

# Innovations

## Corporate Risk Management: Determinants of Profitability and Stability in the Banking Sector

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**Abstract:** *With increasing interest on holistic approach to risk management in organizations, it is obvious that corporate risk management is swiftly becoming an imperative area of study. The purpose of this paper is to broaden the literature on corporate risk management by examining its effect on financial stability, also while controlling for financial leverage on listed commercial banks in Nigeria. The study adopts an export-facto research design where quantitative data were collected from the annual report and websites of 13 listed commercial banks over a period of 15 years which covers the span of 2010 through to 2024. In total, 198 observations were realized and utilized after following all processes of data preparation. Multivariate Regression analysis was employed to test the hypotheses in this study using E views 12. The study found an insignificant relationship in the relationship between both board size and board independence and financial stability using p-values  $H_{01}(p = 0.08)$  and  $H_{02}(p = 0.56)$ . A significant relationship was established while examining risk committee existence  $H_{03}(p = 0.03)$  and financial stability and also, financial leverage - financial stability nexus  $H_{04}(p = 0.03)$  based on significance level of 5%. The results suggest that while board size and board independence remain essential in aligning management decisions, effective risk governance and prudent leverage management are critical in attaining financial stability. It is therefore recommended that Managers must embed risk awareness into organizational culture by promoting transparency, accountability, and futuristic risk assessment, ensuring that governance structures translate into day-to-day decision-making practices*

**Keywords:** *Corporate risk management, financial stability, financial performance, financial distress, financial leverage*

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## 1.0 Introduction

Several studies indicate that a holistic approach to corporate risk management can enhance stability within firms, particularly as global business dynamics evolve rapidly. These changes introduce substantial risks that threaten organizational performance and sustainability. The concept of risk management is increasingly pivotal for corporations, aiding decision-makers in navigating uncertainties and fostering innovation, while also building resilience against future challenges ((Imeni & Edalatpanah, 2023). In Nigeria, the banking sector has undergone significant reforms aimed at achieving financial soundness, which is crucial for economic growth and effective monetary policy transmission (Komolafe,2025).

In this study, we focus on the organizational structure of risk management in the Nigeria banking industry. It is no doubt that a healthy financial industry is considered a key component of every nation's economic stability, likewise, the financial industry in Nigeria plays a significant role in her economy. The Central Bank of Nigeria (CBN) Revised Code of Corporate Governance (CCG) 2014 mandates an annual appraisal of the board and individual directors of financial institutions (Gasu,2023). Hence, the key question we examine, is whether the board size, the board independence, risk management committee and financial leverage are unarguable very crucial to an effective corporate risk management system.

Existing studies on corporate risk management in Nigeria Kadipe et al.( 2021), Ugwu and Nwakoby (2020), have largely focused on broader sectors or specific aspects of risk management without comprehensively examining its impact on financial stability in listed commercial banks. Moreover, prior studies like Bagh et al. (2022),Khan et al. (2024) and Oliveria et al.(2021) focused their studies on manufacturing company and other non financial sectors. Also, the indecisiveness surrounding the nexus between corporate risk management, corporate structure and the financial stability of the banking sector which over time has been attributed to feeble corporate governance and poor enterprise risk implementation strategy and practice (Houwayji, 2024), has limit the ability of policymakers and bank executives to design and implement targeted strategies that addresses the unique challenges faced by these institutions.

Furtherance, this study therefore seeks to address this critical gap by investigating the effect of corporate risk management on the financial stability of listed commercial banks in Nigeria. It aim to provide empirical evidence on the effectiveness of corporate risk management practices, its significant dimensions which is most imperative and offer actionable insights for improving the resilience and profitability of these institutions in an increasingly uncertain economic environment.

### 1.2 Research Question

To address the above research problem, the following research questions were developed;

- What is the effect of board size on financial stability of listed commercial banks in Nigeria
- To What extent does board independence effect financial stability of listed commercial banks in Nigeria
- What effect does risk committee existence have on financial stability of listed commercial banks in Nigeria
- What effect does financial leverage have as a control variable on financial stability of listed commercial bank in Nigeria

### 1.3 Research Objectives

The specific objectives of the studies are to;

- Determine the effect of board size on financial stability of listed commercial banks in Nigeria
- Evaluate the effect board independence on financial stability of listed commercial banks in Nigeria
- Examine the effect of the existence of risk committee on the financial stability of listed commercial banks in Nigeria
- Ascertain the effect of financial leverage on the financial stability of listed commercial banks in Nigeria

### 1.4 Research Hypotheses

**H<sub>01</sub>** Board size has no significant effect on financial stability of listed commercial banks in Nigeria.

**H<sub>02</sub>** Board independence has no significant effect on the financial stability of listed commercial banks in Nigeria.

**H<sub>03</sub>** Risk committee has no significant effect on financial stability of listed commercial banks in Nigeria.

**H<sub>04</sub>** Financial leverage has no effect on financial stability of listed commercial banks in Nigeria.

## 2.0 Literature Review

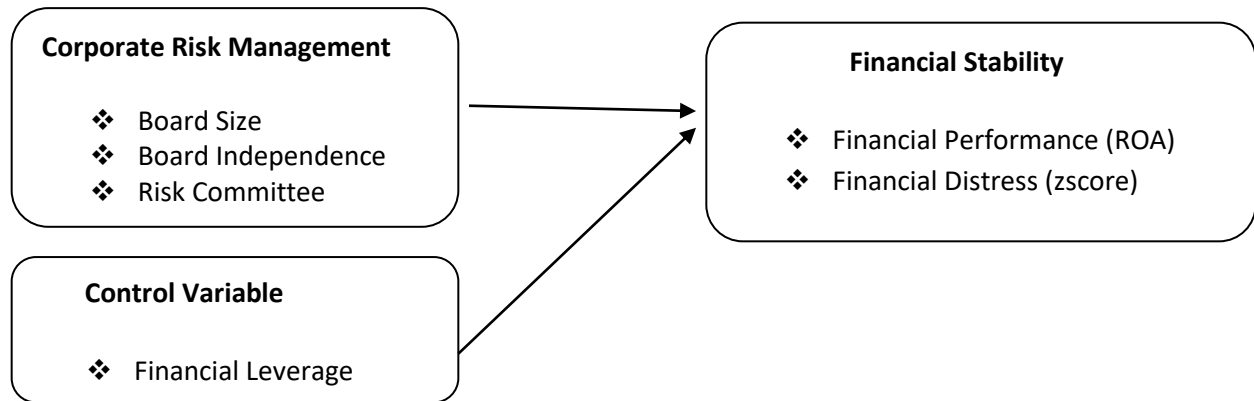
This section encompasses the conceptual review, theoretical framework and empirical review. Financial stability refers to condition where a financial system carries out its operations smoothly and is resilience to shock or uncertainties that could disrupt economic stability. Ismail and Ahmed (2023), defined financial stability as a circumstance where a financial system is able to perform it functions effectively and efficiently and sustaining the offering of critical financial services to

the economy. Measuring financial stability may require several requirements or indicators such as capital adequacy ratio, operational soundness. However, two commonly used indicators are financial performance and financial distress.

Corporate risk management is a more efficient and effective mechanism which goes beyond the traditional approaches to risk management which involves identification, assessment and reaction to match the raising level of risk across more sophisticated enterprise of today (Jalilvand & Moorthy, 2024). Bahamid et al.,(2022) has defined corporate risk management as a routine that is carried out by the board of directors, managers along with other employees of a company to manage the uncertainties associated with the business. Corporate risk management is characterized by the constitution and activities of the board of directors (Oluwagbade et al., 2023). Board size, board independence and risk committee are three key factors that influence how risk is managed in a corporation.

Board size refers to the number of members on the board of a company (Fariha et al., 2022) . Larger boards can bring diverse skills, knowledge, and experience, which may improve the ability to identify and assess risks (Githaiga et al., 2022). On the contrary, smaller boards tend to be more efficient and cohesive but may lack diversity of expertise. According to Smaili et al. (2023), board independence refers to the proportion of non-executive, independent directors who are not part of management and have no conflicts of interest responsible for better internal controls and are less inclined to taking excessive risk. A risk committee is a subcommittee of the board responsible for overseeing risk management policies, procedures, and performance (Jiang & Ji, 2024).

The study's independent variable (corporate risk management) was dimensioned into three proxies; board size, board independence and risk committee. Also, the dependent variable (financial stability) was dimensioned into two proxies; financial performance (ROA) and financial distress (zscore). The study used this conceptual framework to create the research framework. The study introduced financial leverage as a control variable to ascertain that the outcome of the study is not influenced. A control variable ensures that changes in the dependent variable are caused only by the independent variable (Li, 2021). Financial leverage as a control variable, though was adapted from Khan et al., (2024) is rooted on its importance to give a better understanding to the nexus between corporate risk management and financial performance.



**Research Framework:** Author's Compilation (2025)

## 2.2 Theoretical Framework

The resource dependency theory was adopted as the theoretical insight via which the relationship between corporate risk management and financial stability, the controlling effect of leverage on the board structure and risk management- financial stability relationship will be investigated. This is because the resource dependency theory puts forward helpful insights into the dynamics of organizations and their external stakeholders. Despite its limitations, the theory offers a framework for understanding the factors that influences organizational actions and decision making process. It has become imperative for organizations today to better understand these factors that could influence their performance and guarantee their stability. Understanding the theory's framework, organizations can make informed decisions, as well as, develop strategies to effectively manage their relationship with their external stakeholders, mitigate against potential risk and guarantee stability in the long run.

## 2.3 Empirical Review

Several literatures were reviewed base on their relation to the research questions of this study.

A Nigeria-based study by Musa et al. (2022) focused on corporate governance on risk management. Corporate governance was conceptualized as having 3 major attributes, namely; board index, management influence, corporate governance disclosure index and risk management was measure with the following proxies Capital risk, Credit risk, Liquidity risk. The population for the study was 22 commercial banks.. Panel data regression analysis used to examine the relationship. Board size, audit committee composition, and board independence was found to have a significant positive relationship with capital risk. Corporate governance disclosure has a negative but non-significant relationship with credit risk and

corporate governance disclosure has a significant negative relationship with liquidity risk.

In the context of the United State of America, Balasubramanyan et al. (2023) examined Impact of risk oversight functions on bank risk, evidence from the Dodd-Frank act. The study concluded that there is no causal effect of a risk committee and chief risk officer on bank risk. This was ascertained by obtaining a five years panel data from 230 banks in America and analyzed using ordinary least square regression analysis. Dummy variables were used to denote that existence of a chief risk officer, risk compliant and risk committee existence representing risk oversight in these institutions. Risk was measured using aggregate risk and the study utilized ROA as a control variable for the study.

Similarly and still in the United State of America banking space, Jiang and Ji (2024) also examined risk management committee and bank performance, evidence from the adoption of Dodd-Frank act. The existence of a risk committee was used as a measure for the independent variable collected from 239 banks over a period of 9 years resulting to a total observation of 1,962. Loan quality (NPL) and profitability (risk -adjusted ROA) were used as dimensions for bank performance. Size , capital to asset, deposit to asset, loan to asset were also employed as control variable for the study. The study established that risk committee has effectively reduced bank risks.

In a bid to study risk management in corporate governance framework, Rehman et al., (2021) adopted an observational, correlational research design that examined the mediating role of risk management on the relationship between corporate governance, the independent variable represented by board size and foreign ownership and the study's dependent variable, financial performance. The finding of the study disclosed risk management as a partially mediator in the relationship between board size and financial performance.

Akin to the study of Rehman et al. (2021), Park and Chung (2022) examined corporate governance and firm performance in the banking industry of South Asia. This study investigated the impact of risk management governance mechanisms, such as a dedicated risk committee and chief risk officer, on the financial performance and sustainability of banks in the South Asian banking industry. The study utilized a non-randomized, non-controlled, observational study examining the relationship between risk governance mechanisms and financial performance in the banking under investigation. Findings from the study revealed that the presence of a chief risk officer (CRO) on the executive board is associated with differences in the bank's financial performance. Also, corporate governance structure, mainly the risk governance mechanisms, has a positive and significant impact on the financial performance of banks in the industry.

To examine the effect of board of director's characteristics on risk and bank performance in Turkey, Dogan and Eksi (2020) retrieved 133 data observations from

19 banks. The study adopted a quantitative secondary, panel data research design. The study measured board characteristics using 4 proxies board size, board independence, CEO duality and foreign director and financial performance was measured by ROA and non performing loans (NPL). The study found that board size, foreign board members and the independent board members have an effect on both non-performing loans and the return on assets.

### 3.0 Methodology

The study is informed by the positivist research philosophy, where the primary goal of the positivist query is to generate explanatory links or causal relationships that in due course will lead to the prediction and control of the phenomena in question. Therefore, the study adopts an expost-facto research design method, this research design method concentrates on how events that have already occurred can predict outcomes. The population of the study is 13 listed commercial banks in Nigeria currently listed in the Nigeria Stock Exchange. A purposive sampling technique was utilized in the sample selection base on the specific characteristics that they share i.e they are all commercial banks listed on the Nigeria Stock Exchange.

Data for the study were obtained via secondary sources from the published annual reports of banks under investigation from their respective websites and reports filed by the banks with NSE. The data required in this study include data on corporate risk management (board size, board independence and risk committee), for financial stability, financial performance is measured using return on asset (ROA) and financial distress is measured using z-score. The study focused on listed commercial banks in Nigeria only to eliminate segmentation related effects and variances.

**Table 3.1 Variables, Description and Sources**

Variable	Description/ Measurement	Source
Board Size	Number of members on the board	Bank's annual report
Board Independence	Proportion of the independent members on the board of the total number of members on the board	Bank's annual report

Risk Committee (RC)	RC, the existence of board level , stand alone risk committees is evident, an indicator variable that equals one will be assigned and zero otherwise	Bank's annual report
Return on Asset (ROA)	Net income divided by total asset	Bank's financial statement
Z score	Banks distance from default risk/financial distress is calculated by the sum of the average return on asset and capital to total asset ratio divided by standard deviation of return on asset	Bank's financial statement
Leverage	Total debt divided by total asset	Bank's financial statement

### 3.1 Model Specification

The study's hypotheses will be examined base on the models illustrated below, adapted from the study of Azizah (2023). This model was adapted to better understand the relationship between the dependent variables financial performance and financial distress against the multiple independent variables board size (BS), board independence (BI) and risk committee (RC) of this study. Also this model will help to understand how the different variables are related to each other while also identifying which variable is most significant in impacting the dependent variables. Moreover, the model will help improve efficiency and will provide a more rounded outcome.

#### Model 1:

$$Y_{ROAit} = \beta_0 + \beta_1 X_{BSit} + \beta_2 X_{BIit} + \beta_3 X_{RCit} + \beta_4 X_{FINLEVit} \varepsilon \dots \dots \dots \text{eqn.3.1}$$

Model 1 describes the relationship between firm's performance using ROA and dimensions of corporate risk management. Also, controlling for financial leverage.

#### Model 2:

$$Y_{Zscoreit} = \beta_0 + \beta_1 X_{BSit} + \beta_2 X_{BIit} + \beta_3 X_{RCit} + \beta_4 X_{FINLEVit} \varepsilon \dots \dots \dots \text{eqn.3.2b}$$

Model 2 describes the relationships in regards to firm financial distress using zscore as a proxy for measurement and the dimensions of corporate risk management. Also, to investigate the association while controlling for financial leverage ( $LEV_{it}$ ). Where;  $it$  = signifies panel of bank  $i$  at time  $t$ ,  $Y_{ROA}$  = signifies financial performance variable used (ROA)  $Y_{ZSCORE}$  = signifies financial distress variable used (z score)  $\beta_0$  = signifies constant  $\beta_1$  = signifies coefficients  $X$  = signifies explanatory variables, BS, BI, RC and FIN  $LEV_{it}$  = signifies error term

### 3.2 Method of Data Analysis

Eviews version 12.0 software was used as the statistical tool to analyze data collected for the study. This technique was employed to examine the significance of a board size, board independence and board level risk committee existence on financial performance (ROA) and financial distress (zscore) representing measures for financial stability of listed commercial banks in Nigeria.

### Descriptive Statistics

The first stage of data analysis was to probe into the descriptive statistics of the data set, aiding understanding of the prototype, trend and features of the dataset. Also, this statistics measures the central tendency, dispersion of the data and the frequency of the distribution within the data.

**Table 3.2: Descriptive Statistics**

	<b>BS</b>	<b>B_IND</b>	<b>EXT_RC</b>	<b>FIN LEV</b>	<b>ROA</b>	<b>ZSCORE</b>
<b>Mean</b>	13.69072	0.147896	0.788660	0.638901	0.014646	19.41806
<b>Median</b>	14.00000	0.143101	1.000000	0.630404	0.013901	19.71509
<b>Maximum</b>	22.00000	0.492476	1.000000	1.266242	0.130687	66.47000
<b>Minimum</b>	7.000000	0.000000	0.000000	0.000905	-0.142188	-33.05726
<b>Std. Dev.</b>	2.898493	0.084981	0.409315	0.099835	0.026426	15.06454
<b>Skewness</b>	0.007290	0.286463	-1.414101	1.697172	-2.509767	-0.172539
<b>Kurtosis</b>	2.910129	4.243792	2.999681	24.31802	19.69900	3.854380
<b>Jarque-Bera</b>	0.067006	15.15838	64.65636	3766.669	2457.756	6.863112
<b>Probability</b>	0.967052	0.000511	0.000000	0.000000	0.000000	0.032337

**Source: EViews Output, 2025**

The descriptive statistics reveals board size (BS) with a mean of 13.69, median of 14, a maximum of 22 and a minimum of 7 board members. The standard deviation of 2.8 indicates a fairly consistent board sizes across the banks and a skewness of 0.007 and kurtosis of 2.91 represents a symmetric, approximately normal distribution. Overall, the board size amongst the banks is fairly stable and normally distributed. Board Independence (B\_IND) presents a mean of 0.147 translating to only 14.7% of the board are independent non- executive directors. The maximum is 0.49 and

minimum 0.00, this signifies that some banks had no independent director at certain times during the period under review, while others had up to 49%. On the whole, board independence contrast across banks, with most banks having low to moderate representations and a general distribution that shifts slightly away from normal. The study shows a mean of 0.788 denoting that 79% of the banks utilized in this study has in existence a board-level risk committee. A 79% representation signifies that most banks do have a board level risk committee. 0.638 represents the mean statistics for financial leverage suggesting that on an average, the banks finance 64% of their assets with debts. This signifies that while most of the banks in the study embark on the route of moderate financial leverage some of the banks in this study are highly leveraged.

The mean outcome for the return on asset (ROA) was 0.014 implying a profitability that is below average. The maximum is 0.13 and minimum -0.142, the significant contrast in the distribution of the series could also suggest that some banks, during the period of selected for this study might have experience huge losses or gains as compared to others. A mean zscore of 19.42 and a median of 19.7 puts forward that there is a very low chance of insolvency risk. However, with a maximum of 66.5 and minimum of -33.06, this suggest that while some banks show a great distance from bankruptcy, a few others are gravely financially distressed.

### Correlation Statistics

The table below presents the correlation statistics for the variables under consideration.

**Table 3.3: Correlation Statistic**

	BS	B_IND	EXT_RC	LEV_	ROA	ZSCORE
BS	1					
B_IND	-0.27776	1				
EXT_RC	0.376983	0.068536	1			
FIN LEV	-	-	-	1		
ROA	0.032009	0.147577	0.237590	0.386004	1	
ZSCORE	0.226698	0.082703	0.209128	0.561652	0.268255	1

\*Shows significance at the 5% BS (Board Size), B\_IND (Board Independence), EXT\_RC(Risk Committee Existence),FIN LEV (Financial Leverage),ROA (Return on Asset),ZSCORE (Zscore).

The correlation statistics highlight the relationship between board size and the existence of risk committees in banks. A larger board size is linked to the presence

of risk committees and lower financial leverage, while also showing minimal impact on profitability. The presence of a risk committee correlates with improved profitability and financial stability, with lower financial leverage noted. Additionally, a strong negative correlation exists between leverage and profitability, indicating that increased leverage corresponds to lower returns and greater financial distress risk. Overall, a larger board and risk committee contribute to better corporate governance and reduced bankruptcy risk in the long term.

### **Regression Analysis**

This study utilizes three regression models i.e. Ordinary Least Square (OLS), Fixed Effect Model and Random Effect Model to better understand the relationship between the study's dependent variables (return on asset and zscore) and the independent variables (board size, board independence and risk committee existence). The tests of hypotheses were conducted on the foundation of the specified model of the study.

### **Investigating the Effect of Board Size, Board Independence, Risk Committee Existence and Financial Leverage (Control Variable) on Financial Performance (Return on Asset)**

From Table 3.4, the relationship between financial leverage and return on asset, presents a negative and statistically significant nexus at 5% level ( $\beta = -0.04$ ,  $P = 0.03$ ). This relationship tends to be robust given that it is negative and statistically significant on OLS and RE. This outcome substantiates that high debt burden negatively affects profitability, which could be attributed to amplified financial risk and likely a reduction in managerial suppleness. However, even after controlling for leverage, the positive sway of the existence of risk committee at the board level remains significant. This underscores the theoretical proposition of resource dependency theory that strategically positioned resources such as risk experts can enhance firm resilience and performance by making informed decisions, mitigate the adverse effects of resource dependency, particularly financial obligations. Furthermore, suggest that even under conditions of financial pressure, banks with risk committee oversight perform better.

**Table 3.4: Regression Statistics for Corporate Risk Management Proxies and Financial Performance (ROA) with Control Variable Financial Leverage**

Variable	OLS			Fixed Effect Model			Random Effect Model		
	Coef	Std Error	P-Value	Coef	Std Error	P-Value	Coef	Std Error	P-Value
C	0.080703	0.017129	0.0000	0.055272	0.020755	0.0085	0.065782	0.01892	0.0006
BS	-0.001449	0.000675	0.033	-0.001461	0.000831	0.0806	-0.001452	0.000748	0.0535
B_IND	0.024592	0.021236	0.2483	-0.01359	0.023752	0.5679	0.001788	0.022177	0.9358
RC EXT	0.010746	0.004782	0.0258	0.013843	0.006643	0.0386	0.012659	0.005651	0.0263
FIN LEV	-0.09059	0.018391	0.0000	-0.045514	0.021524	0.0359	-0.064227	0.019769	0.0014
R - Square	0.187525			0.351794			0.103633		
Adj R-Square	0.17033			0.293199			0.084662		
Prob (F-Stat)	0.0000			0.0000			0.000349		
Durbin Watson	1.444002			1.732505			1.612864		

**Source: Eviews Output ( 2025)**

In contrast, traditional governance variables such as board size and board independence do not exhibit significant mitigating effects when leverage is accounted for, highlighting the superior role of functionally specialized governance mechanisms in high-risk financial environments. Board size presents a negative relationship with ROA, with marginal significance in OLS ( $P < 0.03$ ) and RE ( $P = 0.05$ ). Larger boards may not be effective in managing financial complexity or debt exposure. Board independence remains statistically insignificant across models ( $P > 0.24$ - OLS,  $P > 0.56$ -FE,  $P > 0.93$ - RE). Implying that independent directors as a standalone measure may not have a mitigating effect on financial risk or its performance consequences. The fixed effects model demonstrated the best fit statistically with a coefficient of determination  $R^2$  of 0.35, suggesting that 35% of the variability in return on asset (ROA) is explained by the independent variables board size, board independence and risk committee existence and control variable, financial leverage.

### Investigating the Effect of Board Size, Board Independence, Risk Committee Existence and Financial Leverage (Control Variable) on Financial Distress (zscore)

Representing the second model of the study, Table 3.5 presents the summary statistics for the descriptive nexus of corporate risk management and financial distress while controlling for financial leverage.

**Table 3.5: Regression Statistics for Corporate Risk Management Proxies, Financial Distress (zscore) and Financial Leverage**

Variable	OLS			Fixed Effect Model			Random Effect Model		
	Coef	Std Error	P-Value	Coef	Std Error	P-Value	Coef	Std Error	P-Value
C	59.23699	8.956749	0.0000	48.58442	4.713765	0.0000	48.77853	5.519934	0.0000
BS	0.783332	0.352805	0.0276	-	0.188792	0.4503	-	0.187695	0.5260
B_IND	19.8906	11.10405	0.0748	-	5.394599	0.0000	-	5.374487	0.0000
RC EXT	-	1.714398	0.4938	3.256687	1.50882	0.0322	3.145554	1.494699	0.0367
FIN LEV	-	81.59786	0.0000	-	4.888483	0.0000	-	4.865942	0.0000
R - Square	0.337426			0.900272			0.432416		
Adj R-Square	0.323404			0.891257			0.420403		
Prob (F-Stat)	0.0000			0.0000			0.0000		
Durbin Watson	0.34537			1.00877			0.916517		

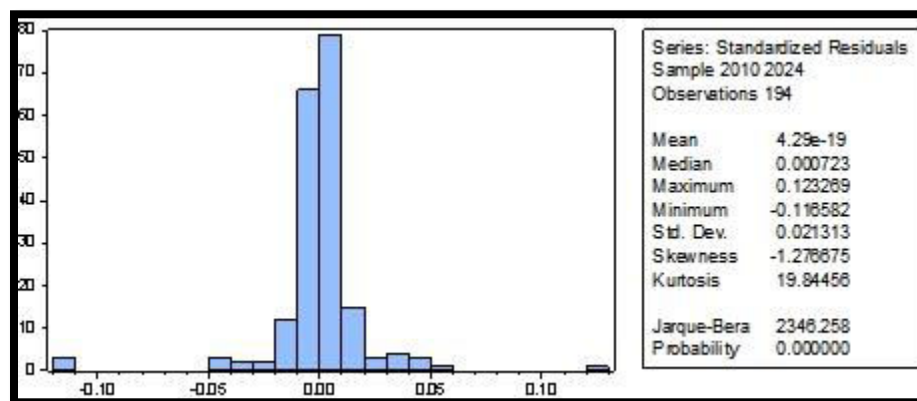
**Source: EVIEWS Output ( 2025)**

Board size exhibits a positive  $\beta=0.78$  and significant  $P=0.027$  association with z score in the OLS model, in the fixed effect  $\beta= -0.14$ ,  $P = 0.45$  and random effect  $\beta -0.11$ ,  $P >0.52$  model, suggesting its impact may not be robust across banks under investigation. Board independence exhibits a marginally positive coefficient 19.89 in the OLS model, it becomes significantly negative and highly significant in both the fixed effect model  $\beta= -33.43$ ,  $P<0.00$  and random effects model  $-32.17$ ,  $P<0.00$ . Conversely, the existence of risk committee shows a consistent positive and statistically significant effect in both the fixed effect model 3.25,  $P<0.05$  and random effects models 3.14,  $P<0.05$ . This highlights the role of specialized risk governance in enhancing financial stability. Reinforcing the inverse relationship between debt level and financial stability, financial leverage revealed a highly significant  $P<$  value

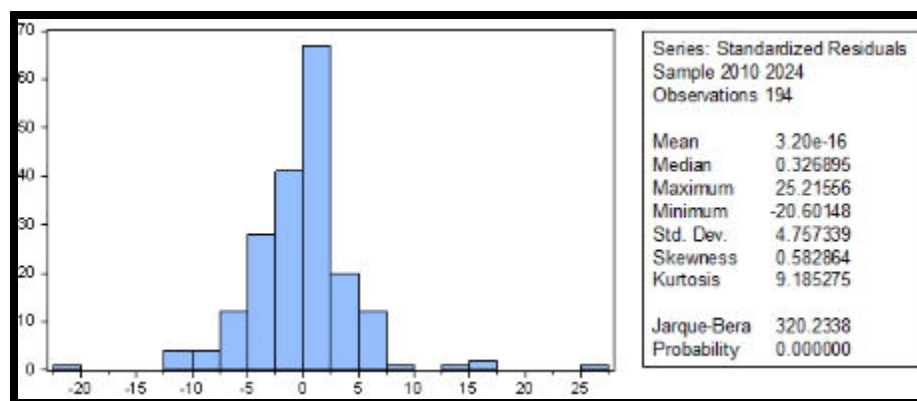
0.001 and strongly negative coefficient ( $\beta = -81.59$ ,  $\beta = -38.86$  and  $\beta = -39.90$ ) across all models. Implying that higher financial leverage significantly reduces zscore, hence the bank becomes more susceptible to financial distress and lessen its financial stability. The fixed effects model exhibited the best fit statistically with a considerable coefficient of determination  $R^2$  of 0.90, suggesting that 90% of the variability in zscore is explained by the independent variables.

#### Post Estimation Test Result- Histogram – Normality Test

The histogram-normality test was therefore performed to evaluate whether the standardized residuals from the regression models followed an approximately normal distribution.



**Fig. 4.1: Residual Diagnostics Test Result – Histogram – Normality Test for Model 1**



**Fig 3.1: Residual Diagnostics Test Result – Histogram – Normality Test for Model 2**

The residual diagnostics across the three model specifications reinforce and contextualize these regression findings. In all cases, the mean of the standardized residuals was approximately zero, confirming the absence of systematic bias in

model predictions. However, the Jarque–Bera statistics were consistently and highly significant ( $p = 0.0000$ ), indicating a strong departure from the normality assumption. Skewness values alternated between negative and positive signs across models. More notably, kurtosis values were markedly higher than the normal distribution benchmark of three, these departures from normality, implies that, while the models capture systematic variation in the financial stability of banks under investigation, they are also influenced by bank specific shocks and outlier behavior that are not fully explained by the included predictors.

#### **4.0 Discussion of Findings**

Regression analyses were conducted using pooled Ordinary Least Squares, fixed effects, and random effects models to ensure robustness across different econometric specifications. Overall, a bank's board with a considerable number of directors will better supports corporate governance through having a risk committee at the board level and reduced leverage, which will in turn lower financial distress risk. The result aligns with studies of Abdullah and Tursoy (2023), Aidoo et al., (2024) and Al Koni et al. (2025) ,which may also be said to be consistent with the law of diminishing returns in board effectiveness . However, the lack of statistical significance indicates that board size, by itself, is not a major determinant of firm profitability in the sample studied.

Board Independence produced an intriguing pattern. For return on asset model, the relationship was statistically insignificant, suggesting limited direct impact on short-term profitability. In contrast, for the zscore model, fixed and random effects estimations revealed a strong and negative association, implying that higher board independence may be detrimental to financial stability. This outcome contradicts agency theory expectations and much of the governance and risk management literatures Yahaya (2025), Anderson and Reeb (2004) and Pham and Nguyen (2020). However, it aligns with findings by Oshim et al. (2024) and Oluwagbade (2023), who caution that overly independent boards may lack firm-specific knowledge and strong resource linkages, thereby limiting their capacity to navigate periods of financial distress. The existence of risk committee at the board level showed a generally positive association with both ROA and the Z-score in fixed and random effects models, with statistical significance more consistently evident for financial stability than profitability. This result implies that banks with risk governance structures are better equipped to handle operational and financial risks, resulting in more efficient use of assets and improved profitability. Aligning with prior studies of Nahar and Jahan (2021) and Nguyen (2022), which document that the presence of risk committee consisting of directors with specialized risk management understanding will enhance operational oversight and resilience to adverse risk events.

Studies of Afaneh (2023) and Aebi et al. (2012) presented a lack of statistical significance in the relationship between risk committee presence and insolvency risk (zscore) and financial performance, attributed the outcome to the possible influence of other factors such as dogmatic environment of the banking sector, the constitution of the corporate authority and value given to risk management. Financial Leverage, included as a control variable, consistently exhibited a negative and highly significant relationship with both ROA and the Z-score. This finding agrees with the studies of Bensaadi (2025), Nandi and Bernajee (2024) and Mule et al., (2015), stating that leverage negatively impacts financial performance and stability, especially in organizations with strict governance systems. These findings demonstrate the complexities that exist between leverage strategies and governance mechanisms and the importance of strong governance frameworks in reducing leverage's negative effects on financial measures.

## **5. Conclusion**

The findings of this study highlight the centrality of corporate risk management in banking governance. Effective governance structures, particularly the establishment of risk committees emerge as critical in enhancing both profitability and financial stability. However, the evidence also suggests that traditional mechanisms such as larger boards or higher proportions of independent directors do not uniformly guarantee stronger outcomes, and may, in certain contexts, even undermine bank resilience. Most importantly, the consistently adverse impact of high financial leverage illustrates that governance mechanisms alone cannot compensate for structural imbalances in a bank's capital structure. Profitability and stability are fundamentally constrained when leverage ratios exceed prudent levels, underscoring the systemic importance of integrating governance mechanisms with sound risk management practices. Thus, the study concludes that while governance characteristics such as board size and board independence remains essential in aligning management decisions with shareholder and stakeholder interests, effective risk governance through dedicated committees and prudent leverage management is indispensable to ensuring the sustainable performance and resilience of banks.

## **6.0 Recommendation**

The findings of this study carry several recommendations for bank managers, directors, and regulators, tilting toward the need of prioritizing risk committee expertise. The positive effect of risk committee expertise on both profitability and stability highlights the importance of appointing directors with specialized risk management knowledge. Secondly, banks should carefully balance independence with domain expertise, appointing independent directors who possess practical

banking and risk management experience can enhance board effectiveness, avoiding the risk of formal independence without substantive contribution. Board size for contextual fit deserves critical consideration. The mixed effects of board size suggest that managers should avoid the “one-size-fits-all” prescriptions and lastly, the integration of governance with risk culture is imperative.

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