 11) deposit money banks listed on the Nigerian Exchange Group, (NGX), and analyzing one hundred and seventy-six firm year observations using regression with Driscoll–Kraay standard errors analysis technique, the findings revealed that audit firm size (AUFS) significantly improve bank Z score, [coef. = 0.638 (p-value = 0.005)], audit report timeliness (ARTIME) significantly reduces bank Z score [coef. = -0.400 (p-value = audit committee diligence (ACDI) revealed a positive insignificant effect respectively on Z score of listed deposit money banks in Nigeria during the period under consideration. Based on the above findings, it was concluded that audit quality in the Nigerian banking sector is not uniformly effective, rather, its effect on bank failure risks is selective, with only specific audit mechanisms demonstrating the capacity to significantly enhance financial solvency, thereby suggesting that the effectiveness of external audit as a safeguard against bank failure risks depend not merely on its presence, but likely on factors such as depth, credibility, and functional execution of its key components. this study concluded that audit. Consequently, this study recommended among others, that listed deposit money banks in Nigeria, alongside regulators and external auditors, should prioritize substantive governance quality, auditor competence and independence, rigorous audit execution, timely financial reporting, risk-sensitive audit remuneration, coordinated assurance mechanisms, and proactive internal control systems over mere procedural compliance, in order to strengthen transparency, reinforce market confidence, and enhance long term financial stability in line with Agency theory.

Keywords:

Audit Quality; Failure Risks of Listed Deposit Money Banks; Bank Z-Score; Agency Theory.

1.0 INTRODUCTION

The stability of the banking sector is central to the effective functioning of any modern economy, given banks' pivotal role in financial intermediation, payment systems, credit allocation, and economic development. According to Stephen and Ighosewe (2025), the banking industry occupies a strategic position in mobilizing savings, financing private and public sector investments, and implementing monetary policy. Consequently, the failure risks of banks pose severe systemic risks, including loss of depositor confidence, disruption of credit markets, fiscal costs arising from bailouts, and broader macroeconomic instability (Ching *et al.*, 2023). Despite numerous regulatory reforms and supervisory interventions by the Central Bank of Nigeria (CBN), the Nigerian banking sector has continued to experience episodes of financial distress and bank failure risks, raising concerns about the effectiveness of existing governance and assurance mechanisms.

Historically, Nigeria has witnessed several waves of bank risk failures. The post-Structural Adjustment Programme (SAP) era of the 1990s was characterized by widespread bank distress, leading to the revocation of licenses of many commercial and merchant banks (Chuma & Yaha, 2024). Similarly, the banking consolidation exercise of 2004–2005, which increased minimum capital requirements, was followed by the 2009 banking crisis that exposed deep-seated weaknesses in corporate governance, risk management practices, insider abuse, and financial reporting quality. The failure and eventual takeover or liquidation of several banks during this period—despite the issuance of unmodified audit opinions prior to their collapse highlighted serious concerns about the credibility of audited financial statements and the effectiveness of external audit as an early warning mechanism for bank failure (Ezeani *et al.*, 2024).

Audit quality represents one of the most critical external governance mechanisms designed to enhance credibility, transparency, and reliability of financial reporting. High-quality audits are expected to constrain managerial opportunism, reduce information asymmetry, and improve the accuracy of financial statements, thereby enabling stakeholders to assess banks' financial health more effectively (Emovon & Ogbonmwan, 2024). High audit quality is expected to limit earnings manipulation, ensure timely loss recognition, and improve transparency in banks' financial statements, thereby reducing information asymmetry between bank management and stakeholders. Given the opacity and complexity of banking operations, the effectiveness of audit quality mechanisms becomes particularly crucial in detecting distress risks before it escalates into systemic failure. Weak audit quality on the other hand, may allow the concealment of financial distress, delayed loss recognition, earnings manipulation, and excessive risk-taking, all of which increase the likelihood of bank failure risks.

1.2 Statement of the problem

The stability of the banking sector is fundamental to economic growth and financial system resilience, particularly in developing economies such as Nigeria where banks dominate financial intermediation. However, and sadly enough, global, recent and recurring failure risks and collapses of banks which have been blamed on poor external audit qualities, are counter-productive to national economic developments. The current and repeated failures of listed deposit money banks in Nigeria, a developing economy, have resulted in substantial economic losses, loss of depositors' confidence, erosion of shareholders' value, and increased fiscal burdens by the affected governments. Episodes such as the 2009 banking crisis, the failure of Skye Bank in 2018, and the revocation of Heritage Bank's license 2024, the defunct Afribank

and Oceanic banks, among others, raised critical questions about whether audited financial statements adequately reflect the true and fair view of financial conditions of deposit money banks in Nigerian.

A recurring feature of listed deposit money banks' failure risks in Nigeria is that many these distressed banks had been issued unmodified audit opinions prior to their collapse. This phenomenon raises fundamental concerns about the effectiveness of audit quality as an external monitoring and assurance mechanism in detecting financial distress and signaling heightened risk of failure. Although audit quality is widely regarded as a key determinant of financial reporting credibility and corporate stability, empirical evidence on its relationship with bank failure risk in Nigeria remains limited (Chuma & Yaha, 2024; Alzoubi & Selamat, 2022).

Numerous factors have been blamed on the inability of external audit functions to minimize the rate of failure risks of deposit money banks in Nigeria. Prominent among these factors are (a) unscrupulous conduct of managers (b) meeting analyst expectations in order to raise share prices (c) reduction of tax burdens (e) poor external audit quality and failure of external audit functions to stop bank failures (Egbunike, et al., 2023; Kamau, et al., 2022; Gandia & Huguet, 2021;

Al-taie et al., 2017 and Ndubuisi & Ezechukwu, 2017). However, the contextual causes of continued failure risks of listed deposit money banks in Nigeria are poor external audit quality and failure of the external audit functions to stop failures of listed deposit money banks in Nigeria (Egbunike, 2023 et al.; Kamau, et al., 2022; Gandia & Huguet, 2021; Al-taie, 2017 and Ndubuisi & Ezechukwu, 2017).

2.0 REVIEW OF RELATED LITERATURE

2.1. Conceptual review

2.1.1 Audit firm size

Audit firm size is a key attribute of audit quality that reflects the scale, resources, expertise, and reputation of an external auditor. In the auditing literature, firm size has been widely recognized as a critical determinant of audit effectiveness because larger firms are expected to have more comprehensive audit methodologies, specialized industry knowledge, and rigorous quality control systems (Alzoubi, 2022). The premise is that audit firms with extensive global networks and professional capacity is be better positioned to detect and report material misstatements in clients' financial statements.

From the foregoing, it is the opinion of this author that independent, effective and statutory auditing is indispensable for efficient markets and one of the prerequisites for quality and effective external audit services is auditing is audit firm size. Big 4 auditing firms due to size, professional quality and reputation could be more competent and effective than non-big 4 accounting firms.

2.1.2 Audit report timeliness

Audit report timeliness constitutes a critical dimension of audit quality, reflecting the speed with which audited financial statements are finalized and released following the financial year-end. Conceptually, it captures the efficiency and responsiveness of the audit process, and is grounded in both Signaling Theory and Information Asymmetry Theory, which posit that

timely disclosure enhances transparency and reduces uncertainty among stakeholders (Habib, Bhuiyan, Huang, & Miah, 2019; Knechel & Sharma, 2012). In the context of financial reporting, the timeliness of audit reporting serves as an important signal of the reliability and credibility of financial information, as delays may indicate underlying reporting complexities, audit disputes, or heightened risk conditions within the firm. This is particularly significant in the banking sector, where opaque financial structures, high leverage, and regulatory sensitivity demand prompt and accurate information dissemination (Saha & Roy, 2022; Thuneibat, Issa, & Baker, 2024).

In summary, the choice of audit report timeliness as a proxy for audit quality is justified both theoretically and empirically, as it directly captures the efficiency of the audit process and its ability to provide timely, decision-relevant information. Audit report timeliness provides a direct indication of how effectively the audit process responds to reporting demands, making it a critical indicator in assessing the role of audit quality in mitigating bank failure risk.

2.1.3 Audit committee diligence

Audit committee diligence refers to how actively, carefully, and responsibly an audit committee carries out its oversight role over a company's financial reporting, auditing, and internal control processes. An audit committee is considered diligent when it devotes sufficient time, attention, and effort to its statutory and governance responsibilities rather than performing them in a ceremonial or symbolic manner (Stephen & Ighosewe, 2025). Academically and in corporate governance literature, audit committee diligence is commonly reflected in frequency of meetings. A diligent audit committee meets regularly (often more than the minimum required) to review financial statements, discuss audit issues, and address emerging risks (Tande et al., 2024).

Frequent meetings enhance timely detection of financial reporting problems and control weaknesses.

Based on the above, this study opined that when management knows that the audit committee is actively engaged and conducting regular reviews, they are more likely to adhere to ethical standards and best practices to avoid scrutiny and maintain credibility. Frequency of audit firm meetings can be measured by how many audit committee meetings held within one year.

2.2 Bank failure risks

Bank failure risks refer to the likelihood that a banking institution will become financially distressed to the point where it can no longer meet its obligations to depositors, creditors, and other stakeholders. A bank is generally considered to have failed when it becomes insolvent, experiences persistent illiquidity, or has its operating license withdrawn by regulatory authorities due to unsound financial conditions (Nnadi et al., 2021). Bank failure risk is therefore associated with weaknesses in asset quality, capital adequacy, liquidity management, and overall risk governance. In the Nigerian context, bank failure has historically been linked to systemic fragilities within the financial sector, including poor regulatory compliance, weak corporate governance, and macroeconomic instability (Sanusi, 2010).

2.2.1 Bank Z-Score

The Bank Z score (distance-to-default measure) has emerged as one of the most widely applied quantitative frameworks for assessing bank failure, particularly in modern banking research where financial distress is gradual, complex, and often obscured by regulatory structures.

Unlike the Altman Z-score, which was originally developed by Altman (1968) for non-finance firms, the Bank Z score is specifically designed to reflect the unique financial architecture of banking institutions. It integrates key dimensions of bank performance to include profitability, capitalization, and earnings volatility, into a single composite index that estimates the number of standard deviations a bank's returns can decline before exhausting its capital base (Boyd & Graham, 1986). This formulation provides a probabilistic and forward-looking assessment of insolvency risk, thereby offering a more theoretically consistent and institution-specific measure of financial fragility within the banking sector. The determination of the Bank Z score is typically expressed as:

$$Z = \frac{ROA + (Equity/Total\ Assets)}{\sigma(ROA)}$$

where return on assets reflects profitability, the equity-to-total assets ratio captures capitalization strength, and the standard deviation of return on assets represents earnings volatility. This formulation directly aligns with the risk-bearing capacity of banks, as it measures how far a bank is from insolvency in terms of its ability to absorb losses relative to the variability of its earnings.

Hesse & Čihák, (2007) noted that unlike the traditional Altman framework, which relies on variables such as sales and working capital that are less meaningful in banking contexts, the Bank Z score employs ratios that are inherently consistent with banking operations and regulatory capital structures. As such, it avoids the conceptual and empirical limitations associated with adapting non-financial distress models to financial institutions. In practical terms, the Bank Z score is interpreted as a measure of “distance to default,” where a higher score signifies greater resilience to shocks in asset quality, liquidity pressures, or macroeconomic disturbances, while a lower score indicates heightened exposure to failure risk. This makes it particularly valuable as an early warning tool for regulators, investors, and researchers interested in monitoring financial stability within the banking system.

2.3 Theoretical framework

2.3.1 Agency theory

Agency Theory was first propounded independently by Stephen Ross (1973) and Barry Mitnick (1973), but majorly exposed within the literature by Jensen and Meckling (1976). The theory posits that a contractual relationship exists between a principal, who delegates decision-making authority, and an agent, who is entrusted with managing resources on behalf of the principal. Ross (1973) argued that the central problem in this relationship arises from information asymmetry, where the agent possesses superior information about actions and outcomes compared to the principal. Mitnick (1973) further contend that agents may pursue self-interested objectives that conflict with the goals of principals, particularly when monitoring mechanisms are weak or ineffective. As a result, agency costs such as monitoring costs, bonding costs, and residual losses emerge, making external control mechanisms necessary to align the interests of both parties.

Agency Theory was the anchoring theory for this study because it provided the most suitable explanation for the role of audit quality in mitigating agency problems within the banking sector. Listed deposit money banks were characterized by complex ownership and control structures, where shareholders and depositors (principals) rely on managers (agents) to prudently manage funds and disclose accurate financial information. However, managers may have incentives to engage in earnings manipulation, excessive risk-taking, or concealment of

financial distress to protect personal interests such as job security, compensation, or reputation. High audit quality, reflected through audit firm size, audit report timeliness, audit committee diligence, among others, serve as an external monitoring mechanism designed to reduce information asymmetry and constrain opportunistic managerial behavior. This theoretical positioning aligned directly with the study's objective of examining the effect of audit quality on the listed deposit money banks especially in Nigeria.

2.4 Empirical review of literature

2.4.1 Empirical review of literature on audit firm size and Bank Z-Score

Adenle *et al.* (2025) conducted a study titled "Audit Quality and Bank Failure in Nigeria: Evidence from Deposit Money Banks." The objective of the study was to examine the effect of audit quality attributes, including audit firm size and auditor independence, on bank failure. The study adopted an ex-post facto research design and utilized panel data from listed deposit money banks between 2012 and 2023. Logistic regression analysis was employed to estimate failure probability. The research gap identified is that the study measured bank failure using regulatory intervention status rather than a continuous stability indicator such as the Z-score. The findings revealed that banks audited by large audit firms exhibited significantly lower likelihood of failure. The study concluded that audit firm size plays a stabilizing role in the banking sector and recommended stricter regulatory encouragement for engagement of large audit firms. However, the present study will improve on this by adopting the Z-score to capture gradations in failure risk rather than binary failure outcomes.

Ayeni-Agbaje and Oluyori (2024) investigated audit quality and financial performance of publicly listed deposit money banks in Nigeria using panel data from 2014–2023 with pooled least squares. The study's objective was to examine the influence of auditor independence, audit committee size, and audit firm size on bank performance (proxied by return on assets). The methodology was an ex-post facto research design using secondary data and inferential statistics. A research gap is that while the study included audit firm size, it focused on financial performance rather than bank failure risk (Z-score). The findings revealed that audit firm size had a positive and significant effect on financial performance, unlike auditor independence which was negative and insignificant. The study concluded that audit firm size is a vital factor in audit quality affecting performance and recommended careful selection of larger audit firms. However, because financial performance is not the same as survival or failure risk, this study will extend empirical inquiry by linking audit firm size specifically to Z-score (failure risk) rather than ROA.

Al-Hroot *et al.* (2024) examined the impact of audit firm size on bank insolvency risk and financial stability in emerging economies. The objective of the study was to assess whether larger audit firms mitigate excessive risk-taking and failure risk. The study adopted panel data regression and found that banks audited by large audit firms exhibited significantly higher stability and lower insolvency risk. However, the study did not account for country-specific regulatory frameworks and excluded Nigeria from its sample. The study concluded that audit firm size is a critical determinant of bank stability and recommended further country-specific studies. The present study will fill this gap by focusing on Nigerian deposit money banks.

2.4.2 Empirical review of literature on audit report timeliness and Bank Z-Score

Sudradjat, Ishak, and Nugraha (2023) examined the effect of audit committee characteristics, public accounting firm reputation, and the COVID-19 crisis on audit report lag among banks listed on the Indonesia Stock Exchange (IDX) using annual panel data covering the 2014–2021 period in Indonesia. The study focused on the banking sector and utilized 320 bank-year observations obtained from 40 banks selected through purposive sampling from a population of banks consistently listed on the IDX during the study period. The study adopted a quantitative research design based on panel data analysis. Data were analyzed using panel data regression techniques, specifically the Random Effect Model (REM), after conducting Chow, Hausman, and Lagrange Multiplier tests to determine the most suitable estimation model. The findings revealed that the frequency of audit committee meetings significantly and negatively affected audit report lag. The reputation of public accounting firms also had a significant negative effect on audit report lag. Conversely, the COVID-19 crisis exerted a significant positive effect on audit report lag. However, the study found that audit committee size and the proportion of female audit committee members had no significant effect on audit report lag. The present study will fill this gap by focusing on Nigerian deposit money banks and using bank Z-score as the failure proxy.

Ogbodo and Jiagbogu (2021) examined the effect of determinants of financial reporting timeliness on reporting timeliness among deposit money banks quoted on the Nigerian Exchange Group. The study specifically investigated the effect of bank age and audit firm type on the timeliness of financial reporting within the Nigerian banking industry. The study covered 16 banks resulting to 134 firm-year observations. *ex-post facto* research design was adopted, while secondary data were extracted from the sampled banks' annual reports and accounts. Hypotheses were tested using regression analysis. Findings from the regression analysis revealed that bank age had a significant positive effect on the timeliness of financial reporting. The study also found that audit firm type significantly influenced the timeliness. The present study will extend this work by employing Z-score as a comprehensive insolvency risk proxy.

2.4.3 Empirical review of literature on audit committee diligence and Bank Z-Score

Alaldin et al. (2025) investigated the impact of audit committee characteristics on going concern and how the relationship is moderated by audit fees among quoted firms in Nigeria. The study covers ten years from 2012 to 2023. Eleven (11) listed industrial goods companies were selected out of the total population of 13 listed industrial goods firms. The pooled logistic regression was adopted to analyze the data sourced from the annual reports of listed firms. The findings of the study revealed that audit committee diligence exhibit a positive and significant relationship with going concern. However, leverage has a positive and insignificant relationship with going concern status. When fees were introduced as a moderating variable, the findings showed that audit committee diligence have a negative and significant relationship at a 1% significance level. This implies that the negative relationship is more noticeable when a firm pays high audit fees.

Magaji et al. (2025) examined audit quality, governance mechanism and going concern opinion of listed deposit money banks in Nigeria for the period of ten years. The population of the study consisted of all the 13 listed deposit money banks in Nigeria as at 31st December, 2024. The study adopted expo-factor and correlation research designs, and multiple regression was employed as technique of data analysis. The findings of the study revealed that audit

independence, audit committee diligence and board independence have significant negative impact on going concern status of quoted Nigerian banks while auditor size and audit tenure have insignificant influence on going concern status of listed deposit money banks in Nigeria.

Lukeman et al. (2024) examined the effect of audit quality on likelihood of bankruptcy of listed manufacturing companies in Indonesia. Audit quality was measured by two different proxies; i.e., audit committee diligence and industry specialist auditors, while likelihood of bankruptcy was measured by Ohlson model. Meanwhile, leverage, firm size, and operating cash flow served as control variables. The sample involved in this study comprised of manufacturing companies listed on the Indonesia Stock Exchange; covering 420 firm-year observations from the fiscal years 2010 to 2022. This study applied a multiple regression analysis in estimating the relationship between the audit quality and likelihood of bankruptcy. As hypothesized in this study, the results showed that audit quality can help in detecting the likelihood of bankruptcy of the studied firms. The findings advance the current knowledge pertaining to audit quality and likelihood of bankruptcy relationship in the context of emerging economies such Indonesia.

3.0 METHODOLOGY

3.1 Research design

This study adopted the *ex post facto* research design. In this study, *ex post facto* design was appropriate because the study relied exclusively on secondary data obtained from already published financial statements and audit reports of listed deposit money banks in Nigeria. The researcher had no intentions nor manipulated the vocal variables of interest namely, audit quality attributes and bank failure risks, as they have already occurred over the period under investigation 2009 to 2024.

3.2 Sources of data

The study relied exclusively on secondary data obtained from annual reports and published financial statements of listed deposit money banks that were retrieved from Nigerian Exchange Group (NGX) database, Central Bank of Nigeria (CBN) Statistical Bulletin, for the sixteen (16) year period, 2009 to 2024. The data for this study were collected through a rigorous manual (hand-picking) process from secondary sources, specifically the audited annual reports and financial statements of deposit money banks listed on the Nigerian Exchange Group over the period 2009 to 2024, accessed via official bank websites and the NGX disclosure portal to ensure authenticity and reliability.

Information used to compute bank failure risk, proxied by the Bank Z score, was derived from key financial indicators including return on assets, equity-to-total assets ratio, and earnings volatility, while audit quality variables, comprising audit firm size, audit report timeliness, audit tenure, audit fee, joint audit, audit committee diligence, and audit opinion, were systematically extracted from corporate governance disclosures, audit reports, and notes to the accounts. To enhance methodological rigor, all variables were measured in strict accordance with their operational definitions using a standardized data extraction template, complemented by cross-validation, independent verification, and ensure consistency across observations. These procedures, consistent with established archival research standards, strengthen the accuracy, replicability, and internal validity of the dataset, thereby providing a robust empirical foundation for the study's econometric analysis (Saunders, Lewis, & Thornhill, 2019; Creswell, 2014).

3.3 Population of the study

The target population comprised of all listed deposit money banks in Nigeria. These banks were required by regulatory frameworks to publish audited financial statements and are subject to statutory external audit requirements. The population ensured comprehensive coverage of banks that have a public audit trail for the period under study 2009 to 2024.

3.4. Sample size and sampling techniques

The size of the sample for this study was eleven (11) listed deposit money banks that were listed on the Nigerian Exchange Group during the period 2009 to 2024. This was justified because the population size was manageable and all required information for the study were readily available for retrieval. Given the relatively small and well-defined population of eleven (11) deposit money banks listed on the Nigerian Exchange Group, the adoption of a census sampling approach was both methodologically sound and empirically justified. In research contexts Saunders, Lewis, & Thornhill, (2019), stated that where the population size is limited and accessible, census sampling is preferred because it eliminates sampling error and ensures complete coverage of all relevant units, thereby enhancing the validity and generalizability of findings within the defined population (Creswell, 2014).

Unlike probabilistic sampling techniques, which are designed to infer characteristics of a population from a subset, census approaches allow researchers to directly observe the full population, reducing concerns related to representativeness bias and improving the robustness of statistical inference (Etikan & Bala, 2017). In the context of this study, where each listed bank plays a critical and distinct role within the Nigerian financial system, excluding any unit could lead to incomplete or biased conclusions. Therefore, the use of census sampling strengthened the analytical rigor of the study by ensuring that the findings reflect the true characteristics of the entire population of listed deposit money banks in Nigeria.

3.5 Data analysis techniques

In this study, descriptive statistics, data normality test, and correlation analysis were employed as basic pre-regression analysis while Variance inflation factor test (test for multicollinearity) and test for Heteroscedasticity of Residua were conducted as formal post regression diagnostic test. Individual statistical significance test (T test and Z test) and overall statistical significance test (Fisher test and Wald test) for fixed and random effect models were determined respectively. All analyses were carried out at 5% level of significance using STATA 17 statistics/econometric software.

3.6 Variable definitions and measurements

The model that was used in this study was adapted from of Hidayah and Bahri, (2025), but was modified to fit the objectives of this study which primarily focused on audit quality and failure risks of listed deposit money banks in Nigeria between 2009 and 2024. Definitions and measurements of variables are tabulated below:

Operationalization of variables

Table 3.1: Measurement of variables

S/N	Variables (Independent)	Measurement	Source	A Priori Sign
1	Audit Firm Size (AUFS)	Dummy variable: '1' = Big Four, '0' = Non-Big Four	DeAngelo (1981)	+
2	Audit Report Timeliness (ARTIME)	difference in the number of days between company year end and day which the external auditor signed off the report.	Sobhan, Mim, & Rahman, (2025).	+
3	Audit committee diligence (AUCD)	number of audit committee meetings held per year	Agyei-Mensah and Yeboah. (2024)	+
S/N	Variables (Dependent)	Measurement	Source	A Priori Sign
1.	Bank Failure Risk (Z-score)	ROA Plus Capital Adequacy Ratio Divided by Standard Deviation of ROA	Laeven, & Levine, (2009).	

Source: Researcher's compilation (2026)

3.7 Model specification

The model that was used in this study was adapted from of Hidayah and Bahri, (2025), but was modified to fit the objectives of this study and presented below as;

$$\text{Bank Z-score} = f(\text{Audit firm size, audit report timeliness, and audit committee diligence}) \quad \text{Equation (1)}$$

Econometric Form

$$\text{BZSCORE}_{it} = \beta_0 + \beta_1 \text{AUFS}_{it} + \beta_2 \text{ARTIME}_{it} + \beta_3 \text{ACDI}_{it} + \varepsilon_{it} \dots\dots\dots \quad \text{Equation (2)}$$

Where:

BZSCORE _{it}	=	Bank Z score (bank failure risk for bank at time)
AUFS	=	Audit firm size
ARTIME	=	Audit report timeliness
I	=	Cross section
t	=	Time frame
β ₀	=	Intercept term
ε	=	Error term

3.8 Decision rule

The study adopted a 5% level of significance for hypothesis testing. A p-value ≤ 0.05 led the to rejection of the null hypothesis (H_0), indicating that the independent variable had a significant effect on the dependent variable. Conversely, p-value > 0.05 led to acceptance of the null hypothesis. Additionally, regression coefficients were used to determine the direction and magnitude of relationships between audit quality proxies and Bank Z-Score.

4.0 DATA PRESENTATION AND RESULTS/ANALYSIS AND DISCUSSION

4.1 Descriptive statistics.

Table 4.1 provides a summary of the descriptive statistical analysis results.

Table 4.1 Summary of descriptive statistics:

Variable	Obs	Mean	Std. dev.	Min	Max
BZSCORE	176	2.15299	1.612107	-2.55524	5.752249
AUFS	176	.8863636	.3182746	0	1
ARTIME	176	85.92045	38.5643	20	354
ACDI	176	4.471591	1.213867	1	11

Source: Author's Computation (2026) (Stata Version 17)

Descriptive statistics was utilized in this study to present a concise summary of the dataset, providing useful insight into the central tendency, variability, and overall distributional patterns of the variables examined. Fundamental statistical indicators including the mean, standard deviation, minimum, and maximum values were calculated to reveal the average levels, degree of dispersion, and range within the data. Field, (2013) and Pallant, (2020) noted that this initial analytical step is crucial for appreciating the structure of the dataset, uncovering potential outliers, and identifying issues such as skewness or irregularities that may influence subsequent regression results. Through the assessment of these statistics, the researcher is better positioned to understand the individual behavior of each variable prior to exploring their interdependencies. This study examined the descriptive statistics for the explanatory and outcome variables of interest. Each variable was examined based on its mean, standard deviation and maximum and minimum values as presented in Table 4.1.

The descriptive statistics result provided in table 4.1, provided a revealing snapshot of both the stability profile and audit quality dynamics of deposit money banks listed on the Nigerian Exchange Group over the 200 to 2024 period. The mean value of bank failure risk (BZSCORE, 2.15299) suggests that, on average, Nigerian banks operate with a moderate buffer against failure risk, consistent with a relatively stable but not risk-immune banking environment. However, the relatively high standard deviation (1.612107), combined with a minimum value of -2.55524 , signals that some banks experienced episodes of severe financial distress, even approaching insolvency conditions. Such dispersion is not trivial, it reflects the structural fragility embedded within the Nigerian banking system, especially during post-crisis adjustments following the 2009 banking reforms and subsequent macroeconomic shocks. The maximum value (5.752249) further indicates that while some banks maintained strong solvency positions, the gap between the strongest and weakest bank is wide, suggesting heterogeneity in risk management efficiency and capital adequacy practices across the sector.

For audit quality proxies, the distribution of AUFS (mean = 0.886) indicates a strong dominance of Big Four audit firms among Nigerian listed banks, implying a high perceived need for audit credibility in a highly regulated industry. The variable Audit Report Timeliness (ARTIME) shows a mean delay of 85.92 days, with a very high standard deviation (38.56) and an extreme maximum of 354 days, pointing to significant inconsistencies in reporting speed. In reality, prolonged audit lag may reflect underlying financial reporting complexities or disputes, which are themselves signals of potential distress risks. Meanwhile, Audit Committee Diligence (ACDI) averages at 4.47 meetings annually, which appears reasonable on the surface, but the wide range (1 to 11 meetings) indicates inconsistent oversight intensity across banks.

4.2 Normality test

Table 4.2 **Data normality test result**

Variable	Obs	W	V	z	Prob>z
BZSCORE	176	0.98541	1.948	1.524	0.06374
AUFS	176	0.92842	9.558	5.160	0.00000
ARTIME	176	0.70067	39.967	8.431	0.00000
ACDI	176	0.94896	6.815	4.387	0.00001

Source: Author's Computation (2026) (Stata Version 17)

Shapiro–Wilk normality test procedure was utilized in this study to assess whether the data series follow a normal distribution by examining deviations in skewness and kurtosis relative to a theoretical normal curve. Shapiro–Wilk statistic serves as a goodness-of-fit test that evaluates the extent to which sample data conform to the distributional characteristics of normality, particularly in terms of shape and symmetry (Ghasemi & Zahediasl, 2012; Yap & Sim, 2011). The application of Shapiro–Wilk test is further supported by the size of the dataset, as the total number of observations (176) falls within the range where the test is regarded as highly reliable and efficient in detecting non-normality compared to alternative procedures (Field, 2013; Doane & Seward, 2011). When the residuals are normally distributed, the graphical representation is expected to approximate a bell-shaped histogram, and the probability value associated with the z-statistic should not be statistically significant at the 0.05 level. The Shapiro–Wilk normality test on the dataset of listed deposit money banks for the period 2009 to 2024 provided critical insights into the distributional properties of the study variables as presented in Table 4.2

The Shapiro–Wilk normality test results displayed in table 4.2, provide critical understanding of the distributional properties of the variables employed in examining audit quality and failure risks among listed deposit money banks in the Nigerian over the 2009 to 2024 period. Beginning with the dependent variable, Bank Z Score, the reported Z value of (BZSCORE 1.524) with an associated probability value of 0.06374 indicates that the null hypothesis of normality cannot be rejected at the conventional 5% level. This suggests that the distribution of bank stability, as captured by the Z score, approximates normality reasonably well within the Nigerian banking context. From an econometric standpoint, this is important because it reflects a situation that the dependent variable does not pose serious threats to parametric inference, particularly in large samples where slight deviations are often tolerated (Razali & Wah, 2011).

In contrast, audit quality proxies exhibit strong and consistent departures from normality. Audit Firm Size (AUFS) records a Z value of 5.160 with a probability value of 0.00000, clearly rejecting the assumption of normality. This outcome is expected given the binary nature of the variable, which inherently violates the continuous distribution assumption underlying normality tests (Knief & Forstmeier, 2021; Debnath & Basu, 2015). More revealing, however, are the continuous audit-related variables. For instance, Audit Report Timeliness (ARTIME) presents an extremely high Z value of 8.431 with a probability value of 0.00000, indicating severe non-normality, likely due to the presence of extreme delays in audit reporting as earlier reflected in the descriptive statistics.

Further, audit governance-related variables reinforce the pattern of non-normality within the dataset. As can be seen, the variable of Audit Committee Diligence (ACDI), records a Z value of 4.387 with a probability value of 0.00001, indicating that meeting frequencies are not symmetrically distributed across banks, but rather concentrated around specific values with occasional extremes.

When taken together, the outcomes suggest that the dataset is largely characterized by non-normal distributions, except for the dependent variable. This raises an important methodological implication, but strict adherence to normality assumptions may not be realistic in applied corporate governance research, given the well-documented prevalence of non-normality in business and financial data (Templeton, & Blank, 2025; Knief & Forstmeier, 2021), and the complexity of assumptions that typically characterize corporate governance panel datasets (Wintoki *et al.*, 2012). Consequently, the reliance on large sample properties (176 firm year observations) and robustness of parametric estimators (regression with Driscoll–Kraay standard errors) becomes justifiable, as many econometric techniques remain consistent even under non-normal conditions (Field, 2013; Razali & Wah, 2011).

4.3 Data analyses

4.3.1 Correlations

In this study, correlation analyses were used to provide insights into the association among the variables as presented in Table 4.3

Table 4.3 Correlation analysis results

	BZSCORE	AUFS	ARTIME	ACDI
BZSCORE	1.0000			
AUFS	0.2558	1.0000		
ARTIME	-0.2794	-0.0268	1.0000	
ACDI	-0.0956	0.1243	0.1244	1.0000

Source: Author's Computation (2026) (Stata Version 17)

Spearman rank correlation results presented in table 4.3, provide important insights into the pattern of association between bank failure risks and audit quality variables among listed deposit money banks in Nigeria, while carefully avoiding any causal interpretation. A weak positive association exists between Bank Z Score and Audit Firm Size ($\rho = 0.2558$), indicating that banks engaging Big Four auditors are modestly associated with higher financial stability. In contrast, Audit Report Timeliness shows a weak negative association with Bank Z Score ($\rho = -0.2794$), implying that longer audit delays tend to be associated with lower bank stability, a pattern that aligns with the argument that reporting delays may signal underlying financial reporting difficulties.

Meanwhile, Audit Committee Diligence demonstrates weak associations across variables, including a mild positive association with Audit Report Timeliness ($\rho = 0.1244$) and Audit Firm Size ($\rho = 0.1243$), indicating that more frequent audit committee meetings are only weakly associated with audit structure and reporting dynamics. The entire outcomes reflect the complex and sometimes weakly connected governance mechanisms within Nigerian banks. In this study, it is important to point out that none of the reported coefficients approach the critical threshold of ($\rho \geq 0.80$), suggesting that multicollinearity is unlikely to be a serious concern at the bivariate level.

Correlation analysis was applied in this study to examine the degree of association among the variables under consideration. At its core, the correlation coefficient indicates how movements in one variable correspond with movements in another by expressing their co-variation in standardized form. Its values lie between -1 and $+1$, where coefficients closer to $+1$ reflect a strong direct association, those closer to -1 indicate a strong inverse association, and values around zero imply little or no linear connection (Schober, Boer, & Schwarte, 2018; Benesty, Chen, Huang, & Cohen, 2009). Importantly, Field, (2013) pointed out that correlation analysis is not designed to serve as a conclusive diagnostic for multicollinearity within regression analysis. Nonetheless, while it does not replace formal multicollinearity tests, empirical guidelines suggest that very high pairwise correlations, typically at or above 0.80, may hint at potential multicollinearity issues, since such strong overlap between variables can introduce redundancy (O'Brien and Scott, 2012), inflate standard errors, destabilize coefficient estimates, and weaken the reliability of statistical inference in regression models (Tabachnick & Fidell, 2013).

4.3.2 Regression

Due to the panel nature of the data, both fixed and random effect regression specifications were conducted. The most suitable of both models was determined using Hausman Specification test.

4.3.2.1 Fixed and random effects models

Fixed and random effects models are widely employed in panel data analysis to address unobserved heterogeneity arising from individual-specific or group-specific characteristics over time. In the fixed effects framework, individual or group effects are assumed to be constant parameters that differ across entities but remain invariant over time, and are explicitly estimated within the model. This approach is particularly appropriate when unobserved characteristics *correlated with the explanatory variables* may bias the estimates, as it effectively controls for all time-invariant heterogeneity by focusing on within-entity variation (Wooldridge, 2010). Consequently, fixed effects estimation isolates the impact of explanatory variables by removing the influence of omitted variables that are constant within each entity.

Conversely, the random effects model treats individual-specific or group-specific effects as random variables drawn from a common distribution, rather than as fixed parameters. Under this assumption, the variation across entities is incorporated into the error term structure, and the model estimates both the within-entity and between-entity variation simultaneously. This approach is efficient when the *unobserved effects are not correlated with the regressors*, allowing for more precise parameter estimates (Greene, 2012). Random effects estimation is therefore suitable when the sampled entities are considered representative of a larger

population and when the assumption of no correlation between individual effects and explanatory variables holds.

Both modelling approaches provide robust frameworks for analyzing panel data by accounting for unobserved heterogeneity and improving the consistency of parameter estimates (Hsiao, 2014). However, the appropriate choice between fixed and random effects models is typically guided by the Hausman specification test, which evaluates whether the underlying assumptions of the random effects model are violated. The general form of the fixed and random effect regression is given as:

$$w_{it} = \beta x_{it} + \alpha_i + \varepsilon_{it}; i = 1, \dots, N; t = t_i, \dots, T_i$$

Where i refers to the i^{th} individual; t is the period.

4.4 Regression analyses

Specifically, the effect of the independent variables on the dependent variable of this study was first examined using panel data estimators which included fixed and random effects analysis. The results are presented in Table 4.4. Particularly, the fixed effects model shows a relatively low within R-squared of 0.0844, indicating that variations within individual banks over time explain only a small proportion of changes in bank failure measured via Bank Z Score, although the model is jointly significant as evidenced by the F-statistic of 2.08 with Prob > F = 0.0487, suggesting that the regressors collectively have explanatory relevance at the 5% level. In contrast, the random effects model reports a high between R-squared value of 0.6841, implying that differences across banks account for a more proportion of the variation in bank failure risks, while the Wald chi-squared statistic of 25.03 with Prob > chi² = 0.0007 confirms strong overall model significance.

However, the poolability diagnostics clearly reject the appropriateness of pooled estimation, as the Fixed Effects Redundancy Test yields Prob > F = 0.0000, indicating the presence of significant individual effects, and the Breusch and Pagan Lagrangian Multiplier test reports $\chi^2 = 145.27$ with Prob > $\chi^2 = 0.0000$, confirming that random effects are present hence, pooled ordinary least square regression analysis technique is inadequate. However, the Hausman Specification Test shows a chi-square value of 11.76 with Prob > $\chi^2 = 0.1088$, indicating that the null hypothesis of no systematic difference between fixed and random effects cannot be rejected. Consequently, the random effects model is preferred due to its efficiency.

Supporting diagnostics test for the established random effect model are as follows. First, the Wooldridge test for autocorrelation reports an F-statistic of 0.911 with Prob > F = 0.3622, indicating that the null hypothesis of no first-order autocorrelation cannot be rejected, thus, the panel residuals are free from serial correlation concerns. Second, the test for residual error based on skewness and kurtosis reveals that while the individual skewness components are not statistically significant, the kurtosis of the idiosyncratic error term is significant ($z = 2.57$, $p = 0.010$), and the joint test for normality on the residual component ($\chi^2 = 7.43$, $p = 0.0244$) suggests a deviation from normality at the observation level, although the group-level error component remains normally distributed ($p = 0.3799$). Third, the test for cross-sectional independence presents mixed evidence, but the more robust Pesaran test ($CD = 4.444$, $p = 0.0000$) clearly indicates the presence of cross-sectional dependence among the banks, implying that macroeconomic shocks affecting one bank may spill over to others. Finally, multicollinearity diagnostics show that all explanatory variables have low VIF values ranging

from 1.07 to 1.73 with a mean VIF of 1.30, confirming the absence of multicollinearity concerns and suggesting that the independent variables are sufficiently distinct to provide reliable coefficient estimates in the random effects model.

Table 4.4 Bank Failure Regression Result

	FIXED EFFECT MODEL	RANDOM EFFECT MODEL	Driscoll–Kraay SE MODEL
AUFS	0.014 (0.960)	0.280 (0.246)	0.638 **(0.005)
ARTIME	-0.021 (0.866)	-0.085 (0.481)	-0.400 **(0.051)
ACDI	0.039 (0.290)	0.027 (0.453)	0.022 (0.335)
R_ SQUARED	0.0844	0.6841	0.4589
FISHER_STAT/WALD CHI ²	2.08 **(0.0487)	25.03 **(0.0007)	18.75 *** (0.0000)
M Wald Test for Groupwise Heteroskedasticity = 0.0244 ** Mean VIF = 1.30 Company FE Test = 0.0001** B&P LM test RE = 0.0000 *** Hausman Test Chi ² = 11.76 Probability = (0.1088) Wooldridge Test for Autocorrelation : Prob = 0.3622 Pesaran abs: Pr = 0.0000 *** Pesaran (2015, 2021) Pr F. = 0.0000*** Frees Test 0.399			

Author's Compilation (2026) (Stata version 17)

4.5 Post regression and other diagnostics

4.5.1 Hausman specification test

Table 4.5: Hausman test results for Variance Inflation Factor

hausman fe re

---- Coefficients ----				
V_B))	(b)	(B)	(b-B)	sqrt(diag(V_b-
	fe	re	Difference	Std. err.
----	-----	-----	-----	-----

AUFS	.0137132	.2804872	-.266774	.1218534
ARTIMEE	-.0205254	-.0851624	.0646371	.0120464
ACDI	.0388241	.0272257	.0115983	.0044806
-----	-----	-----	-----	-----

b = Consistent under H0 and Ha; obtained from xtreg.
B = Inconsistent under Ha, efficient under H0; obtained from xtreg.

Test of H0: Difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 8.18
Prob > chi2 = 0.3167
(V_b-V_B is not positive definite)

Source: Author's compilation (2026) (Stata Version 17)

Table 4.6: Hausman test results: Sigmamore

hausman fe re, sigmamore

V_B))	---- Coefficients ----			
	(b)	(B)	(b-B)	sqrt(diag(V_b-
	fe	re	Difference	Std. err.
---	-----			
AUFS	.0137132	.2804872	-.266774	.1306845
ARTIMEE	-.0205254	-.0851624	.0646371	.0243591
ACDI	.0388241	.0272257	.0115983	.0077987

b = Consistent under H0 and Ha; obtained from xtreg.

B = Inconsistent under Ha, efficient under H0; obtained from xtreg.

Test of H0: Difference in coefficients not systematic

$$\begin{aligned}\chi^2(7) &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 11.76\end{aligned}$$

Prob > chi2 = 0.1088

Source: Author's compilation (2026) (Stata Version 17)

This test checks for a more efficient model against a less efficient but consistent model. It ensures that the more efficient model also gives consistent results. It tests the null hypothesis that the coefficients supplied by the efficient random-effects estimator are the same as the ones estimated by the consistent fixed-effects estimator. Hence, if the p-value > χ^2 is larger than .05, then it is safe to use random effects, but if the p-value < χ^2 is less than .05, then the fixed-effects model should be adopted.

4.5.2 Multicollinearity test

Table 4.7: Collinearity diagnostics

collin AUFS ARTIME ACDI
(obs=176)

Collinearity Diagnostics

Variable	VIF	SQRT VIF	Tolerance	R- Squared
AUFS	1.73	1.32	0.5767	0.4233
ARTIMEE	1.09	1.05	0.9138	0.0862
ACDI	1.07	1.04	0.9317	0.0683

Mean VIF 1.30

	Eigenval	Cond Index
1	5.6515	1.0000
2	1.0122	2.3630
3	0.9101	2.4920
4	0.3137	4.2448

5	0.0669	9.1898
6	0.0393	11.9985
7	0.0049	34.1175
8	0.0017	58.3166

Condition Number	58.3166	
Eigenvalues & Cond Index computed from scaled raw sscp (w/ intercept)		
Det(correlation matrix)	0.4135	

Source: Author's compilation (2026) (Stata Version 17)

Multicollinearity is a common issue in multiple regression analysis where explanatory variables exhibit strong linear relationships with one another. As noted by Gujarati and Porter (2009), it arises when two or more independent variables are highly correlated, making it difficult to isolate their individual effects on the dependent variable. When such high interdependence exists, the precision of coefficient estimates is compromised, leading to inflated standard errors and unstable parameter estimates that may distort statistical inference (Wooldridge, 2016). To assess the presence of multicollinearity, the Variance Inflation Factor (VIF) technique was employed, which quantifies how much the variance of an estimated coefficient is increased due to collinearity. A commonly accepted threshold is that a mean VIF exceeding 10 signals serious multicollinearity concerns requiring corrective measures.

4.5.3 Test for heteroscedasticity of residual

Heteroscedasticity refers to nonexistence of homoscedasticity (a constant variance assumption Baltagi & Yang, 2013). It indicates absence or nonexistence of non-constant variance resulting in the breakdown of Best Linear Unbiased Estimator properties through which consistency and efficiency properties are lost. Using Breusch-Pagan-Godfrey approach for this study, the decision rule is that there is no heteroscedasticity if the Prob > χ^2 is insignificant at 5% level of significance.

4.5.4 Test for serial correlation

Serial correlation, commonly termed autocorrelation, arises in regression analysis when the disturbance terms are correlated across time, thereby breaching the classical assumption that error terms are independently distributed. Gujarati and Porter (2009) describe serial correlation as a condition in which the error term in a given period is correlated with error terms in previous periods, leading to inefficiency in estimation and distortion of standard errors, even when coefficient estimates remain unbiased. In panel data contexts, the presence of autocorrelation results in underestimated standard errors, which in turn inflates t-values and increases the risk of committing a Type I error (Baltagi, 2021).

Consequently, serial correlation undermines the reliability of statistical inference and weakens the validity of hypothesis testing. To address this concern, the Wooldridge test for autocorrelation in panel data was employed. Baltagi, (2021) noted that this test is widely regarded as appropriate for panel datasets due to its minimal assumptions and strong performance across different panel structures. The decision rule is that a statistically significant probability value of the Wooldridge F-statistic at the 5% level leads to the rejection of the null hypothesis of no serial correlation, thereby confirming the existence of autocorrelation in the model.

4.5.5 Test for cross sectional independence

Cross-sectional dependence frequently arises in panel data analysis, particularly when observations span several entities exposed to similar economic forces over time. Baltagi (2021) notes that such dependence occurs when disturbances across cross-sectional units are interrelated, a situation commonly observed among financial institutions operating within a shared macroeconomic and regulatory environment, as reflected in this study. When cross-sectional dependence is ignored, parameter estimates may lose efficiency and the associated standard errors become biased, thereby compromising the reliability of inferential conclusions (De Hoyos & Sarafidis, 2006). To rigorously evaluate the assumption of cross-sectional independence, this study employs a combination of diagnostic procedures, including Pesaran's CD test, Frees' Q test, and Pesaran's absolute correlation test, to provide robust evidence. Conventionally, statistically significant probability values at the 0.05 level leads to the rejection of the null hypothesis of cross-sectional independence within the panel dataset.

4.5.6. Driscoll–Kraay standard error estimator

Despite the indication from the Hausman specification test favoring the random effects model, its suitability was undermined by violations of key diagnostic assumptions, particularly the presence of serial correlation and cross-sectional dependence within the panel dataset. These econometric issues necessitated a more robust estimation framework capable of addressing complex error structures inherent in panel data. Consequently, the regression model was estimated using Driscoll–Kraay standard errors, which provide consistent estimates in the presence of heteroscedasticity, autocorrelation, and spatial (cross-sectional) dependence (Driscoll & Kraay, 1998). In addition, Cameron and Miller (2015) emphasize that such robust covariance estimators are essential in panel settings where conventional estimators fail to account for correlated disturbances across both time and entities. By adopting this estimator, the study ensures that statistical inferences remain reliable and unbiased, thereby preserving the validity and efficiency of hypothesis testing outcomes despite the underlying diagnostic challenges.

4.6 Discussion of findings

4.6.1 Audit firm size

Within the Driscoll–Kraay framework, the positive influence of engaging Big four affiliated auditors can be interpreted through agency theory and signaling theory as a mechanism that strengthens monitoring and reduces information asymmetry between bank managers and dispersed stakeholders. In the Nigerian banking context this outcome is likely especially owing to the fact that after the 2009 banking crisis and subsequent reforms by the Central Bank of Nigeria, there was heightened regulatory emphasis on transparency, risk disclosure, and corporate governance (Sanusi, 2010). The engagement of globally reputable auditors became a credible signal of financial discipline and compliance, particularly under increased scrutiny from both domestic regulators and international investors. From a risk-based audit theory perspective, Big four audit firms deploy more sophisticated risk assessment tools and industry-specific expertise, which enhances the detection of financial vulnerabilities and supports early corrective actions, thereby improving solvency as captured by bank Z score. This empirical evidence is also reported in the study of Salem, Usman, & Ezeani, (2021), who showed that stronger audit quality frameworks enhance financial reporting quality and reduce risk exposure, thereby contributing to improved bank stability in MENA banking systems. Ozili (2017), also documented that enhanced external monitoring mechanisms contribute to improved financial stability in African banks.

4.6.2 Audit report timeliness

The negative implication of delays between financial year-end and audit sign-off reflects a breakdown in the efficiency of financial reporting systems, which can be reasoned through signaling theory and stakeholder theory. In Nigeria, prolonged audit delays often emerge from complex loan impairments, regulatory disputes, or reconciliation issues tied to non-performing assets (Super & Shil, 2019), particularly during periods of macroeconomic stress such as the 2016 recession and post-2020 COVID-19 disruptions. Such delays transmit adverse signals to the market, suggesting unresolved financial reporting issues or heightened audit risk, which weakens stakeholder confidence and perceived bank stability. Under agency theory, delayed reporting increases information asymmetry, giving room for managerial opportunism or concealment of deteriorating asset quality.

Further, the negative effect on bank stability becomes much clearer considering the practical workings of the Nigerian regulatory environment. Alley, (2022) document that deposit money banks in Nigeria do not simply finalize audited reports and publish them, they must first obtain regulatory clearance from the Central Bank of Nigeria before release. The dual-layer approval system—CBN review plus Nigerian Exchange Group filing requirements—has repeatedly caused delays in financial reporting (Nairametrics, 2023), especially in periods of regulatory tightening or macroeconomic stress. Also, several banks have missed statutory filing deadlines because audited accounts were still undergoing regulatory scrutiny, with delays attracting sanctions and fines. However, aside the procedural perspective, regulatory actions signal that regulators themselves are not fully satisfied with aspects of the accounts, which often relates to asset quality concerns, loan provisioning, or capital adequacy.

Therefore, consistent with the outcome from this study, when audit completion is delayed, it is rarely random, it often reflects deeper issues being examined to include but not limited to non-performing loans, IFRS adjustments, or capital reclassification. Not forgetting, IFRS adoption in Nigeria significantly increased audit workload and reporting complexity (Ajekwe, Onobi, & Ibiamke, 2017; Akhalumeh, Izevbekhai, & Ohenhen, 2017), leading to longer audit lags due to expanded disclosure requirements and valuation challenges. Therefore, the negative effect is not just theoretical, it reflects a real institutional bottleneck where delay becomes a proxy for unresolved financial risk among listed deposit money banks in Nigeria.

4.6.3 Audit committee diligence

Again, the statistically insignificant effect of frequency of audit committee meetings on bank failure risks align with the Behavioral Theory of Boards. The Behavioral Theory of Boards (Forbes & Milliken, 1999) argues that effectiveness depends not on how often a committee meets but on the quality of engagement, cognitive input, and decision execution, implying that meeting frequency without depth yields limited governance impact. In the Nigerian banking sector, particularly between 2015 and 2024, heightened regulatory requirements to include governance codes issued by the Central Bank of Nigeria have compelled banks to increase formal oversight activities, yet such compliance may remain procedural rather than impactful. Supporting evidence from the study of Deshani and Ajward, (2025) on Sri Lanka listed licensed banks, indicates that structural governance attributes alone do not significantly enhance bank stability unless accompanied by effective oversight mechanisms. Practically, this reflects a Nigerian reality where governance structures may satisfy regulatory expectations in form but not necessarily in substance, thereby limiting their ability to meaningfully influence bank failure risks.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

In this study, the primary objective was to examine the effect of audit quality on bank failure risks in Nigeria over a sixteen-year period spanning 2009 to 2024. Bank failure risk was proxied by Bank Z Score (Distance-to-Default Measure), while audit quality was decomposed into three key dimensions, namely, audit firm size, audit report timeliness and audit committee diligence in order to capture the multifaceted nature of external audit mechanisms and governance oversight within the banking sector. Given the panel structure of the dataset, both fixed effects and random effects regression models were estimated, with further diagnostic tests conducted to determine model suitability and ensure robustness of inference. However, due to the presence of cross-sectional dependence and deviations from classical assumptions, Driscoll–Kraay standard error estimator was employed in the final estimation to correct for residual non-normality, and cross-sectional dependence, thereby providing reliable estimates for testing the stated hypotheses. Particularly, the results obtained from the regression analysis revealed that;

Audit Firm Size (AUFS) exerts a statistically significant positive effect on bank failure risks [Bank Z score; coef. = 0.638 (p-value = 0.005)] among deposit money banks listed on the Nigerian Exchange Group for the period under consideration. The statistically significant positive effect of audit committee financial expertise on credit risk constitutes a theoretically provocative finding that is most cogently explained through the combined lenses of agency and resource dependency theories operating under conditions of governance dysfunction. The finding indicates that, on average, a shift from non-Big Four auditors to Big Four audit firms leads to a statistically significant increase of 0.638 units in non-performing loans, implying improved financial instability hence higher likelihood of bank failure risks.

Audit Report Timeliness (ARTIME) reveals a statistically significant negative effect on Bank failure risks [coef. = -0.400 (p-value = 0.051)] among listed deposit money banks in Nigeria for the period under study. The finding indicates that, on average, an increase in the number of days between financial year-end and the signing of the audit report leads to a reduction in bank Z score, implying a deterioration in financial stability ultimately an increased likelihood of bank failure risks.

A careful reading of the Driscoll–Kraay regression output demonstrates that Audit Committee Diligence (ACDI) with [coef. = 0.022 (p-value = 0.335)] exerts a positive insignificant effect on bank failure risks among listed deposit money banks in Nigeria for the period under examination. By implication, the number of audit committee meetings held does not cause any statistically significant change in financial stability of banks.

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