ACCOUNTING

Moderating Effect of Financial Leverage on CEO Remuneration, Employee Turnover, and Financial Performance of Listed Non-Financial Firms in Nigeria

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Abstract

The financial performance of listed non-financial firms in Nigeria has raised concerns regarding the influence of corporate disclosure practices and the role of financial leverage. This study examined the moderating effect of financial leverage on CEO remuneration, employee turnover and financial performance of listed non-financial firms in Nigeria. An ex-post facto research design was adopted, using secondary data obtained from the annual reports and financial statements of 71 purposively selected firms from a population of 103 listed non-financial firms on the Nigerian Exchange Group as at 31 December 2025. The study covered the period from 2013 to 2025. CEO remuneration disclosure and employee turnover disclosure were measured using the CEO Remuneration Disclosure Index (CEORDI) and Employee Turnover Disclosure Index (ETODI), respectively, while financial performance was measured using Return on Asset Growth (ROAGR). Financial leverage, measured by the debt-to-equity ratio, served as the moderating variable, while firm size was included as a control variable. Data were analysed using trend analysis, descriptive statistics, correlation analysis, diagnostic tests and panel regression techniques with EViews 13. The findings revealed that CEO remuneration disclosure had a negative but statistically insignificant effect on financial performance, while financial leverage negatively and significantly moderated the relationship. Conversely, employee turnover disclosure had a positive and statistically significant effect on financial performance, with financial leverage positively and significantly moderating the relationship. The study concluded that the effects of corporate disclosure on financial performance differed according to the type of disclosure and the moderating role of financial leverage. It recommended improved corporate disclosure practices, stronger regulatory monitoring and enforcement, prudent debt management, and effective employee retention strategies to enhance transparency, accountability and financial performance.

Keywords: CEO remuneration disclosure; employee turnover disclosure; financial performance; financial leverage; return on asset growth

1 Introduction

The non-financial corporate sector contributes significantly to employment generation, investment, innovation, productivity and economic development in developed and developing economies. The World Bank (2024a) reported that the private sector generates approximately 90% of jobs, 75% of investment and over 70% of output in developing economies. In Nigeria, the non-oil sector accounted for 94.30% of real gross domestic product in the second quarter of 2024 (National Bureau of Statistics [NBS], 2024), highlighting its importance to economic diversification and national development. However, sustainable corporate performance depends partly on effective resource utilisation,

employee retention, appropriate executive remuneration and sound financial management. Therefore, examining CEO remuneration disclosure, employee turnover disclosure and financial performance, alongside the moderating effect of financial leverage, is important for understanding the factors influencing the performance and sustainability of listed non-financial firms in Nigeria.

Financial performance is the central measure of corporate success, determining firm survival, growth, and value creation globally (Adeosun, 2025). In developed nations, it drives economic growth by attracting investment, funding expansion, and sustaining pension systems (Taylor and Francis Online, 2026). In emerging economies, it is even more critical due to institutional uncertainty and weak monitoring, serving as the primary mechanism through which governance translates into firm value (Garuda, 2025; Taylor and Francis Online, 2026). In Nigeria, non-financial firms face persistent volatility and structural fragility. The manufacturing sector contracted in July 2025 (Nigeria Economic Summit Group, 2025), real manufacturing growth was only 1.25% in Q3 2025, and capacity utilisation stagnated at 30–50% (Adeosun, 2025). Firm-level evidence confirms this: Conoil Plc's profit fell 77% to N2.01 billion in 2025 due to soaring finance costs (BusinessDay, 2026), while FTN Cocoa remained loss-making despite a 310% revenue surge (New Telegraph, 2026). These outcomes stem from inadequate power, limited financing, forex scarcity, and high costs, which squeeze margins and discourage investment (Nigeria Economic Summit Group, 2025, 2026). Against this backdrop, governance and disclosure practices, particularly CEO remuneration and employee turnover emerge as critical determinants of financial performance in Nigeria's challenging environment (Adeosun, 2025; BusinessDay, 2025).

Financial performance can be measured using accounting-based and market-based proxies, including Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), Earnings per Share (EPS), Return on Capital Employed (ROCE), Economic Value Added (EVA), and Tobin's Q, with recent empirical studies continuing to employ ROA, ROE, and Tobin's Q as measures of corporate financial performance (Al-Azizah and Haron, 2025; Bishwas and Hossain, 2025). Return on Asset Growth (ROAGR) can also be employed as a dynamic financial-performance metric because it captures the change in a firm's asset-based profitability from one period to another; importantly, recent scholarly research has operationalised changes in ROA (ΔROA) as a measure of firm performance, while a 2025 study also examined ROA growth as a specific firm-performance indicator (Batsakis et al., 2024; Gropengießer-Arlt and Zacharias, 2025). ROA Growth was adopted as the primary proxy for financial performance because it captures the year-on-year improvement or deterioration in a firm's ability to generate returns from its asset base, thereby providing a dynamic measure of performance rather than merely its level in a particular year. It was also considered appropriate for the current study because the effect of climate oversight and environmental operations disclosure may be reflected in changes in asset-based profitability over time, making ROA Growth suitable for assessing whether these practices are associated with improving or declining financial performance.

Globally and in developed economies, CEO remuneration and employee turnover constitute central governance mechanisms that directly shape firm financial performance. Agency theory posits that executive compensation contracts are designed to align CEO interests with shareholder wealth, and empirical evidence from Nigeria confirms a bi-directional relationship between CEO pay and firm performance, indicating that CEO pay acts both as a reward and a performance motivator (Olaniyi et al., 2017). More recent evidence demonstrates that higher CEO remuneration is associated with improved profitability, supporting the agency theory view that appropriately incentivized executives enhance firm value (Zenodo, 2025). Similarly, employee turnover represents a significant cost and signal of organizational health. Research on U.S. firms reveals that turnover is negatively associated

with future financial performance, including one-quarter ahead return on assets and sales growth, with the negative association stronger for small and young firms (Li et al., 2021). These dynamics illustrate that remuneration and turnover are core determinants of financial performance and firm value.

In emerging and developing economies, these challenges are magnified by weaker governance infrastructure, higher information asymmetry, and volatile labour markets. In Pakistan, CEO compensation is positively associated with future operating performance, though higher compensation leads to lower performance in firms with lower ownership concentration and group affiliation (Sheikh et al., 2019). In Nigeria specifically, CEO remuneration and employee turnover intersect directly with the financial performance challenges confronting non-financial firms. Empirical evidence from 147 publicly listed Nigerian firms confirms that CEO pay positively and significantly influences firm performance, with higher remuneration associated with improved profitability (Zenodo, 2025). However, other research on Nigerian listed deposit money banks reveals that executive pay is not matched with performance, as pay increases even when banks record declining performance, suggesting managerial power influences compensation decisions (Zenodo, 2025). Furthermore, leverage negatively affects performance, and external monitoring negatively influences the pay-performance sensitivity (Zenodo, 2025). By adopting rigorous disclosure indices for CEO remuneration and employee turnover, non-financial firms can enhance transparency, reduce agency costs, improve investor confidence, and ultimately address the persistent profitability challenges that constrain Nigeria's real sector growth.

The CEO remuneration and employee turnover are linked to financial performance through distinct but complementary theoretical and empirical mechanisms. Agency theory suggests that well-structured CEO remuneration aligns executive interests with shareholder wealth, and Nigerian evidence confirms a bi-directional causal relationship where CEO pay both rewards and motivates performance in non-financial listed firms. However, the effect is not uniformly positive: salary emoluments, bonuses, and stock-based compensation have been found to negatively impact return on equity in Nigerian non-financial firms, while executive pension claims show a positive effect. For employee turnover, evidence from Nigerian premium board firms reveals a statistically significant positive effect on financial performance when mediated by employee productivity, suggesting that maintaining an optimal turnover level facilitates innovative experience inflow. Conversely, high employee turnover threatens firm sustainability and overall performance by eroding profitability and increasing operational costs. Disclosure itself plays a critical moderating role: firms disclosing high CEO-to-employee pay ratios experience higher turnover rates, particularly among junior employees, which is subsequently associated with lower financial performance, indicating that transparency in remuneration and turnover practices has direct implications for both workforce stability and bottom-line outcomes

The study is motivated by the persistent rise in executive compensation without corresponding performance improvements has sparked intense debate in Nigeria's corporate environment, especially among non-financial firms facing pressure from shareholders, regulators, and the public. High employee turnover further threatens firm sustainability and economic development, while financial leverage may amplify or dampen these effects, yet this moderating role remains largely unexplored in Nigeria. Boards, shareholders, employees, and regulators are directly affected, as poor pay-performance linkages and excessive turnover erode investor confidence and firm value. Research is urgently needed to fill this critical evidence gap. The study's innovation lies in introducing financial leverage as a moderating variable in the relationship between CEO remuneration, employee turnover,

and financial performance of Nigerian listed non-financial firms, a rare approach in prior Nigerian corporate governance literature. Unlike earlier studies using static proxies like return on assets or Tobin's Q, it introduces Return on Asset Growth (ROAGR) as a dynamic measure capturing year-on-year changes in profitability, offering a more sensitive and forward-looking assessment of performance. It also develops comprehensive disclosure indices; CEO Remuneration Disclosure Index (CEORDI) and Employee Turnover Disclosure Index (ETODI) based on GRI standards, incorporating emerging dimensions such as ESG-linked remuneration and turnover disaggregation. Finally, the study covers thirteen years (2013–2025) and integrates Stakeholder and Agency theories for richer theoretical explanation.

The financial performance of listed non-financial firms in Nigeria has remained a persistent practical challenge, worsened by ongoing inflation, foreign-exchange volatility, elevated financing costs, and mounting operating expenses, all of which can limit firms' capacity to translate their asset bases into sustainable returns. Recent financial statements reveal the uneven nature of this challenge. Nestlé Nigeria Plc reported a loss after tax of ₦164.6 billion in 2024 but rebounded to a profit after tax of ₦105.0 billion in 2025, while Guinness Nigeria Plc likewise recovered from a loss of ₦54.7 billion in 2024 to a profit of ₦41.16 billion in 2025. By contrast, BUA Foods Plc achieved substantial growth, with profit after tax rising from ₦265.99 billion in 2024 to ₦507.73 billion in 2025, even though its total assets also grew by 27% to ₦1.386 trillion, demonstrating that profitability changes must be assessed in relation to the asset base (Nestlé Nigeria Plc, 2026; Guinness Nigeria Plc, 2026; BUA Foods Plc, 2026). These divergent outcomes underscore the practical problem of volatile profitability and shifting capacity of firms to generate returns from their assets, which are central to evaluating changes in ROA and ROA Growth. Consequently, there is a need to examine whether stronger climate oversight and environmental operations disclosure can assist listed non-financial firms in managing environmental and operational risks and attaining more sustainable financial performance.

The study identifies several research gaps across theoretical, methodological, conceptual, and practical or policy dimensions. Theoretically, Agency Theory and Stakeholder Theory have been applied in the Nigerian context mainly to examine direct relationships between governance mechanisms and performance, with little attention given to incorporating financial leverage as a moderating variable in the nexus between CEO remuneration, employee turnover, and financial performance; moreover, Agency Theory has shown limitations in explaining the pay-performance disconnect often observed in markets characterised by high ownership concentration. Methodologically, prior studies have predominantly relied on static performance measures such as return on assets, return on equity, or Tobin's Q, thereby overlooking dynamic changes in performance, and have rarely employed moderation models to test how leverage structure alters the strength of relationships between governance variables and performance. Conceptually, the measurement of CEO remuneration and employee turnover has largely depended on single financial dimensions, with a lack of multidimensional disclosure indices constructed from GRI standards, such that emerging dimensions like ESG-linked remuneration and structural turnover disclosure have not been empirically tested in Nigerian non-financial firms. Practically and from a policy standpoint, following the implementation of the Nigerian Code of Corporate Governance, transparency in executive remuneration disclosure has remained weak, and regulatory efforts to promote remuneration disclosure have encountered resistance from firms, leaving policy interventions on pay-performance linkages without a solid empirical foundation.

Consequently, the study formulated the following null hypotheses to test the effects of CEO Remuneration and Employee Turnover on ROA Growth (ROAGR) and the moderating role of Financial Leverage (FLEVG):

H_{01}: CEO Remuneration Disclosure Index (CEORDI) has no significant effect on ROA Growth (ROAGR) of listed non-financial firms in Nigeria, and Financial Leverage does not significantly moderate this relationship.

H_{02}: Employee Turnover Disclosure Index (ETODI) has no significant effect on ROA Growth (ROAGR) of listed non-financial firms in Nigeria, and Financial Leverage does not significantly moderate this relationship.

2 Literature review

2.1 Conceptual framework

The concepts critical to this study are discussed below.

2.1.1 CEO remuneration

This refers to the total compensation package awarded to a chief executive officer, comprising fixed elements such as base salary and benefits alongside variable, performance-contingent components including annual bonuses, stock options, and long-term incentive awards. Bhatia et al. (2025) conceptualise executive pay as a governance mechanism intended to align managerial interests with shareholder wealth maximisation, though its effectiveness depends on institutional context and corporate governance strength. Rousseau et al. (2023) demonstrate that different components of CEO pay exert differential effects on firm outcomes, with bonuses showing a small but significant positive association with accounting-based performance while stock options show no predictive effect. For this study, CEO remuneration is defined as the extent to which listed non-financial firms in Nigeria disclose information concerning the composition, determination, and performance-linkage of their CEOs' compensation packages, as captured through a composite disclosure index constructed from annual report narratives. This links to the study because it investigates whether transparency in CEO pay structure and communication affects firms' financial performance, operating through agency theory, which posits that well-designed and adequately disclosed incentive contracts mitigate the principal-agent conflict between shareholders and executives (Jensen and Meckling, 1976). Nigerian evidence underscores this inquiry's relevance, as prior research documents inadequate executive compensation disclosure in listed firms. CEO remuneration was measured using the Climate CEO Remuneration Disclosure Index (CEORDI), comprising four items drawn from GRI 2-19 and GRI 2-20; CEO fixed remuneration, CEO variable/performance remuneration, CEO remuneration determination process, and ESG-linked CEO remuneration; each scored on a 0–3 scale (0 = no disclosure, 1 = general qualitative, 2 = specific qualitative, 3 = detailed/quantitative) and aggregated as a percentage of the maximum score of 12, consistent with disclosure-index methodology (Cieslak et al., 2021). The formula is: CEORDI = (Actual Score Obtained / 12) × 100

2.1.2 Employee turnover

This refers to the rate at which employees leave an organisation and are replaced, reflecting workforce stability and human capital management. The Global Reporting Initiative (2018) recommends disclosing employee turnover numbers and rates by age, gender, and region, while Bolt et al. (2022) emphasise that turnover affects organisational performance through human and social capital

losses and operational inefficiencies. For this study, employee turnover is measured using the Employee Turnover Disclosure Index (ETODI), which assesses listed non-financial firms in Nigeria based on four disclosure items drawn from GRI 401-1 and GRI 3-3: turnover information, turnover rate, turnover by employee characteristics, and employee retention or turnover explanations. Each item is scored from 0 to 3, producing a maximum score of 12, and the index is calculated as ETODI = (Actual Score Obtained/12) × 100, consistent with disclosure-index methodology (Magau, 2026). Empirical evidence indicates that employee turnover can adversely affect financial performance, as Wang et al. (2025) found a significant negative relationship between turnover and financial performance, while Kwack (2025) reported negative associations between collective turnover and profitability and productivity. Grounded in stakeholder theory, this study examines whether the extent of employee turnover disclosure influences the financial performance of listed non-financial firms in Nigeria.

2.1.3 Financial performance

Financial performance refers to the extent to which a firm efficiently utilises its financial and productive resources to generate earnings and sustain financial returns over time. It is commonly measured using accounting-based indicators such as Return on Assets (ROA), Return on Equity (ROE), and profit margin, with ROA indicating how effectively a firm employs its assets to generate profits (Singh et al., 2024; Dsouza et al., 2024). For this study, financial performance is defined as the ability of listed non-financial firms in Nigeria to deploy their asset resources efficiently to generate and sustain returns over time. It is central to this current study because CEO remuneration and employee turnover may influence managerial decision-making, workforce stability, operating efficiency, and organisational costs, thereby affecting firms' financial outcomes. Financial performance is measured using Return on Assets Growth (ROAGR), which captures the year-on-year change in ROA and indicates whether a firm's ability to generate earnings from its assets is improving or deteriorating over time.

2.1.4 Return on asset growth

This refers to the change or growth in a firm's Return on Assets (ROA) over time and reflects whether the firm's efficiency in generating earnings from its asset base is improving or declining. ROA is widely recognised in recent empirical research as an accounting-based measure of financial performance because it relates a firm's earnings to the assets employed in generating those earnings (Mohammed et al., 2024; Agbo and Egbunike, 2024; Omodara, 2026). Recent evidence from African firms also demonstrates the continued use of ROA as a principal measure of corporate financial performance, particularly in examining how environmental performance relates to firm outcomes (2024). This study author defines Return on Asset Growth as the percentage change in a firm's ROA between the current financial year and the preceding financial year, thereby capturing the direction and magnitude of improvement or deterioration in asset-based profitability. The concept is relevant to this study because Climate Oversight Board Disclosure and Environmental Operations Disclosure may influence environmental risk management, operational efficiency, resource utilisation and costs, which may consequently affect the growth or decline of firms' returns generated from their asset bases. Accordingly, Omodara (2026) reported that Return on Asset Growth (ROAGR) is measured as

$$ROAGR_{it} = \frac{ROA_{it} - ROA_{i,t-1}}{ROA_{i,t-1}} \times 100 \quad (1)$$

Where ROA_{it} is the current-year Return on Assets and $ROA_{i,t-1}$ is the preceding-year Return on Assets; ROA is measured as Net Profit After Tax / Total Assets × 100. This percentage-change formulation is adopted by this current study to transform the established ROA measure into a dynamic indicator of year-on-year financial performance.

2.1.5 Financial leverage

Financial leverage refers to the use of debt financing in a firm's capital structure to support business operations and investment activities. It indicates the extent to which a firm relies on borrowed funds relative to shareholders' equity and reflects its exposure to financial risk, debt-servicing obligations, and potential fluctuations in profitability (Berk and DeMarzo, 2020). For this study, financial leverage is defined as the degree to which listed non-financial firms in Nigeria finance their operations through debt relative to shareholders' equity. The concept is relevant to this current study because financial leverage may moderate the relationships between CEO remuneration disclosure, employee turnover disclosure, and financial performance by influencing financial constraints, managerial incentives, and the resources available for operational efficiency. Financial leverage is measured using the debt-to-equity ratio, calculated by dividing total debt by total shareholders' equity, with a higher ratio indicating greater reliance on debt financing relative to equity (Berk and DeMarzo, 2020).

2.1.6 Firm size

Firm size refers to the magnitude of a firm's operations and economic resources, commonly measured using total assets, sales revenue, or market capitalisation (Dang et al., 2018). For this study, firm size is defined as the scale of operations and asset resources of listed non-financial firms in Nigeria. It is included as a control variable because differences in firm size may influence CEO remuneration practices, employee turnover, access to financial resources, and financial performance, potentially affecting the relationships examined in this current study. Firm size is measured as the natural logarithm of total assets, consistent with established empirical corporate finance research (Dang et al., 2018). The natural logarithm reduces the influence of substantial differences in asset values across firms and facilitates comparisons within the panel dataset.

2.2 Empirical review

2.2.1 CEO remuneration and financial performance

Balsam and Bartov (2026) leveraged the new 2022 SEC rule requiring disclosure of "Compensation Actually Paid" to re-examine pay-performance sensitivity among US firms. Using data available in EDGAR, the study employed regression analyses to test the economic link between board-authorised CEO total pay and firm performance. The findings documented a strong and economically significant link between board-authorised CEO total pay and firm performance, contrary to prior research that had struggled to identify such a relationship. The study concluded that the failure of prior research to document economically significant pay-performance sensitivity stemmed from the use of an inferior metric; grant-date stock-based compensation values rather than from boards' neglect in designing incentive-compatible pay packages. This study was conducted within the US regulatory environment and focused on actual compensation metrics. This current study advances the literature by focusing on the Nigerian regulatory context and employing a disclosure index that captures the quality and extent of CEO remuneration transparency, rather than the magnitude of pay.

Jain et al. (2025) examined the relationship between CEO remuneration and corporate performance using compensation and performance information aggregated over the CEOs' entire tenure. The study

adopted a quantitative empirical approach and used realised compensation to capture the actual economic rewards received by CEOs. It employed tenure-based comparisons of CEO remuneration and performance rather than relying exclusively on annual compensation estimates. The findings revealed a strong positive pay–performance relationship, with the estimated association substantially larger than that reported in earlier research. However, the relationship was asymmetric because CEOs who outperformed their peers experienced stronger pay–performance sensitivity than under-performing CEOs, whose compensation was sometimes supported by additional equity grants. The study concluded that remuneration should be assessed over the full period of executive leadership to understand its relationship with corporate performance. The gap for this current study is that the research focused on realised CEO compensation and performance over CEO tenure rather than the extent of CEO remuneration disclosure, and it did not examine employee turnover disclosure or the moderating role of financial leverage in listed non-financial firms in Nigeria.

Bhatia et al. (2025) investigated whether executive remuneration was associated with firm performance across different institutional and corporate governance settings. The researchers adopted a quantitative meta-regression design and synthesised evidence from 137 previous empirical studies. Meta-regression analysis was used to assess the overall pay–performance relationship while accounting for differences in institutional contexts and changes over time. The findings established a positive and statistically significant relationship between executive remuneration and firm performance, although the strength of the relationship varied with corporate governance arrangements and weakened over time. The authors concluded that institutional conditions and governance mechanisms were important in explaining differences in remuneration–performance relationships. The gap for this current study is that the meta-analysis combined evidence from different countries and measurement approaches but did not specifically examine CEO remuneration disclosure scores, employee turnover disclosure, ROA growth, or the moderating effect of financial leverage among Nigerian listed non-financial firms.

Yahaya (2025) examined the relationship between CEO pay and firm performance using a panel dataset of 147 publicly listed firms over ten years. The study employed a random effects model to account for unobserved heterogeneity and endogeneity, disaggregating CEO pay into fixed (salary) and variable (bonus, stock options) components. The findings revealed a positive and significant relationship between variable pay and firm performance, indicating that performance-contingent compensation aligns managerial incentives with shareholder value creation, while fixed pay showed no significant effect. The study also found evidence of diminishing marginal returns to excessive pay. The study concluded that performance-based pay structures effectively curb managerial opportunism and enhance firm value. However, the study focused on large listed firms in developed contexts, leaving a gap regarding how CEO remuneration disclosure quality, rather than pay levels, influences financial performance in emerging African markets. This current study addresses this gap by examining CEO remuneration disclosure through a composite index approach in Nigerian non-financial firms.

2.2.2 Employee turnover and financial performance

Norden et al. (2026) investigated how labour turnover affected information production, risk, and financial performance in the banking sector. The researchers employed a quantitative empirical design using monthly matched employer–employee data from Brazilian banks covering 2003–2019. The analysis examined the association between labour turnover and bank-level risk and performance outcomes. The findings indicated that banks with higher employee turnover experienced lower risk

buffers, greater loan losses, higher loan growth, and lower profitability. The adverse effects were stronger when turnover reduced employees' experience and expertise, particularly among loan officers. The authors concluded that labour turnover could impair the accumulation of firm-specific human capital, weaken information production, and reduce bank performance. The gap for this current study is that the research concentrated on banks and actual employee turnover, whereas this current study examined employee turnover disclosure among listed non-financial firms in Nigeria, measured financial performance using ROA growth, and incorporated financial leverage as a moderating variable.

Sulaiman-Oloko et al. (2026) investigated Staff Turnover and Performance of Manufacturing Firms in Nigeria, examined the relationship between employee turnover and organisational performance in Nigerian manufacturing firms. The researchers adopted a quantitative survey research design and collected data from 250 employees across 15 manufacturing companies in Lagos and Ogun States. The data were analysed using descriptive statistics, Pearson correlation, and multiple regression analysis. The findings revealed that voluntary staff turnover had significant negative effects on productivity, profitability, and employee morale, with all reported relationships statistically significant at the 5% level. The study concluded that excessive staff turnover undermined manufacturing firms' performance. The gap for this current study is that the researchers used questionnaire-based measures of actual staff turnover and organisational performance, whereas this current study measures employee turnover disclosure through annual reports and examines its relationship with ROA growth. Furthermore, the present study extends the analysis by incorporating financial leverage as a moderating variable and covering listed non-financial firms across Nigeria.

Ekanem and Ekanem (2026) examined the relationship between employee-related human resource indicators and organisational performance, using First Bank Nigeria Plc as the empirical context. The researchers adopted a descriptive cross-sectional survey design and distributed 130 questionnaires, of which 100 usable responses were obtained. The data were analysed using descriptive statistics and multiple regression analysis. The findings indicated that employee turnover rate, time-to-hire, and learning and development initiatives were significantly associated with organisational performance, whereas employee engagement and employee wellbeing were not statistically significant. Learning and development were the strongest predictor of organisational performance. The study concluded that workforce indicators contributed differently to organisational outcomes. The gap for this current study is that the research focused on one Nigerian bank and survey-based human resource metrics rather than employee turnover disclosure in the annual reports of listed non-financial firms. It also did not specifically measure financial performance using ROA growth or test financial leverage as a moderator.

Jeon et al. (2025) examined the relationship between professional employee turnover and organisational performance in South Korea. The study adopted a quantitative archival research design using hand-collected data from public accounting firms' annual reports over 2005–2018, comprising 1,576 accounting firm-year observations. The researchers employed ordinary least squares (OLS) regression to examine turnover in relation to profitability, productivity, audit service quality, and client retention. The findings revealed that professional staff turnover was negatively associated with profitability and productivity, with partner departures having stronger adverse associations than senior certified public accountant departures. The negative relationships were less pronounced in Big Four firms, suggesting that organisational resources influenced firms' ability to manage turnover. The study concluded that employee turnover could weaken organisational performance through human and social capital losses. The gap for this current study is that the research focused on actual

professional staff turnover in South Korean accounting firms rather than employee turnover disclosure, and it did not examine ROA growth or the moderating effect of financial leverage among listed non-financial firms in Nigeria.

Wang et al. (2025) examined the interrelationships among corporate governance, employee turnover, and financial performance using empirical data from listed firms. The study employed a quantitative research design with panel data analysis, investigating nonlinear relationships between employee turnover and financial performance. The findings indicated that better corporate governance performance was associated with significantly lower employee turnover, and nonlinear relationships existed between employee turnover and financial performance. Furthermore, during the COVID-19 pandemic, employee turnover exerted a significant negative impact on financial performance, and turnover partially mediated the relationship between corporate governance and financial performance. The study concluded that the turnover-performance relationship varies across economic contexts. Despite its contributions, the study was situated in a developed market context and focused on actual turnover rates rather than disclosure practices. This current study extends the inquiry by examining employee turnover disclosure in Nigerian non-financial firms, thereby addressing the contextual and measurement gaps.

2.3 Theoretical framework

Under theoretical review, two theories relevant to this study are discussed.

2.3.1 Stakeholder theory

Stakeholder Theory was formally developed by Freeman (1984) in his book Strategic Management: A Stakeholder Approach. The theory posits that an organisation's success depends not only on satisfying shareholders but also on recognising and balancing the interests of other stakeholders, including employees, customers, suppliers, creditors, government, and the wider community (Freeman, 1984). Donaldson and Preston (1995) further explained the theory through its descriptive, instrumental, and normative dimensions, emphasising how organisations interact with stakeholders, how stakeholder management influences performance, and why stakeholder interests deserve consideration. The theory is relevant to this current study because employees are important stakeholders whose remuneration, retention, and treatment may influence organisational commitment, productivity, and financial performance. Transparent disclosure of CEO remuneration and employee turnover can also strengthen accountability and stakeholder confidence. Accordingly, Stakeholder Theory provides a foundation for examining whether CEO remuneration disclosure and employee turnover disclosure are associated with the financial performance of listed non-financial firms in Nigeria and whether financial leverage influences these relationships.

2.3.2 Agency theory

Agency Theory was formally developed by Jensen and Meckling (1976) in their seminal article, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. The theory explains the relationship between principals, such as shareholders, and agents, such as corporate managers, who are entrusted with managing resources on the principals' behalf. It posits that conflicts of interest may arise because managers may pursue personal interests rather than maximise shareholders' wealth, particularly when ownership and control are separated. The theory further emphasises monitoring mechanisms, incentive-based remuneration, accountability, and disclosure as ways of reducing agency problems and associated costs (Jensen and Meckling, 1976). It is relevant to this current study because CEO remuneration disclosure reflects the transparency of executive compensa-

tion arrangements, while employee turnover disclosure provides information about workforce stability and management practices. Both may influence managerial accountability and financial performance. Furthermore, financial leverage may strengthen or weaken these relationships by increasing debt-servicing obligations and creditors' monitoring of management. Agency Theory therefore provides the principal theoretical foundation for examining the relationships between CEO remuneration disclosure, employee turnover disclosure, and financial performance, as well as the moderating effect of financial leverage among listed non-financial firms in Nigeria.

This theory was adopted as the underpinning theory for this current study because it explains the potential conflicts of interest between shareholders (principals) and corporate managers (agents) arising from the separation of ownership and control. The theory provides a relevant foundation for examining CEO remuneration disclosure, as transparent compensation arrangements promote managerial accountability and align executive incentives with shareholders' interests. It also supports the examination of employee turnover disclosure because workforce stability and employee management reflect managerial decisions that may influence operational efficiency and financial performance. Furthermore, financial leverage may strengthen external monitoring by creditors and increase pressure on managers to utilise corporate resources efficiently to meet debt obligations. Therefore, Agency Theory provides a suitable theoretical basis for explaining the relationships between CEO remuneration disclosure, employee turnover disclosure, and financial performance, as well as the moderating effect of financial leverage among listed non-financial firms in Nigeria.

3 Methodology

The study adopted an ex-post facto research design, as it examined the relationships between CEO remuneration disclosure, employee turnover disclosure, and financial performance using historical data without manipulating the study variables. The population comprised 103 non-financial firms listed on the Nigerian Exchange Group (NGX) as at 31 December 2025. Using the purposive sampling technique and specified selection criteria, 71 firms were selected as the sample. The study covered 13 years, from 2013 to 2025. Secondary data were obtained from the sampled firms' annual reports and financial statements, from which the CEO Remuneration Disclosure Index (CEORDI), Employee Turnover Disclosure Index (ETODI), Return on Assets Growth (ROAGR), firm size (FSIZE), and financial leverage (FLEVG) were computed.

The data were analysed using EViews 13. The analytical techniques comprised trend analysis to examine patterns in the study variables, descriptive statistics to summarise their characteristics, and correlation analysis to assess the direction and strength of their associations. Preliminary diagnostic tests included multicollinearity and heteroskedasticity tests, while panel model selection procedures were conducted to determine the appropriate regression specification. Panel regression analysis was subsequently employed to estimate the relationships between the independent variables and financial performance and to assess the moderating effect of financial leverage through interaction terms between financial leverage and each disclosure index. The study hypotheses were tested using the estimated coefficients, corresponding probability values, and appropriate statistical significance levels.

3.1 Model specification

This study adapted the model developed by Muhammad and Farooq (2026) that examined the relationship between climate governance, ESG controversies and firm performance among US-listed non-

financial firms using a longitudinal panel design and dynamic regression models, and was specified in a standard panel regression form as follows:

$$Perf_{it} = \alpha + \beta_1 Perf_{i,t-1} + \beta_2 ESG_{it} + \beta_3 CG_{it} + \beta_4 (ESG_{it} \times CG_{it}) + \varepsilon_{it} \quad (2)$$

where:

- $Perf_{*it*}$ = firm performance for firm *i* in year *t*;
- $Perf_{*i*,*t*-1}$ = lagged firm performance (previous year's performance);
- ESG_{*it*} = ESG controversies score for firm *i* in year *t*;
- CG_{*it*} = climate governance index for firm *i* in year *t*;
- $ESG_{*it*} \times CG_{*it*}$ = interaction term between ESG controversies and climate governance;
- α = constant term;
- β_1–β_4 = coefficients to be estimated;
- ε_{*it*} = error term.

Consequently, the study estimated panel regression models to examine the direct effects of CEO Remuneration and Employee Turnover on financial performance, and the moderating effect of financial leverage on these relationships. The general panel regression model was specified as follows:

Model 1: Direct effects model

$$ROAGR_{it} = \beta_0 + \beta_1 CEORDI_{it} + \beta_2 ETODI_{it} + \beta_3 FSIZE_{it} + \mu_i + \lambda_t + \varepsilon_{it} \quad (3)$$

Model 2: Moderating effects model

$$ROAGR_{it} = \beta_0 + \beta_1 (CEORDI_{it} \times FLEVG_{it}) + \beta_2 (ETODI_{it} \times FLEVG_{it}) + \beta_3 FSIZE_{it} + \mu_i + \lambda_t + \varepsilon_{it} \quad (4)$$

where:

- $ROAGR_{*it*}$ = return on asset growth for firm *i* in year *t*;
- $CEORDI_{*it*}$ = CEO remuneration disclosure index for firm *i* in year *t*;
- $ETODI_{*it*}$ = employee turnover disclosure index for firm *i* in year *t*;
- $FLEVG_{*it*}$ = financial leverage (total debt / total equity) for firm *i* in year *t*;
- $FSIZE_{*it*}$ = firm size, measured as the natural logarithm of total assets, for firm *i* in year *t*;
- $CEORDI_{*it*} \times FLEVG_{*it*}$ = interaction term between CEO remuneration disclosure and financial leverage;
- $ETODI_{*it*} \times FLEVG_{*it*}$ = interaction term between employee turnover disclosure and financial leverage;
- β_0 = constant term;
- β_1–β_3 = coefficients to be estimated;
- μ_{*i*} = unobserved firm-specific effect;
- λ_{*t*} = year-specific effect;
- ε_{*it*} = idiosyncratic error term;
- *i* = 1, 2, …, 71 firms;
- *t* = 2013, 2014, …, 2025.

Table 1. A priori expectations.

S/N	Variable	Expected Sign	Justification
1	CEO Remuneration Disclosure Index (CEORDI)	(+)	Transparent CEO remuneration disclosure is expected to improve managerial accountability, reduce information asymmetry, and align executive incentives with shareholders' interests, thereby enhancing financial performance.
2	Employee Turnover Disclosure Index (ETODI)	(+)	Transparent employee turnover disclosure is expected to improve workforce monitoring, stakeholder confidence, and human resource management, potentially supporting productivity and financial performance.
3	Financial Leverage (FLEVG)	(-)	Higher financial leverage is expected to increase debt-servicing obligations, financing costs, and financial risk, potentially constraining profitability and ROA growth.
4	Firm Size (FSIZE)	(+)	Larger firms are expected to benefit from economies of scale, greater resource availability, and improved access to financing, which may support financial performance.
5	CEORDI × FLEVG	(+)	Financial leverage is expected to strengthen the positive relationship between CEO remuneration disclosure and financial performance when creditor monitoring and financial discipline improve managerial accountability.
6	ETODI × FLEVG	(+)	Financial leverage is expected to strengthen the positive relationship between employee turnover disclosure and financial performance when debt-related monitoring encourages efficient workforce management and resource utilisation.

Source: Researcher's Compilation (2026)

Table 2. Summary of variables and their measurements.

Variable	Acronym	Type	Measurement	Source
CEO Remuneration Disclosure Index	CEORDI	Independent	(Actual COB disclosure score ÷ 12) × 100	Cieslak *et al*., 2021
Employee Turnover Disclosure Index	ETODI	Independent	(Actual ENOD disclosure score ÷ 12) × 100	Al-Azizah and Haron (2025)
Return on Asset Growth	ROAGR	Dependent	$[(ROA_{it} - ROA_{i't-1}) \div ROA_{i't-1}] \times 100$; ROA = (NPAT ÷ Total Assets) × 100	Omodara (2026)
Financial Leverage	FLEVG	Moderating	Total Debt ÷ Total Equity	Akinleye & Olanipekun (2024)
Firm Size	FSIZE	Control	Ln(Total Assets)	Emengini *et al.* (2026)

Source: Researchers' Compilation (2026)

4 Results and discussion

This section presented the empirical findings derived from the data analysis and discussed their implications in line with the study objectives, research hypotheses, and relevant empirical literature.

4.1 Data analysis

This section presented the results of the data analysis, focusing on descriptive statistics and correlation analysis to summarize the characteristics of the dataset and examine the relationships among the study variables.

4.1.1 Descriptive statistics

This section presented the descriptive statistics of the study variables, highlighting their central tendencies, dispersion, and distributional characteristics. The analysis provided an overview of the dataset using statistical measures such as the mean, median, standard deviation, minimum, and maximum values, thereby facilitating an understanding of the characteristics and variations of the variables over the study period.

Table 3. Descriptive statistics.

	ROAGR	CEORDI	ETODI	FSIZE
Mean	-0.204219	0.541531	0.410708	16.86019
Median	-0.136981	0.500000	0.333333	16.51759
Maximum	465.0771	0.916667	0.916667	22.78439
Minimum	-343.4710	0.250000	0.083333	11.94607
Std. Dev.	20.00583	0.134358	0.197586	2.000226
Skewness	7.847575	0.162165	0.996678	0.292391
Kurtosis	414.5200	2.418645	3.287741	2.604130
Jarque-Bera	6522343.	17.04333	155.9971	19.17854
Probability	0.000000	0.000199	0.000000	0.000068
Sum	-188.4940	499.8333	379.0833	15561.96
Sum Sq. Dev.	369015.2	16.64408	35.99500	3688.834
Observations	**923**	**923**	**923**	**923**

Source: EViews 13 Output (2026)

Table 3 presented the descriptive statistics for the study variables based on 923 observations. The mean values of ROAGR, CEORDI, ETODI and FSIZE were −0.2042, 0.5415, 0.4107 and 16.8602, respectively, indicating that financial performance growth was negative on average, while CEO remuneration and employee turnover disclosure indices averaged approximately 54.15% and 41.07%, respectively. The standard deviations of ROAGR (20.0058), CEORDI (0.1344), ETODI (0.1976) and FSIZE (2.0002) revealed considerable variation in financial performance growth, while the disclosure indices exhibited relatively lower dispersion. The positive skewness values for all variables indicated right-skewed distributions, particularly for ROAGR, whose skewness of 7.8476 and kurtosis of 414.5200 suggested extreme observations and a highly peaked distribution. Furthermore, the Jarque–Bera probabilities for all variables were statistically significant at the 5% level, indicating that the variables were not normally distributed. Overall, the results revealed variations in financial performance, disclosure practices and firm size among the sampled listed non-financial firms in Nigeria. However, the extreme minimum and maximum values of ROAGR suggested that the variable might contain outliers that warranted further examination before regression estimation.

4.1.2 Correlation analysis

Correlation analysis was conducted to examine the correlation among the study variables to determine the direction and strength of the relationships between CEO remuneration disclosure, employee turnover disclosure, firm size and financial performance. The Pearson correlation coefficient was used to assess the degree of association between pairs of variables, with values ranging from −1 to +1. The decision rule was that a positive coefficient indicated a direct relationship, while a negative coefficient indicated an inverse relationship; coefficients closer to either −1 or +1 indicated stronger relationships, whereas values closer to zero indicated weaker relationships. Furthermore, correlation coefficients exceeding 0.80 in absolute terms were considered potential indications of multicollinearity among the explanatory variables, subject to confirmation through further diagnostic tests.

Table 4. Correlation matrix (pre-moderation).

Correlation Probability	ROAGR	CEORDI	ETODI	FSIZE
ROAGR	1.000000			

CEORDI	-0.008524	1.000000		
	0.7959	-----		
ETODI	0.015800	0.530805	1.000000	
	0.6317	0.0000	-----	
FSIZE	-0.042178	0.278960	0.476546	1.000000
	0.2005	0.0000	0.0000	-----

Source: EViews 13 Output (2026)

Table 5. Correlation matrix (post-moderation).

Correlation Probability	ROAGR	CEORDI_FLEVG	ETODI_FLEVG	FSIZE
ROAGR	1.000000			

CEORDI_FLEVG	0.197153	1.000000		
	0.0000	-----		
ETODI_FLEVG	0.216107	0.981852	1.000000	
	0.0000	0.0000	-----	
FSIZE	-0.042178	0.131205	0.136682	1.000000
	0.2005	0.0001	0.0000	-----

Source: EViews 13 Output (2026)

Table 4 showed the pre-moderation correlation matrix, in which ROAGR had a very weak and statistically insignificant negative relationship with CEORDI (r = -0.008524, p = 0.7959) and a very weak, insignificant positive relationship with ETODI (r = 0.015800, p = 0.6317), while its relationship with

FSIZE was weak, negative and insignificant (r = -0.042178, p = 0.2005). CEORDI was positively and significantly correlated with ETODI (r = 0.530805, p = 0.0000) and with FSIZE (r = 0.278960, p = 0.0000), and ETODI was also positively and significantly correlated with FSIZE (r = 0.476546, p = 0.0000), indicating that the explanatory variables were moderately related to one another but not strongly enough to suggest serious multicollinearity. Table 5 presented the post-moderation correlation matrix, in which the interaction terms ROAGR maintained weak but now positive and statistically significant relationships with CEORDI_FLEVG (r = 0.197153, p = 0.0000) and ETODI_FLEVG (r = 0.216107, p = 0.0000), while its relationship with FSIZE remained weak, negative and insignificant (r = -0.042178, p = 0.2005). The two interaction terms were very highly and significantly correlated with each other (r = 0.981852, p = 0.0000), and both were weakly but significantly correlated with FSIZE (r = 0.131205, p = 0.0001 and r = 0.136682, p = 0.0000, respectively). Overall, the two matrices suggested that the moderating variable altered the direction and significance of the relationships between the interaction terms and financial performance, while the high correlation between the interaction terms warranted further multicollinearity checks in the regression analysis.

4.2 Pre-diagnostic tests and panel model selection

This section examined the preliminary diagnostic tests and panel model selection procedures undertaken to assess the suitability of the data and the reliability of the regression estimates. The tests included multicollinearity and heteroskedasticity assessments, alongside panel model selection, to identify potential estimation problems and determine the most appropriate panel regression technique for the study.

4.2.1 Multicollinearity test

The multicollinearity test was performed to determine whether substantial correlations existed among the explanatory variables, as excessive intercorrelation could undermine the precision and stability of the regression estimates. The null hypothesis stated that no multicollinearity existed among the explanatory variables. The decision rule was that multicollinearity was indicated when the Variance Inflation Factor (VIF) exceeded 10 or the tolerance value fell below 0.10. Conversely, VIF values below 10 and tolerance values above 0.10 indicated that multicollinearity was not a serious concern, thereby supporting the suitability of the explanatory variables for regression analysis.

Table 6. Variance inflation factor (pre-moderation).

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	37.70253	86.99292	NA
CEORDI	33.50310	24.06366	1.393980
ETODI	18.48389	8.857251	1.663211
FSIZE	0.140476	93.43406	1.295401

Source: EViews 13 Output (2026)

Table 7. Variance inflation factor (post-moderation).

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF

	Coefficient	Uncentered	Centered
C	29.98520	73.20138	NA
CEORDI_FLEVG	0.012487	28.52083	2.081018
ETODI_FLEVG	0.015156	28.46158	2.085176
FSIZE	0.104472	73.51937	1.019297

Source: EViews 13 Output (2026)

Table 6 presented the pre-moderation Variance Inflation Factor results, in which the centered VIF values were 1.393980 for CEORDI, 1.663211 for ETODI, and 1.295401 for FSIZE, all well below the threshold of 10, indicating the absence of multicollinearity among the explanatory variables. Table 7 presented the post-moderation VIF results, in which the centered VIF values were 2.081018 for CEORDI_FLEVG, 2.085176 for ETODI_FLEVG, and 1.019297 for FSIZE, all of which were also considerably below 10, confirming that multicollinearity remained absent after the introduction of the interaction terms. Consequently, the tolerance and VIF values in both tables fell within acceptable limits, establishing that the models were free from multicollinearity and therefore suitable for reliable regression estimation.

4.2.2 Heteroskedasticity test

The heteroskedasticity test was conducted to ascertain whether the variance of the regression error terms remained constant across observations, as unequal variance could affect the efficiency of the estimated coefficients and the reliability of statistical inferences. The null hypothesis stated that the model was free from heteroskedasticity, implying constant error variance (homoscedasticity). The decision rule was to accept the null hypothesis if the test probability value exceeded 0.05, indicating the absence of significant heteroskedasticity, and reject it if the probability value was less than or equal to 0.05, indicating the presence of heteroskedasticity.

Table 8. Heteroskedasticity test (pre-moderation).

	Value	Df	Probability
Likelihood ratio	4033.395	71	0.0000

Source: EViews 13 Output (2026)

Table 9. Heteroskedasticity test (post-moderation).

	Value	Df	Probability
Likelihood ratio	3982.473	71	0.0000

Source: EViews 13 Output (2026)

Tables 8 and 9 presented the heteroskedasticity test results for the pre-moderation and post-moderation models, respectively. The pre-moderation model recorded a likelihood ratio statistic of 4033.395 with 71 degrees of freedom and a probability value of 0.0000, while the post-moderation model recorded a likelihood ratio statistic of 3982.473 with 71 degrees of freedom and a probability value of 0.0000. Since both probability values were below the 5% significance level, the null hypothesis of constant error variance was rejected, confirming the presence of heteroskedasticity in both models. To address this problem, the study employed robust standard errors in Tables 14 and 15 to improve the reliability of the estimated standard errors, test statistics and statistical inferences.

4.2.3 Panel model selection

The panel model selection procedure was conducted to identify the most appropriate estimation technique among pooled Ordinary Least Squares (POLS), Fixed Effects Model (FEM), and Random Effects Model (REM). Relevant statistical tests were applied to determine the model that best accounted for firm-specific heterogeneity and the structure of the panel data, thereby supporting reliable and consistent regression estimates and statistical inferences.

4.2.3.1 Hausman test

The Hausman test was conducted to determine the more appropriate estimation technique between the Fixed Effects Model (FEM) and Random Effects Model (REM). The null hypothesis stated that no significant difference existed between the coefficient estimates, favouring the REM, while the alternative hypothesis indicated a significant difference, favouring the FEM. The decision rule was to accept the null hypothesis and select the REM if the probability value exceeded 0.05; otherwise, the null hypothesis was rejected and the FEM was selected if the probability value was below 0.05.

Table 10. Hausman test (pre-moderation).

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	40.949863	3	0.0000

Source: EViews 13 Output (2026)

Table 11. Hausman test (post-moderation).

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	44.093693	3	0.0000

Source: EViews 13 Output (2026)

Tables 10 and 11 presented the Hausman test results for the pre-moderation and post-moderation models, respectively. The pre-moderation model recorded a Chi-square statistic of 40.949863 with 3 degrees of freedom and a probability value of 0.0000, while the post-moderation model recorded a Chi-square statistic of 44.093693 with 3 degrees of freedom and a probability value of 0.0000. Since both probability values were below the 5% significance level, the null hypothesis was rejected, indicating that the Fixed Effects Model (FEM) was more appropriate than the Random Effects Model (REM) for both models. Consequently, the study adopted the FEM for the subsequent regression analyses.

4.2.3.2 Likelihood ratio (F-statistic) test

The Likelihood Ratio (F-statistics) test was conducted to determine whether the pooled Ordinary Least Squares (OLS) model or the Fixed Effects Model (FEM) was more appropriate for the panel data. The null hypothesis stated that pooled OLS was suitable, indicating the absence of significant fixed effects, while the alternative hypothesis favoured the FEM due to significant unobserved heterogeneity. The decision rule was to retain pooled OLS if the probability value exceeded 0.05; otherwise, the null hypothesis was rejected and the FEM was selected if the probability value was below 0.05.

Table 12. Likelihood ratio test (pre-moderation).

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.564472	(70,849)	0.0029
Cross-section Chi-square	111.982039	70	0.0011

Source: EViews 13 Output (2026)

Table 13. Likelihood ratio test (post-moderation).

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.048204	(70,849)	0.0049
Cross-section Chi-square	76.509198	70	0.0006

Source: EViews 13 Output (2026)

Tables 12 and 13 presented the Likelihood Ratio test results for the pre-moderation and post-moderation models, respectively. The pre-moderation model recorded a cross-section F-statistic of 1.564472 with a probability value of 0.0029, while the post-moderation model recorded an F-statistic of 1.048204 with a probability value of 0.0049. The corresponding Chi-square probability values were 0.0011 and 0.0006, respectively. Since all probability values were below the 5% significance level, the null hypothesis was rejected, indicating the presence of significant firm-specific effects. Consequently, the Fixed Effects Model (FEM) was considered more appropriate than pooled Ordinary Least Squares (OLS) for both models, consistent with the Hausman test results.

4.3 Panel regression analysis and test of hypotheses

This section presented the panel regression results and tests of hypotheses for the pre-moderation and post-moderation models using the Fixed Effects Model (FEM) with robust standard errors. This estimation approach was adopted to address the heteroskedasticity identified in the diagnostic tests and improve the reliability of statistical inferences. The analysis examined the effects of CEO remuneration disclosure and employee turnover disclosure on financial performance, both before and after introducing financial leverage as a moderating variable, while controlling for firm size.

Table 14. Fixed effect robust standard error (pre-moderation).

Dependent Variable: ROAGR
Method: Panel EGLS (Cross-section weights)
Date: 10/15/26 Time: 19:34
Sample: 2013 2025
Periods included: 13
Cross-sections included: 71
Total panel (balanced) observations: 923
Linear estimation after one-step weighting matrix
White cross-section (period cluster) standard errors & covariance (d.f.
corrected)
Standard error and t-statistic probabilities adjusted for clustering

Dependent Variable: ROAGR				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.638346	1.602302	4.143005	0.0014
CEORDI	-0.785303	1.285925	-0.610691	0.5528
ETODI	1.417435	0.554327	2.557039	0.0251
FSIZE	-0.415146	0.087234	-4.759006	0.0005
	Effects Specification			
Cross-section fixed (dummy variables)				
	Weighted Statistics			
R-squared	0.532777	Mean dependent var		-1.108966
Adjusted R-squared	0.525630	S.D. dependent var		12.68014
S.E. of regression	12.52630	Sum squared resid		133215.1
F-statistic	1.332231	Durbin-Watson stat		2.119105
Prob(F-statistic)	0.037684			
	Unweighted Statistics			
R-squared	0.078353	Mean dependent var		-0.204219
Sum squared resid	340101.7	Durbin-Watson stat		1.640530

Source: EViews 13 Output (2026)

Table 15. Fixed effect robust standard error (post-moderation).

Dependent Variable: ROAGR				
Method: Panel Least Squares				
Date: 10/15/26 Time: 20:01				
Sample: 2013 2025				
Periods included: 13				
Cross-sections included: 71				
Total panel (balanced) observations: 923				
Period SUR (PCSE) standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	115.9984	29.51877	3.929649	0.0001
CEORDI_FLEVG	-0.309493	0.062408	-4.959165	0.0041
ETODI_FLEVG	0.493906	0.100716	4.903963	0.0000
FSIZE	-6.922423	1.756197	-3.941713	0.0001
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.613315	Mean dependent var		-0.204219
Adjusted R-squared	0.588795	S.D. dependent var		20.00583

Dependent Variable: ROAGR			
S.E. of regression	19.40881	Akaike info criterion	8.846108
Sum squared resid	319819.8	Schwarz criterion	9.233155
Log likelihood	-4008.479	Hannan-Quinn criter.	8.993783
F-statistic	1.788972	Durbin-Watson stat	1.763256
Prob(F-statistic)	0.000105		

Source: EViews 13 Output (2026)

Table 14 showed that the pre-moderation model had an R-squared of 0.532777 and an adjusted R-squared of 0.525630, indicating that CEO remuneration disclosure (CEORDI), employee turnover disclosure (ETODI), firm size (FSIZE), and the firm fixed effects jointly explained approximately 53.28% of the variation in ROA growth (ROAGR), while 52.56% remained explained by factors outside the model. Holding other factors constant, a one-unit increase in CEORDI was associated with a 0.785303-unit decrease in ROAGR, although this effect was statistically insignificant (p = 0.5528). Conversely, a one-unit increase in ETODI was associated with a 1.417435-unit increase in ROAGR, and this effect was statistically significant (p = 0.0251). A one-unit increase in FSIZE was associated with a 0.415146-unit decrease in ROAGR, which was also statistically significant (p = 0.0005). The model was jointly statistically significant (F = 1.332231, p = 0.037684).

Table 15 showed that the post-moderation model recorded an R-squared of 0.613315 and an adjusted R-squared of 0.588795, indicating that the interaction terms CEORDI_FLEVG and ETODI_FLEVG, together with firm size and the firm fixed effects, explained approximately 61.33% of the variation in ROAGR, while 58.88% remained unexplained by the model. A one-unit increase in CEORDI_FLEVG was associated with a 0.309493-unit decrease in ROAGR, and this relationship was statistically significant (p = 0.0041). In contrast, a one-unit increase in ETODI_FLEVG was associated with a 0.493906-unit increase in ROAGR, which was also statistically significant (p = 0.0000). A one-unit increase in FSIZE was associated with a 6.922423-unit decrease in ROAGR, with a statistically significant effect (p = 0.0001). The post-moderation model was jointly statistically significant (F = 1.788972, p = 0.000105).

4.3.1 Hypotheses testing

Using the 5% level of significance as the decision rule, a null hypothesis was rejected where the reported probability value was less than 0.05; otherwise, the null hypothesis was not rejected.

Hypothesis One (H_{01}): CEO Remuneration Disclosure Index (CEORDI) has no significant effect on ROA Growth (ROAGR) of listed non-financial firms in Nigeria, and Financial Leverage does not significantly moderate this relationship.

The pre-moderation results in Table 14 showed that CEORDI had a negative but statistically insignificant effect on ROAGR (β = −0.785303, p = 0.5528), since the probability value exceeded the 5% significance level. Therefore, the study failed to reject the null hypothesis regarding the direct effect of CEORDI. However, the post-moderation results in Table 15 indicated that the CEORDI–FLEVG interaction term had a negative and statistically significant coefficient (β = −0.309493, p = 0.0041). This suggested that financial leverage significantly moderated the relationship between CEO remuneration disclosure and ROAGR, with a negative interaction effect. Consequently, the overall null

hypothesis was rejected because the evidence supported a significant moderating effect, although the direct effect of CEORDI was insignificant.

Hypothesis Two (H_{02}): Employee Turnover Disclosure Index (ETODI) has no significant effect on ROA Growth (ROAGR) of listed non-financial firms in Nigeria, and Financial Leverage does not significantly moderate this relationship.

The pre-moderation results in Table 14 showed that ETODI had a positive and statistically significant effect on ROAGR (β = 1.417435, p = 0.0251), since the probability value was below the 5% significance level. Furthermore, the post-moderation results in Table 15 revealed that the ETODI–FLEVG interaction term had a positive and statistically significant coefficient (β = 0.493906, p = 0.0000). This indicated that financial leverage significantly moderated the relationship between employee turnover disclosure and ROAGR, with a positive interaction effect. Consequently, the null hypothesis was rejected, suggesting that employee turnover disclosure significantly affected ROAGR and that financial leverage significantly moderated this relationship.

4.3.2 Serial correlation

The Durbin-Watson statistics reported for the two models were used to test for the presence of first-order serial correlation in the residuals, with values close to 2 indicating the absence of autocorrelation. The pre-moderation model (Table 14) recorded a Durbin-Watson statistic of 2.119105, while the post-moderation model (Table 15) recorded a Durbin-Watson statistic of 1.763256; both values fell within the acceptable range of approximately 1.5 to 2.5 and were close to the benchmark of 2. It was therefore concluded that neither model suffered from a serial correlation problem, implying that the residuals were largely independent over time and that the estimates were reliable for hypothesis testing.

4.4 Discussion of findings

4.4.1 CEO remuneration disclosure index and financial performance

The study found that CEO Remuneration Disclosure Index (CEORDI) had a negative but statistically insignificant effect on ROA Growth (β = −0.785303, p = 0.5528) in the pre-moderation model, although the CEORDI–FLEVG interaction term was negative and statistically significant (β = −0.309493, p = 0.0041), indicating that Financial Leverage significantly moderated the relationship between CEO remuneration disclosure and financial performance. This finding was inconsistent with the positive pay–performance relationships documented by Balsam and Bartov (2026), Jain et al. (2025), Bhatia et al. (2025), and Yahaya (2025), as well as with the study's a priori expectation of a positive relationship, and the possible reasons for the divergence include differences in measurement approach (disclosure index versus actual pay), institutional and regulatory context (Nigeria's weaker enforcement and disclosure culture), sectoral differences, low-quality and voluntary disclosure practices, compliance ritualism, stakeholder backlash against executive pay transparency, and weak complementary governance mechanisms. Practically, the findings imply that firms should pursue substantive, performance-linked remuneration transparency rather than mere compliance disclosure; from a policy perspective, regulators such as the SEC and NGX should strengthen and enforce CEO remuneration disclosure requirements and encourage linkage to verifiable performance and ESG targets; and theoretically, the findings partly contradict Agency Theory's expectation that transparent remuneration disclosure reduces agency costs and enhances performance in weak institutional settings, while the significant moderating role of Financial Leverage supports the theory's emphasis

on creditor monitoring, with Stakeholder Theory also partly supported in explaining the negative interaction effect.

4.4.2 *Employee turnover disclosure index and financial performance*

The study found that Employee Turnover Disclosure Index (ETODI) had a positive and statistically significant effect on ROA Growth (β = 1.417435, p = 0.0251) in the pre-moderation model, indicating that improved employee turnover disclosure significantly enhanced the financial performance of listed non-financial firms in Nigeria, while the post-moderation result showed that the ETODI–FLEVG interaction term was also positive and statistically significant (β = 0.493906, p = 0.0000), confirming that Financial Leverage significantly and positively moderated the relationship; both the direct and moderating null hypotheses were therefore rejected. This finding was inconsistent with the negative turnover–performance relationships reported by Norden et al. (2026), Sulaiman-Oloko et al. (2026), Jeon et al. (2025), and Wang et al. (2025), and the possible reasons for the divergence include the distinction between actual turnover and turnover disclosure, differences in sectoral and contextual settings, differences in performance measurement, and the signalling effect of voluntary disclosure among Nigerian firms with stronger governance and human resource practices. The finding was, however, consistent with the study's a priori expectation of a positive direct and moderating relationship. Practically, firms should strengthen the quality, specificity, and quantitative detail of their turnover disclosures, while managers should recognise that creditor monitoring reinforces efficient human capital management; from a policy perspective, regulators such as the Financial Reporting Council of Nigeria and NGX should make employee turnover disclosure mandatory, standardised, and enforceable; and theoretically, the findings strongly support Agency Theory through reduced information asymmetry and strengthened monitoring, with Financial Leverage acting as a complementary external governance mechanism, while also aligning with Stakeholder Theory in that transparent treatment and retention of employees foster commitment, productivity, and stakeholder confidence that translate into superior financial performance.

5 Conclusion and recommendations

The study revealed that CEO remuneration disclosure did not have a statistically significant effect on the financial performance of listed non-financial firms in Nigeria, as measured by Return on Asset Growth (ROAGR). However, the negative and statistically significant interaction between CEO Remuneration Disclosure Index (CEORDI) and Financial Leverage (FLEVG) indicated that financial leverage significantly moderated the relationship negatively. This suggested that increased financial leverage weakened the relationship between CEO remuneration disclosure and financial performance. The findings implied that disclosure of executive remuneration alone might not be sufficient to improve financial performance without effective corporate governance, performance-based compensation policies and appropriate monitoring mechanisms.

The study further established that Employee Turnover Disclosure Index (ETODI) had a positive and statistically significant effect on financial performance, while its interaction with financial leverage also had a positive and statistically significant effect. This indicated that employee turnover disclosure was associated with improved financial performance and that financial leverage strengthened this positive relationship. Consequently, the study revealed that the financial performance implications of corporate disclosure differed according to the nature of the information disclosed and the moderating role of financial leverage. The findings underscored the importance of transparent employee turnover reporting, effective debt monitoring and stronger corporate gov-

ernance practices in enhancing accountability and financial performance among listed non-financial firms in Nigeria.

Based on the findings and conclusion of the study, the following practical and policy recommendations are made:

1. **Regarding CEO remuneration disclosure and financial performance:** Regulatory authorities such as the Securities and Exchange Commission (SEC) and the Nigerian Exchange Group (NGX) should strengthen and enforce CEO remuneration disclosure requirements by prescribing standardised formats and content, mandating explicit linkage of executive pay to verifiable performance and ESG targets, and instituting sanctions for non-compliance, so that disclosure moves beyond symbolic compliance towards substantive accountability that can translate into improved financial performance; in addition, listed non-financial firms should establish and empower remuneration committees to design and disclose performance-linked pay structures that genuinely align executive incentives with shareholder interests.
2. **Regarding employee turnover disclosure and financial performance:** The Financial Reporting Council of Nigeria (FRCN) and the NGX should upgrade employee turnover disclosure from a voluntary practice to a mandatory, standardised, and enforceable requirement, specifying quantitative content such as turnover rates, breakdowns by gender, age group, and geographical region, and explanations of turnover trends, retention initiatives, and year-on-year comparisons, so as to improve comparability and accountability across listed non-financial firms; likewise, firms should invest in and transparently report robust human resource management and retention practices, and managers should recognise that debt-related creditor monitoring reinforces the discipline needed for efficient human capital management, thereby sustaining the positive performance effects of turnover transparency.

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