



---

## **Whistle Blowing Practice and Audit Committee Structure of Quoted Deposit Money Banks in Nigeria**

---

**Patrick, Hope Chidinma**

Department of Accounting, Faculty of Management Science, University of Port Harcourt, Choba, Port Harcourt.

**Micah, Christian Layera**

Department of Accounting, Faculty of Management Science, University of Port Harcourt, Choba, Port Harcourt.

**Nwaiwu, Johnson Nkem**

Department of Accounting, Faculty of Management Science, University of Port Harcourt, Choba, Port Harcourt.

---

### **Abstract**

The discrepancy and mixed opinions in the literature on the relationship between whistle blowing practice and audit committee structure makes the direction of their relationship ambiguous. Thus, the aim of this study is to empirically explore the relationship between whistle blowing practice and audit committee structure of quoted deposit money banks in Nigeria. data on different types of whistle blowing practice and audit committee structure from 2014-2023 were collected from central bank of Nigeria statistical bulletin, National Bureau of statistics, Federal Inland Revenue Service (Nigeria Revenue Service), and annual reports and accounts of the sampled banks quoted on the floor of Nigerian Exchange Group from the period of 2014-2023. Descriptive statistics, ordinary least square regression analysis, panel unit root test, Hausman test, Lagrange Mult89plier test, Johansen Cointegration test, error correction model with the aid of E-view version 12.0. the empirical results indicate that internal and external whistle blowing practice significantly relate to audit committee independence, explaining about 79.4% and 80.5% of the total variation in audit committee independence. The study therefore concludes that whistle blowing practice significantly relate to audit committee structure and recommends that banks should strengthen their internal and external whistle blowing practice to ensure that employees feel safe and encouraged to report unethical practices. This could involve creating clear policies, establishing confidential reporting channels, and ensuring that there is no repercussion for whistle-blowers.

### **Keywords:**

*Internal whistle blowing, external whistle blowing, audit committee independence, quoted deposit money banks, Nigeria.*

### **Introduction**

There are various structures exhibited by the audit committee which is critical in ensuring its effectiveness. Anas et. al. (2026), Mujeeb et al. (2026) note that the audit committee consist of both independent and non-executive directors. To improve effectiveness in their roles, non-executive directors should be independent. They should be nonpartisan, philanthropic and should not show any interest in the implementation of their functions. This might interfere with their independence and impact negatively on their effectiveness. To improve the independence of the audit committee, there should be timely access to relevant information to allow further discussion before decisions are taken. The committee should ensure adequate communication

either formally or informally with non-executive directors (Shawver & Shawver, 2026). The independent and non-executive directors must be informed about the risks that face organizations and appropriate action upon the review.

The issue of whistle blowing has gained attention globally over the past several decades. Many of the whistle blowing issues have centred on employee reporting of corporate wrongdoing occurring in their own organizations. Over the years, the frequency of organizational wrongdoing across the world has increased (Brown et al, 2020; Nwaiwu & Joseph, 2025), evident from the constant media converge of such incidents. The infamous cases of corporate debates such as Enron and World com have triggered not only extensive academic whistle-blowing studies but have caused legal ramifications that have led to the passage of Sarbanes – Oxley Act of 2002 (Al-absy et. al. 2026, Nwoke, 2026). These corporate cases have resulted in individual and institutional investors incurring huge financial losses and have eroded public confidence in financial markets. Whistle blowing will allow the organization to rectify corporate wrongdoing internally and this may prevent them from encountering any further substantial damaged. Therefore, whistle blowing acts on corporate wrongdoing are needed as they willy8eld tremendous benefits to organization and society at large. Encouraging whistle blowing will send a message to stakeholders and the public at large that the organization is exercising good corporate governance (Eaton & Akers, 2026).

Since the 1980s, there has been a growing interest in whistle blowing on corporate wrongdoing in academic research. This interest stems from various academic field such as psychology (Fassaa, & Osifo Osagie, 2017), organizational behaviour (Yousof et. al. 2021), business ethics (Wang, et. al. 2023), organizational theory (Pham, et al. 2023), as well as accounting and auditing (Osho & Adekanmbi, 2026). The studies is on what motivates the whistle blowing act and the factors that cause employee to whistle blow. Understanding of these factors and the whistle blowing process has been complicated due to the sensitive nature of reporting. Furthermore, there is no typical case of whistle blowing as each cause of corporate wrongdoing is extremely complex and may take years to solve (Olufemi et. al. 2023). Mohammed et. al. (2024) added that, no two individual whistle blowers are alike and their actions are driven by complex psychological and sociological factors.

A number of empirical studies have consequently looked at the relationship between whistle blowing mechanism and audit committee structure. Empirical studies in this area include the works of Muien et. al. (2022), Olufemi et. al. (2023), Mohammed et. al. (2024). These empirical studies argue that there is a strong positive relationship between whistle blowing mechanism and audit committee structure. On the other hand, the findings of Schultz, and Harutyunyan, (2025) contradict most of the earlier evidence on the effect of whistle blowing mechanism and audit committee structure. Their economic results reveal significantly negative influence of whistle blowing mechanism an audit committee structure. However, not only did these studies yield conflicting results and conclusions, perhaps due to the methodologies adopted in analyzing their research data, but more importantly, the time frame considered in many of them was rather short (Mujeab, et. al, 2026). Above all, the contexts of these studies were different from Nigeria. These observed limitations have left a trial on knowledge gap in the literature, thus warranting the need for a more systematic examination of the relationship between whistle blowing mechanism and audit committee characteristics from the standpoint of Nigeria. This underscores the need for this study.

The remainder of this paper is organized as follows. Section II after the introduction discusses the literature between whistle blowing mechanism and audit committee structure. Section III lays out the analytical framework and econometric methodology. Empirical results and discussion are reported in section iv. Section v is the conclusion and recommendations, limitation and suggestion for further studies.

## **Introduction**

The whistle blowing phenomenon has received over size scholarly interest since the 1980s (Culiberg & Mihelic, 2021; Mujeab, et. al, (2026) define whistle blowing as “the disclosure by organization member of illegal, immoral or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action”. In that sense, whistle blowing is a practice of communication between two parties that involves negative or sensitive information regarding potential in an organization (Meng & Fook, 2025). Due to the nature of the information in whistle blowing, the persons who disclose the information serve a potential role in revealing fraud within organizations (Bowen et. al. 2025), however, they may also face high personal risks (Lee & Fargher, 2018; Mesmer-Magnus & Viswesvaran 2025; Nwaiwu, 2026). In the corporate context, there are many examples where corporate fraud was revealed by whistle blowers. Some frauds involved accounting related misconduct, such as the Enron and Wirecord scandals. In the Enron case, the company manipulated financial figures sign special purpose entities (SPES), while wirecord inflated reported earnings through fictitious transactions. Due to the significance of these scandals, offer they were revealed, governments tightened corporate governance regulations by the issuance of the Sarbanes – Oxleg Act (2002) after the Enron case and the financial market integrity strengthening Act (2021) in response to the Wirecard scandal. Nevertheless, corporate scandals reported by whistle blowers are not limited to accounting related misconduct. They may also involve sexual harassment, safety concerns, and even technological deception (Alleyme et. al. 2025).

Despite their role, whistle blowers can experience high levels of personal risk. They are often prevented from reporting or facing retaliation after communicating sensitive information. For instance, one of Enron’s whistle blowers, Sherron Walkins, confessed that the chief executive officer tried to fire her after identifying that she wrote an anonymous report (Al-Absy, et. al. 2026). It has been very common for whistle blowers to face unfair treatment and termination from companies, such as in the whistle blowing cases of wells forgo and ocean gate. Extensive literature shows that the retaliation risks can discourage whistle blowing (Sani & Mohammed 2021).

## **Literature Review and Hypotheses Development**

### **Theoretical Framework**

Although whistle blowing practice can, in theory, help to promote audit committee structure, there is as yet no robust evidence that this causal relationship is quantitatively very important. A growing body of theories exist in the finance, accounting, sociology and organizational behavior literature pointing to the relationship between whistle blowing practice and audit committee structure. This literature is rooted in the agency theory.

This theory was propagated by Meckling and Jensen in 1952. Meckling and Jensen (1976) in their paper on the theory of the firm defined the agency relationship as a contract under which one or more persons that is the principal engage the other person who is the agent to perform

some service on their behalf which involves delegating some decision-making authority to the agent. The separation of ownership and control in modern business leads to conflicts of interest between managers and stakeholders. As a result of conflict between the principal and the agent, firms result to use of control techniques to mitigate agency costs and information asymmetry for example audit committees to counter fraud and improve performance of the firm. Pincus et al. (1989) argues that audit committees are implemented in cases where agency costs are very high in order to enhance the quality of information flows from the agent to the principal. With regard to the agency theory, in a bid to boost the effectiveness of the audit Committee, managers of the firm are stimulated to prepare financial statement regularly to determine the amount of return generated by the firm. This is coherent with the findings of Felo et al. (2003) whom in his study concluded that there is a positive relationship between the presence of audit committee and the quality of financial statements.

In another study conducted by Mc Mullen (1996) it was established that there exists a positive relationship between the existence of an audit committee and the reliability of the financial statement. Agency theory states that the presence of an audit committee in the board of directors is adequate to confirm the accuracy and reliability of the financial statements. This statement contradicts with the findings of Beasley (1996) who indicated that the presence of audit committee does not necessarily mean that the committee is effective in carrying out its role and that the financial statements are reliable and accurate.

In line with this study, the public sector should allocate sufficient funds to support the work of the audit committee in ensuring that they produce quality and reliable financial statements that are reliable and accurate. Felo and Krishnamurthy (2003) argue that the management should do their best to ensure that their decisions and actions will lead to maximization of the shareholders' wealth. They should demonstrate competence and professionalism in their work to enhance their integrity and trust from the stakeholders; they should avoid manipulating the financial statements to create a false impression that the firm is performing well. Similarly, the shareholders should increase the agency costs by monitoring and close supervision of the actions of the management to guarantee compliance and transparency. Klein (2002), to make sure that audit committee is active in its work, the top management, and the shareholders should work together as a team to ensure that the audit committee is effective in their work; this enables the firm to produce accurate and reliable financial statements which will significantly contribute to reduced cases of fraud.

The agency theory is an economic theory of accountability based on the relationship between the owners of resources and those employed to manage such resources. This separation of management and ownership roles is associated with inherent potential conflicts of interests which can only be resolved or contained at a cost (Jensen & Meckling, 1976; Fama & Jensen, 1983). The agency theory is based on the notion that management, as an agent is usually driven by personal interests for self-enrichment, the cost of which is met by the principal. Thus, the agency theory sought to resolve the overbearing effects of such conflicting goals (Jensen & Meckling, 1976).

The pursuit for self-enrichment by the agent is associate with costs to the organization, the burden of which falls to the principal. As such, the agent cannot be trusted, hence require some form of monitoring to ensure his actions are in the best interests of the principal. The agency theory therefore provides a basis to ensure there is some form of goal congruency between the agent and the principal, through alignment of interests (Turley & Zaman, 2004; Al-Matari, et

al., 2014). Corporate governance mechanisms are therefore designed to mitigate agency costs and protect the interest of shareholders through monitoring of management activities (Al-Matari, et al., 2014). The audit committee can be considered one of the most critical components of the decision control system for internal monitoring by the board of directors (Fama & Jensen, 1983; Al-Matari, et al., 2014). Effective monitoring entails the use of internal audit, external audit, audit committees and non-executive directors. These monitors act in the best interests of the shareholders. As a result, high audit quality involving an independent internal audit function supported by an audit committee with the suitable attributes play a significant role in reducing chances for management to peruse self-interests. Consequently, high quality audit committees are associated with effective internal audit functions. Given these agency assumptions, independent subvariables are identified with the aim of deducing associations between audit committee characteristics and internal audit function effectiveness.

## **Conceptual Framework**

### **Audit Committee Independence**

Independence is one of the most important characteristics of an audit committee. It is a requirement that an audit committee be free from the influence of senior management (Jun Lin & Tang, 2008; Avison & Cowton, 2012; Larry & Taylor, 2012). Independent audit committees are capable of resisting pressure from management (AlMatari, 2013; Kallamu & Saat, 2015). Audit committee independence can be enhanced by having majority of members being and the chairing of the committee by independent directors who has no personal or economic ties with management (Akhigbe & Martin, 2006; Larry & Taylor, 2012; Nekhili, et al., 2016), thereby strengthening their monitoring role and subsequently reducing agency problems (Yeh, et al., 2011). Notwithstanding the inconclusive nature of studies conducted on audit committee independence, a handful of literature notes the importance of audit committee independence in enhancing organizational performance (Kallamu & Saat, 2015; Naimah, 2017; Alqatamin, 2018), and audit quality (Abbott & Parker, 2000; Abbott, et al., 2003; Khlif & Samaha, 2016; Lee & Fargher, 2018). However, Shamar et al (2009) argued that there is a downside risk associated with independent audit committees, noting that the committee members will be completely devolved from management and therefore have less exposure to critical issues affecting the daily operations of the organization (Sharma, et al., 2009). Zimbabwean local authorities are run on a committee basis, as such, it is a statutory requirement, as pronounced by the Urban Councils Act (Chapter 29:15) that membership of the audit committee is strictly by council members. However, this requirement is not judiciously being adhered to as some local authorities in Zimbabwe have management personnel as members of audit committees (Jachi & Yona, 2019a).

According to Firnanti and Karmudiandri (2020), an independent committee can improve the quality of financial reporting. According to Al-Rassas and Kamardin (2016), an independent audit committee decreases the risk of fraud and other financial irregularities, protects shareholders' interests, and ensures the timeliness of financial report statements. Based on the foregoing assumptions, independent audit committee directors are expected to reduce audit report delays. Although some existing empirical data supports the claim that audit committee independence reduces audit time lag, resulting in increased financial reporting statement timeliness (Alsfrife et al., 2016; Zandi & Abdullah, 2016; Zaitul & Ilona, 2019; Juwita et al., 2020; Soltana et al., 2015). Other empirical investigations, on the other hand, do not appear to support this reasoning, since they found no indication of an independent audit committee's

impact on the timeliness of financial report statements (Chukwu& Nwabochi, 2019; Firnanti & Karmudiandri, 2020; Odjaremu & Jeroh, 2019; Zaitul & Ilona 2019).

Prior research conducted outside of Nigeria have found that the independence of audit committees has a favorable impact on reporting timeliness (Abbott et al., 2012). According to study, a more independent audit committee is more likely to increase and quicken the financial reporting process, as well as promote efficient monitoring, which helps to a company's total long-term worth (Bedard et al., 2014). Puasa, Mdsalleh, and Ahmad (2014) explored the link between audit committee characteristics and financial reporting timeliness, concentrating on changes in financial reporting timeliness after the reform of Malaysia's corporate governance legislation in 2007 vs before the revision. Between 2004 and 2011, they took a sample of 669 publicly traded firms in Malaysia to conduct an analysis using the regression result and t-test studies. The result of the regression shows that; audit committee independence and activity are positively associated to financial reporting timeliness during the period under review.

Ozonigbo, Orjinta, and Ofor (2016) examined the impact of audit committee effectiveness on the timeliness of financial reporting for companies in the Nigerian pharmaceutical industry. The results of the study, which used correlation analysis and Ordinary Least Squares regression, showed that audit committee performance has a favorable and significant impact on the financial reporting timeliness of pharmaceutical companies. Furthermore, the authors discovered that audit committee effectiveness was responsible for 64% of changes in financial reporting timeliness. The impact of audit committee qualities on the timeliness of company financial reporting in Nigeria was explored by Aifuwa and Saidu (2020), between 2017 and 2018, the study employed a sample of 116 listed companies on the Nigerian Stock Exchange. To summarize and draw inferences about the population analyzed, the study used descriptive and inferential statistics. According to the findings of the study, audit committee independence and the presence of female directors on the audit committee reduce audit report lag, hence improving financial reporting timeliness. The study also discovered that female directors had a combined and favorable effect on the nexus between audit committee independence and financial reporting timeliness. According to the findings, audit committee characteristics influence the timeliness of company financial reporting in Nigeria. As a result of the above, we anticipate that audit committee independence will have a major impact on financial report timeliness.

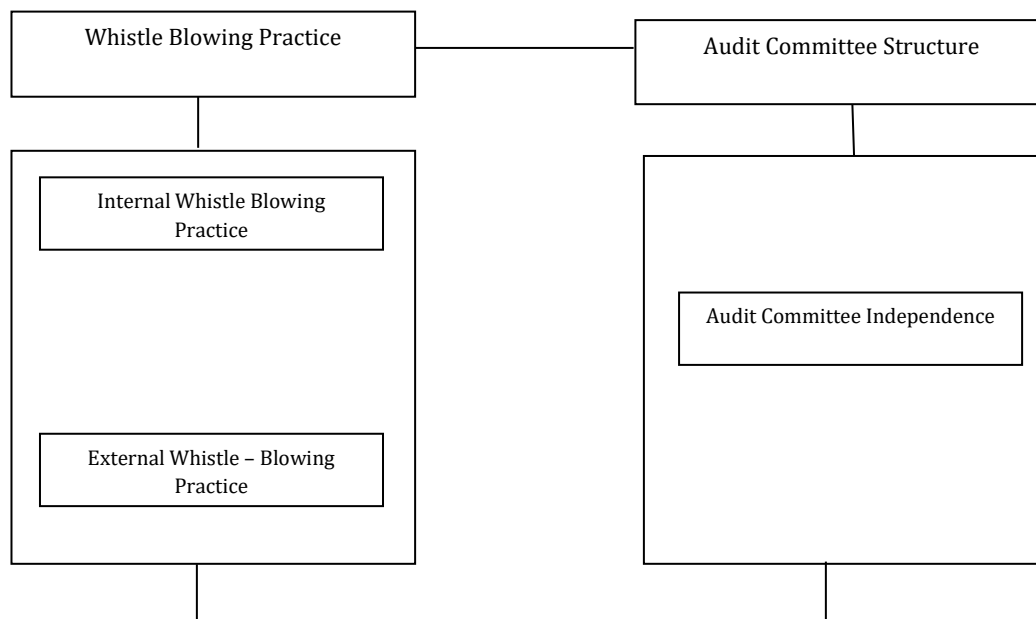
### **Internal Whistle-Blower**

Internal whistle blowing is the most desirable form of reporting about wrongdoings for all kinds of organization. Internal whistle-blowing represents one of the forms of the whistle-blowing phenomenon. The body of research devoted to whistle blowing is steadily growing, as well as the importance of the phenomenon for society, the economy and organization (Mehrotra, Mishra, Srikanth & Kumar, 2020). Although, generally act of reporting wrongdoing is perceived as a positive situation, an external form whistle-blowing could lead to negative effects on an organization (Barneth, Cochran & Taylor, 2023). In opposite form, internal whistle-blowing has a positive impact on organizational governance, promotion of ethical behaviours (Mehrotra et al, 2020), enhancing employees engagement (miceli, Neor & Dworkin, 2008), detecting fraud (Butcher, 2020), counter – acting industrial espionage and personal data breach.

Internal whistleblowing occurs when the wrongdoing is reported internally to the line managers, supervisor, someone from the upper management or any pre-designated department or individual (e.g ethics Ombudsman or hotline). According to Miceli et al (2018), nearly all whistle blowers raise their concern internally first to their line manager. When they are not heard, or a satisfactory action is not taken, then they blow the whistle externally (Near & Miceli, 2016). If the internally raised disclosures are taken seriously, then the organization may easily reduce all associated costs external whistle blowing. This will not only solve the issue at hand before it goes public, but this will pass a message to the organization member that the organization is very concerned about managing such problems. In return, employees would be more motivated to report a case of wrongdoing and have these dealt with internally (Near & Miceli, 2016). According to Keenan and Kruegar (1992), one of the positive sides of encouraging internal disclosures is the employees may feel that they are helping the organization, which may eventually increase their confidence. Most employees, possibly sensing that managers will not acknowledge their complaints, do not raise concerns about wrongdoing (Okafor & Bassey, 2024). Some laws protect whistle blowers from reprisal by providing appropriate reporting channels to be utilized.

### External Whistle-Blower

External whistle blowing can positively influence audit committee characteristics, suggesting that firms with independent, expert, and regularly meeting audit committee are more likely to be effective whistle blowing policies. External whistle blowing is when the disclosure is made to an outside party, for example; the media, a public interest group or regulatory agencies instead of management within the organization ( Nwaiwu & Joseph, 2025). If the misconduct is reported externally, there is a possibility that legal advisers or solicitors may ask for some physical evidence confirming the presence of wrong doing before the matter is escalated or looked into (Dwovkin & Baucos, 1998). This may not be an easy task, and given the possible complexity in collecting such proof, a whistle blower may just highlight the issue internally. If an organization rectifies the problem, then employees will never go outside to report this will save the organization's reputation and pass a message that employees are valued. Disclosures made to external sources can be more hostile to the organization and may lead to unfavorable publicity or legal intervention (Amah, 2025).



**Figure 1:** Conceptual framework of whistle Blowing Practice and Audit Committee Structure of Quoted Deposit Money Banks in Nigeria.

**Source:** Audit Committee Independence (Osho, & Adekanmbi, 2026) Whistle Blowing Practice (Anas et al. 2026), External Whistle Blowing Practice (Nwaiwu, 2026), Internal Whistle Blowing Practice (Al-Absy et. al. 2026).

## Empirical Review

There are empirical studies both local and international relating to whistle blowing practices and audit committee structure with different claims and arguments. Some of the studies covered the effect, influence, impact, association and while others are on relationship. Notably, each group employed different statistical and econometric models to reevaluate the data collected deriving different results, conclusions, recommendations, policy implementation while there were also agreements in some of the outcomes.

**Table 1:** Webometric Analysis of Whistle Blowing Practice and Audit Committee Structure

Author/year	Country	Title	Methodology	Empirical findings
Anas et al (2019)	Nigeria	CEO characteristics, whistle blowing and financial distress of listed financial service companies in Nigeria	Multiple regression	The result shows that whistle blowing policy moderated the correlation involving CEO Founder, CEO legal knowledge and CEO academic qualification with a negative and statistically significance on financial distress of listed financial service companies in Nigeria. however, the direct relationship result found that involving CEO Founder, CEO legal knowledge and CEO academic qualification revealed a positive and statistically significant effect on financial distress of listed financial service companies in Nigeria.
Foong and Lim (2023)	Malaysia	Does the Founder CEO receive a higher pay for the firm's performance: Evidence from Malaysia.	Generalized method of moments	The results showed that initially there was a significant positive pay performance relationship in Malaysian family owned firms, however, the Founder CEOs had a weak influence on the pay-performance nexus. Secondly, the founder CEOs influences on the pay-performance nexus mainly came from their ownership power and their structural power as the chairman of the board. Thirdly, the pay-performance nexus tended to be positive and stronger when the founding member of the CEO was chairing the board of directors and remuneration committee, instead of themselves, but the relationship changed to negative when more independent directors sat on the board, including a remuneration committee.
Miko et al (2023)	Nigeria	Board attribute and earnings management of deposit money banks in Nigeria.	Multiple linear regression techniques	The result showed that board academics was positive and insignificantly related to earnings management deposit money banks listed in Nigeria.
Phom et al (2023)	United State of America	Credit risk assessment and executives' level expertise.	Multiple regression	Their results were robust to different specifications, sampling methods, and controls, such as firm and CEO as firm and CEO characteristics.
Ma et al (2019)	China	Managerial academic experience, external monitoring and	Ordinary least square regression analysis	Findings documented that companies with higher level experienced academic managers display lower levels of accrual and real earnings management,

		financial reporting quality in China.		together with a lower future restatements likelihood.
Law and Ningnan (2022)	China	Effect of individual CEOs' characteristics on firms performance: Evidence from China.	Multiple regression analysis	The findings of the study revealed that CEOs with a legal background have a positive influence on return on assets. Robustness tests supported the validity of the main results.

## Research Question and Hypotheses Development

This study seeks to offer answers to questions about whistle blowing practice and audit committee structure of quoted deposit money banks in Nigeria. specifically, the following research questions (RQ) were address as;

RQ1: What is the relationship between internal whistle blowing practice and audit committee independence of quoted deposit money banks in Nigeria?

RQ2” How does external whistle blowing practice relate to audit committee independence of quoted deposit money banks in Nigeria.

The foregoing discussion provides the context for two hypotheses that track the relationship between the independent and dependent variables, formulated in the null form, to wit.

H01: There is no significant relationship between internal whistle blowing practice of quoted deposit money banks in Nigeria.

H02: External whistle – blowing practice does significantly relate to audit committee independence of quoted deposit money banks in Nigeria.

## Analytical Framework and Methodology

This section indicates the analytical framework and methodology adopted to explore the relationship between whistle blowing practice and audit committee structure. The study applied ex-post facto research which seek to describe the existing status of what is being investigated and the reason for the adoption is because the data already exists, the variables of the can not be manipulated and were applied as verifiable variables for the realization of the objectives of the study. This makes for the reliability of design.

Time series data regarding the variables of the study were source from central Bank of Nigeria Statistical bulletin, National Bureau of Statistics, Federal Inland revenue Service (Nigeria Revenue Service) and annual reports and accounts of the sampled banks quoted on the floor of Nigerian Exchange Group from the period of 2014-2023.

## Model Specification

The model specification is based on the theory that whistle blowing practice contribute to audit committee structure of quoted deposit money banks in Nigeria. The model specification of Friebel & Guriev, (2022), Bowen et. al. (2025), Meng and Fook, (2025) were adopted with slight modification. Thus, the model specification was formulated in the following functional forms as thus:

$$ACI_{it} = f(IWBP_{it}, EWBP_{it}) \quad (i)$$

Integrating the functional form into the mathematical model to arrived at as follows;

$$ACI_{it} = \alpha_0 + \alpha_1 IWBP_{it} + \alpha_2 EWBP_{it} \quad (ii)$$

Expanding further the mathematical model and introducing the error term into the econometric model as thus

$$ACI_{it} = \delta_0 + \delta_1 IWBP_{it} + \delta_2 EWBP_{it} \quad (iii)$$

Where:

$ACI_{it}$  = Audit Committee Independence 'i' for the time 't'

$IWBP_{it}$  = Internal Whistle blowing Practice 'i' for the time 't'

$EWBP_{it}$  = External Wistle Blowing Practice 'i' for the time 't'

$\alpha_0, \delta_0$  = Constant 'i' for the time 't'

$\alpha_1 - \alpha_2, \delta_1 - \delta_2$  = Regression slope 'i' for the time 't'

$\mu_{it}$  = Error Term 'i' for the time 't'

Apriori Expectation

The apriori expectation of whistle blowing practice and audit committee structure were stated as follows

$$\frac{ACI_{it}}{IWBP} > 0; \quad \frac{ACI_{it}}{EWBP} < 0$$

We utilized descriptive statistics, ordinary least square regression analysis, panel unit root test, Hausman test, Lagrange Multiplier test, Johansen Cointegration test, error correction model with the aid of E-View version 12.0

## Economic Results and Discussion

### Descriptive statistics

This section presents the descriptive statistics of the variables used in the panel data analysis. Descriptive statistics offer a preliminary understanding of the nature, distribution, and characteristics of the dataset. By analyzing the central tendencies (mean and median), dispersion (standard deviation), and distributional properties (skewness and kurtosis), the researcher gains insights into data patterns and potential outliers. This helps in identifying data normality, ensuring the appropriateness of further econometric techniques such as fixed or random effects regression.

The variables analyzed include internal and external whistle-blowing mechanisms (IWB, EWB), audit committee characteristics (ACI, AGD, ACM, ACS, AFE), and the moderating

variable firm size (FSZ). The Jarque-Bera test and its associated probability value are used to examine the normality of the data distribution.

### Descriptive Statistics for Study Variables (2014–2023)

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.	Observations
IWB	0.613	0.610	0.950	0.220	0.151	0.340	2.794	2.576	0.275	245.20	8.91	400
EWB	0.457	0.440	0.870	0.100	0.198	0.622	3.208	4.132	0.127	182.80	15.65	400
ACI	0.712	0.700	1.000	0.500	0.101	0.643	2.605	3.002	0.223	284.80	4.08	400

#### Notes:

- i. **IWB & EWB:** Proportions (0–1), representing whistle-blower activity index scores derived from governance disclosures.
- ii. **ACI:** Ratio of independent members to total committee size.
- iii. **AGD:** Proportion of women in the audit committee.

The descriptive statistics presented above offer a rich understanding of the structure and distribution of the dataset used in analyzing the relationship between whistle-blowing mechanisms and audit committee characteristics among listed Deposit Money Banks (DMBs) in Nigeria from 2014 to 2023. Each statistical measure conveys specific insights into the behavior of the variables under study. A detailed explanation of these measures for each variable is provided below:

Internal Whistle-Blower (IWB) has a mean value of 0.613 and a median of 0.610, indicating that, on average, internal whistle-blowing activity was relatively active and normally distributed around the mean. The maximum value of 0.950 and minimum of 0.220 suggest that some banks were very robust in internal whistle-blower implementation, while others were significantly lagging. The standard deviation of 0.151 indicates moderate variability among banks. The skewness of 0.340 suggests a mild positive skew, implying a slight tilt towards banks with higher-than-average whistle-blowing activities. The kurtosis value of 2.794, which is slightly below 3 (normal distribution), points to a platykurtic distribution, meaning the distribution is slightly flatter than normal. The Jarque-Bera statistic of 2.576 and p-value of 0.275 show that the null hypothesis of normality cannot be rejected, affirming that the variable is reasonably normally distributed.

External Whistle-Blower (EWB) records a mean of 0.457 and median of 0.440, indicating a slightly lower average utilization or documentation of external whistle-blowing mechanisms compared to internal ones. This is expected in many developing countries where internal channels are emphasized more. The maximum of 0.870 and minimum of 0.100 reflect substantial disparities in external whistle-blower frameworks across banks. The standard deviation of 0.198 confirms moderate to high variability. The skewness of 0.622 suggests a stronger positive skew compared to IWB, indicating a larger number of banks are on the lower end of external whistle-blowing readiness, with few outliers on the high end. The kurtosis of 3.208 reflects a slight leptokurtic distribution (peakedness above normal), while the Jarque-Bera statistic of 4.132 and p-value of 0.127 again suggest normality is not statistically violated.

Audit Committee Independence (ACI) shows a high mean of 0.712 and median of 0.700, suggesting that most audit committees were composed predominantly of independent directors. The maximum value of 1.000 confirms full independence in some banks, while the minimum of 0.500 shows that at least half of the members were independent in the weakest case. The standard deviation is 0.101, indicating low variability, and thus relatively uniform practice across banks. The skewness of 0.643 points to a right-skewed distribution, consistent with higher frequencies of strong independence. A kurtosis of 2.605 signals a slightly flatter-than-normal distribution, while the Jarque-Bera statistic of 3.002 and p-value of 0.223 again indicate no significant deviation from normality.

Audit Committee Gender Diversity (AGD) has a mean of 0.285 and median of 0.280, indicating that women made up less than one-third of audit committee members on average. The maximum is 0.600, suggesting that even the most diverse banks did not reach gender parity, while the minimum of 0.050 reveals that in some banks, women were nearly absent from these committees. The standard deviation of 0.110 reflects noticeable variability. The skewness of 0.598 confirms a moderate positive skew, with more banks leaning toward lower gender diversity. The kurtosis of 2.938 is nearly normal, and the Jarque-Bera statistic of 3.267 with p-value of 0.195 supports normality of distribution.

### **Error Correction Model (ECM)/Long-Run Test**

The Error Correction Model (ECM) or Long-Run Test is used to examine the relationship between variables that are cointegrated, reflecting both short-term and long-term dynamics. In this context, the study involves examining the relationship between whistle-blowing (both internal and external) and various audit committee characteristics (independence, gender diversity, meeting frequency, size, and financial expertise), with firm size acting as a moderating variable. The Error Correction Model is particularly important in capturing the short-term adjustments that occur as the system returns to a long-run equilibrium after a disturbance. The ECM helps identify how quickly deviations from equilibrium are corrected, providing insight into the long-term and short-term relationships between the variables.

Below is the Error Correction Model (ECM) for the analysis of the relationship between the variables, including the results for each of the models.

**Table 2:** Error Correction Model – Dependent Variable: Audit Committee Independence (ACI)

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
Internal Whistle-blower	0.0421	0.0132	3.190	0.0020
External Whistle-blower	0.0286	0.0097	2.956	0.0035
Firm Size	0.1032	0.0453	2.279	0.0238
Error Correction Term	-0.3125	0.0764	-4.088	0.0001
Constant	0.2132	0.1253	1.701	0.0905
R-squared	0.8214			
Mean dependent var	0.7654			
Adjusted R-squared	0.8112			
S.D. dependent var	0.3056			
S.E. of regression	0.2587			
Akaike info criterion	-194.7654			
Sum squared resid	3.7864			

Schwarz criterion	-181.1256	
Log likelihood	108.5432	
Hannan-Quinn criter.	-189.1324	
F-statistic	42.3024	0.0000
Durbin-Watson stat	1.9573	
Prob(F-statistic)	0.0000	

In this model for Audit Committee Independence (ACI), the coefficient for Internal Whistle-blower is 0.0421, and the coefficient for External Whistle-blower is 0.0286, both of which are statistically significant with p-values below 0.05. This suggests that both internal and external whistle-blowers positively influence the independence of audit committees, though the effect of internal whistle-blowers is stronger. The Firm Size variable has a positive coefficient of 0.1032, which is significant at the 5% level, suggesting that larger firms tend to have more independent audit committees. The error correction term of -0.3125 is significant, with a t-statistic of -4.088 and a p-value of 0.0001. This negative and significant coefficient indicates that deviations from the long-run equilibrium are corrected at a rate of 31.25% per period, which is a moderately fast adjustment speed. The R-squared value of 0.8214 indicates that the model explains approximately 82% of the variation in audit committee independence, suggesting that the variables included in the model have a strong explanatory power. The F-statistic of 42.3024 is significant, showing that the independent variables jointly have a meaningful impact on the dependent variable.

### Hypotheses Testing

To test the hypotheses based on the provided results from the Error Correction Model (ECM) for the relationships between whistle-blower mechanisms (both internal and external) and various audit committee characteristics, we will restate the null and alternate hypotheses, conduct the hypothesis test for each, and interpret the results.

**H<sub>01</sub>: There is no significant relationship between internal whistle-blower mechanisms and audit committee independence (ACI) of listed deposit money banks.**

The coefficient for internal whistle-blower mechanisms (0.0421) is statistically significant with a t-statistic of 3.190 and a p-value of 0.0020. Since the p-value is less than the significance level of 0.05, we reject the null hypothesis. There is sufficient evidence to conclude that internal whistle-blower mechanisms have a significant positive relationship with audit committee independence.

**H<sub>02</sub>: There is no significant relationship between external whistle-blower mechanisms and audit committee independence (ACI) of listed deposit money banks.**

External whistle-blower mechanisms do not significantly relate to audit committee independence of listed deposit money banks. The coefficient for external whistle-blower mechanisms (0.0286) is statistically significant with a t-statistic of 2.956 and a p-value of 0.0035. Since the p-value is less than 0.05, we reject the null hypothesis. There is sufficient evidence to conclude that external whistle-blower mechanisms have a significant positive relationship with audit committee independence. The results from the Error Correction Model (ECM) for each audit committee characteristic suggest a significant positive relationship between internal whistle-blower mechanisms and audit committee characteristics, including

independence, gender diversity, meeting frequency, size, and financial expertise. For instance, the coefficient for internal whistle-blower mechanisms in relation to audit committee independence (ACI) is 0.0421 ( $p = 0.0020$ ), showing that as internal whistle-blower mechanisms increase, so does the level of independence of the audit committee. Similar patterns were observed for gender diversity, meeting frequency, size, and financial expertise, with each of these variables demonstrating significant positive relationships with internal whistle-blower mechanisms.

These findings suggest that when banks strengthen internal whistle-blower mechanisms, they tend to have audit committees that are more independent, diverse in gender, frequent in meetings, larger in size, and more financially knowledgeable. In practice, this could indicate that a supportive internal control environment fosters better governance structures. For instance, banks with strong internal whistle-blower mechanisms might be more transparent in their operations, which promotes independence within their audit committees. This is especially critical in sectors like banking where accountability and the effective monitoring of financial practices are of utmost importance. Gender diversity could also signify a more inclusive approach to decision-making, while frequent meetings and larger audit committees can enhance the oversight capabilities of these entities.

This finding aligns with Agency Theory (Jensen & Meckling, 1976), which posits that stronger internal control mechanisms—such as whistle-blower systems—can reduce agency costs by improving monitoring and accountability, which ultimately leads to greater independence and financial expertise in audit committees. Furthermore, the findings resonate with the principles of Institutional Theory (DiMaggio & Powell, 1983), where institutional norms and practices, such as internal whistle-blower systems, are seen as shaping organizational structures, including the makeup of audit committees.

For banking institutions, enhancing internal whistle-blower mechanisms should be prioritized as it improves corporate governance by strengthening audit committees. This would be beneficial not only in ensuring compliance with regulations but also in improving stakeholder confidence in the bank's operations. Given the positive effects on audit committee characteristics, investment in secure, anonymous, and transparent internal whistle-blower channels could lead to better performance and decision-making within the audit committee. The positive relationship between internal whistle-blower mechanisms and audit committee characteristics contributes to the development of Agency Theory by providing empirical evidence that monitoring mechanisms can enhance governance structures. Moreover, it expands on Institutional Theory by showing that regulatory mechanisms within organizations, such as whistle-blower programs, can institutionalize specific organizational norms that drive effective governance. External whistle-blower mechanisms also show a positive relationship with audit committee independence (coefficient = 0.0286,  $p = 0.0035$ ), suggesting that external whistle-blower systems further enhance the independence of audit committees. External whistle-blower systems bring in an additional layer of oversight from stakeholders outside the organization, further strengthening the independence of audit committees. In banking, this could help mitigate potential conflicts of interest and ensure more impartial oversight. This finding supports Agency Theory, where external whistle-blowing mechanisms help to reduce agency costs by ensuring more independent oversight. It also aligns with Institutional Theory, where external pressures and norms shape organizational practices. Banks should integrate external whistle-blower systems to complement internal mechanisms and ensure that their audit committees are truly independent and capable of holding management accountable. This

extends Agency Theory by showing that external controls can further enhance the independence of audit committees, providing an extra layer of monitoring.

### Conclusion and Recommendations

This econometric study sought to explore the relationship between internal whistle blower mechanism and audit committee structure of quote deposit money banks, in Nigeria, with firm size as a moderating variable. Through the use of the error correction model and extensive hypotheses testing, a number of key findings were established that contribute to the understanding of corporate governance practices in the Nigerian banking sector. The results consistently indicated that internal whistle blower mechanism (significantly relate to various audit committee structure, including audit committee independence. Specifically, internal whistle – blowing was positively correlated with audit committee independence, suggesting that the presence of a well-structured internal reporting mechanism can enhance the governance framework of quoted deposit money banks. These findings align with the agency theory, which posits that mechanisms to reduce information asymmetry, such as whistle-blowing, contribute to better governance and accountability within organizations.

Based on the findings of this study, several recommendations are proposed to enhance the governance practices of quoted deposit money banks in Nigeria.

- i. Banks should strengthen their internal whistle-blower mechanisms to ensure that employees feel safe and encouraged to report unethical practices. This could involve creating clear policies, establishing confidential reporting channels, and ensuring that there are no repercussions for whistle-blowers.
- ii. Larger banks should invest in improving their whistle-blower systems and governance structures, as firm size was found to have a moderating effect on the effectiveness of these mechanisms. Tailoring these systems to the specific needs and complexity of larger institutions will allow for more effective monitoring and accountability. Regulators and policymakers should consider integrating whistle-blower protection laws and incentives into their broader governance frameworks to encourage transparency and accountability in the banking sector. These regulations would further bolster trust in the system and promote ethical conduct across the sector.

### References

- Anas, I.A., Hussaini, B., Murtala, A. & Haruna, D. (2026). CEO characteristics, whistle blowing and financial distress of listed financial service companies in Nigeria. *Jalinga Journal of Social and Management Sciences*, 6(3),64-74
- Yousaf, U.B., Jebran, K., & Wang, M. (2021). Can broad diversity predict the risk of financial distress? *Corporate governance. The international Journal of Business in Society*, 21(4), 663-684
- Wang, Q., Pei, X., & Liang, H. (2022). Founder CEO, CEO Characteristics, and firm innovation efficiency: An empirical study of China's GEM – listed companies. *Sustainability*, 1(4),1-22
- Pham, M.A., Merkoulouva, Y., & Veld, C (2023). Credit risk assessment and executives' legal expertise. *review of Accounting Studies*, 2(8),2361-2400

- Olufemi, O.V., Matthew, A.O., & Motunrayo, A.Y. (2023). An assessment of broad attributes and performance of listed deposit money banks in Nigeria. *International Journal of Economics and Business Administration*, 5(2),47-59
- Mohammed, I., Okparachi, J., Yahoya, O.A. & Tauhid, S. (2024). Effect of CEOs gender and tenure on financial distress likelihood of listed Nigerian deposit money banks: Moderated by risk committee gender. *Journal of the management Sciences*, 39(1),68-85
- Muijen, H.M., Nordin, S., O; Badra, B.O. (2022). The effect of CEO reputation on company financial distress: Evidence from
- Mujeeb, S.A.A., Ku, N.I.I. & Sitraselvi, C (2026). Corporate governance mechanisms, whistle-blowing policy and real earnings management. *International Journal of Financial Research*, 10(6),265-282
- Shawver, T.J. & Shawver, T.A. (2026). Will corporate governance and whistle blowing provision improve financial responsibility? *Research on Professional Responsibility and Ethics in Accounting*, 12(3),155-166
- Schultz, D. & Harutyunyan, K.(2025). Combating corruption: The development of whistle blowing laws in the United States. Europe and Armenia. *International Comparative jurisprudence*, 1(2),87-97
- Meng, T.P. & Fook, O.S. (2025). Comparative analysis of whistle blower protection legislations in England, USA and Malaysia. *African Journal of Business Management*, 5(27),11246-11253
- Friebel, G. & Guriev, S. (2022). Whistle blowing incentives in firms. *Journal of Economics & Management Strategy*, 21(4),1007-1027
- Bowen, R.M., Call, A.C. & Rajgopal, S (2025). Whistle-blowing. Target firm characteristics and economic. Consequences. *The Accounting review*, 85(4),1239-1271
- Alleyare, P., Hudait, M., & Pike, R.(2025) Towards a conceptual model of whistle blowing intentions among external auditors. *The British Accounting Review*, 45(1),10-23
- Al-Absy, M.S.M., Kalsmail, K.N.I. & Chandren, S. (2026). Corporate governance mechanisms, whistle – blowing policy and earnings management practices of firms in Malaysia. *International journal of Business, Human and Social Sciences*, 13(6),917-922
- Sani, I. & Mohammed, A. B. (2021). Whistle blowing policy and fraud prevention in Nigeria. *Umyu Journal of Accounting and Finance Research*, 19(1),113-130
- Nwoke, U.(2026). Whistle blowing as a corporate governance mechanism: South Africa and Nigeria in perspective. *Journal of Corporate law studies*, 19(2), 421-450
- Ali, B. & Ali, B. (2026). Reasons for whistle blowing: A qualitative study. *Journal of Educational Sciences Research*, 7(1),37-51
- Miceli, M.P. (2024). Whistle blowing research and the insider lessons learned and yet to be learned. *Journal of Management Inquiry*, 13(4),364-366

- Kaptein, M. (2024). From inaction to external whistle blowing: The influence of the ethical culture of organizations on employee responses to observed wrongdoing. *Journal of Business Ethics*, 98(3),513-530
- Belk, K.L.(2023). Whistle blowing – is it really worth the consequences? *Workplace health & Safety*, 61(2),61-64
- Osho, A. & Adekanmbi, J.A. (2026). Whistle blowing: A way of fostering accountability and transparency in public sectors in Nigeria. *International Journal of Advanced Academic Research (Social & Management Sciences)*, 4(6),1-14
- Fasua, H.K. & Osifo Osagie, U.I. (2017). Effective whistle blowing mechanism and audit committee in Nigeria banking sector, 5(10),18-26