**Effect of Information Asymmetry, Institutional Ownership and Related Party Transaction on Real Earnings Management in Listed Companies in Nigeria**

**Abstract**

*This study examines the effect of information asymmetry, institutional ownership, and related party transactions on real earnings management (REM) among listed manufacturing firms in Nigeria over the period 2018–2022. Drawing on agency theory and signalling theory, the study employs an ex-post facto research design and utilises panel data regression techniques to analyse secondary data extracted from the audited annual reports of ten purposively selected firms. The analysis, conducted using STATA 15, reveals that information asymmetry exerts a positive and statistically significant influence on REM, indicating that firms with less transparent information environments are more likely to engage in earnings manipulation through operational activities. Additionally, institutional ownership is found to have a significant and positive effect on REM, suggesting that institutional investors in Nigeria may exert short-term performance pressures or lack the monitoring intensity typically observed in more developed markets. In contrast, related party transactions exhibit a negative but statistically insignificant relationship with REM, implying a limited role in shaping earnings manipulation practices during the review period. The findings underscore the need to enhance financial reporting transparency, promote active and independent institutional shareholding, and maintain stringent oversight of related party transactions. The study contributes to the growing body of literature on earnings management in emerging markets and offers practical insights for regulators, investors, and corporate boards seeking to strengthen financial accountability and market integrity in Nigeria.*

**Keywords:** Information Asymmetry, Institutional Ownership, Real Earnings Management, Related Party Transactions

**INTRODUCTION**

Earnings management, understood as the deliberate alteration of financial reporting outcomes by corporate managers, continues to be a pressing issue in accounting and finance. It affects the reliability, comparability, and transparency of financial statements, which are essential for informed stakeholder decision-making. Managers exercise discretion in applying accounting principles or structuring business operations to achieve financial reporting objectives, such as misleading investors, meeting analysts' expectations, or satisfying contractual benchmarks like loan covenants or executive compensation thresholds (Liu et al., 2021; Edmans et al., 2023). Historically, research has focused on accrual-based earnings management, which involves the manipulation of accounting estimates and policies. However, recent literature has shifted attention to real earnings management (REM), in which managers alter actual operational activities, such as cutting research and development expenditures, delaying maintenance, offering excessive discounts, or accelerating production, in order to influence reported earnings (Roychowdhury, 2006; Cohen & Zarowin, 2010). REM is particularly concerning because it is harder to detect than accrual manipulation, distorts operational efficiency, and can undermine long-term firm performance (Zang, 2012; Yunus & Sutrisno, 2022).

This study aims to explore the determinants of real earnings management in the context of Nigeria, an emerging market characterised by evolving regulatory systems, limited investor protection, and concentrated ownership structures. Specifically, it examines the role of three corporate governance and informational variables: information asymmetry, institutional ownership, and related party transactions. These variables are especially salient in Nigeria, where the information environment and governance practices differ significantly from those in developed economies.

Information asymmetry occurs when corporate insiders, such as managers and controlling shareholders, possess superior knowledge about the firm's financial health and future prospects compared to external stakeholders (Cai et al., 2015; Chowdhury et al., 2017; Healy & Palepu, 2001). In such environments, managers may exploit this informational advantage to manipulate earnings with less risk of being detected. Akerlof’s (1970) concept of the “market for lemons” illustrates how information gaps between buyers and sellers can lead to suboptimal market outcomes. Similarly, in the corporate setting, high information asymmetry can facilitate managerial opportunism. Nigeria presents a fertile ground for such behaviour due to weak disclosure practices, limited enforcement of financial reporting standards, and restricted access to high-quality information for external investors. In such an environment, the propensity for REM may be significantly higher, as external monitoring mechanisms are ineffective or absent.

Institutional ownership, defined as the proportion of a firm’s shares held by institutional investors such as pension funds, insurance companies, and investment firms, is theorised to play a monitoring role in corporate governance. According to agency theory (Jensen and Meckling, 1976), institutional investors are expected to mitigate agency conflicts by overseeing management behaviour and ensuring alignment with shareholder interests. In developed markets, empirical studies often find that institutional ownership is associated with improved earnings quality and reduced earnings manipulation. This is attributed to the expertise, resources, and long-term investment horizons of institutional investors. However, the effectiveness of institutional ownership as a monitoring mechanism depends on context. In Nigeria, many institutional investors may be passive, closely affiliated with firm insiders, or primarily focused on short-term gains. These characteristics weaken their capacity to serve as effective monitors. Rather than constraining managerial behaviour, such investors may reinforce it, either by demanding short-term results or by colluding with insiders. Hence, the relationship between institutional ownership and REM in Nigeria remains uncertain and warrants empirical investigation.

Related party transactions refer to business dealings between a company and entities or individuals with close ties to the firm’s management. These include transactions with subsidiaries, affiliates, directors, controlling shareholders, and their relatives. While such transactions can be legitimate and efficient, they are often associated with conflict of interest risks. They can be used to transfer resources to insiders or to manipulate financial results. In the context of REM, related party transactions can be used to create the appearance of robust operational performance. For instance, a company might boost sales figures by making favourable sales to a related entity or inflate asset values through intra-group transfers. Prior research, such as Jian and Wong (2010), has documented such practices in China. In Nigeria, where regulatory oversight of related party transactions is weak, these transactions may be exploited more frequently for earnings management purposes. At the same time, some studies suggest that related party transactions may substitute for other forms of manipulation. When managers have access to private benefits through RPTs, they may have less incentive to engage in other types of earnings management. The net effect of RPTs on REM is therefore ambiguous and likely to vary by context.

This study draws on agency theory and signalling theory to frame its hypotheses. Agency theory highlights the conflicts of interest between managers and shareholders, particularly in situations where monitoring is weak and information is asymmetrically distributed. Managers may use REM to serve their own interests, such as securing bonuses or job security. Mechanisms like institutional ownership and transparent oversight of RPTs are posited to reduce agency costs by aligning interests and deterring opportunism. However, when these mechanisms are weak or misaligned, they may fail to constrain, or may even encourage, REM. Signalling theory (Spence, 1973) offers another lens for understanding managerial behaviour in the face of information asymmetry. Managers often seek to convey positive signals to the market to attract investors or maintain stock prices. In contexts where external verification of performance is difficult, managers may use REM as a way to send misleading but favourable signals. For example, managers may cut prices to increase sales, thereby signalling strong market demand, even if this behaviour harms long-term profitability. Institutional ownership might signal to the market that the firm is under effective monitoring, thereby increasing pressure on managers to deliver consistent earnings, which may inadvertently promote REM. Similarly, the existence of extensive RPTs may signal either legitimate business integration or potential manipulation, depending on how the market interprets such transactions.

Despite the importance of these variables, there is limited empirical evidence on how they interact to influence REM in Nigeria. Much of the existing research in the Nigerian context focuses on accrual-based manipulation or broader governance indicators such as board composition and audit quality. There is a paucity of research examining how information asymmetry, institutional ownership, and related party transactions jointly affect real earnings management. Findings from other emerging markets are inconclusive and not directly transferable due to differences in regulatory enforcement, investor sophistication, and market structures. Some studies from Asia report a positive association between information asymmetry and REM, while others find no effect or even a negative one. The same is true for institutional ownership and related party transactions. These inconsistencies highlight the need for context-specific research.

This study seeks to bridge an existing gap in the literature by examining how information asymmetry, institutional ownership, and related party transactions influence real earnings management among companies listed on the Nigerian Exchange. Specifically, it aims to assess the extent to which disparities in information access between corporate insiders and external stakeholders contribute to earnings manipulation through real operational decisions. It also explores the role of institutional investors in shaping managerial behaviour related to earnings reporting, evaluating whether their presence enhances transparency and accountability. Additionally, the study investigates how related party transactions may serve as mechanisms through which firms structure operations to influence reported earnings. These objectives are pursued within the context of Nigeria’s unique corporate governance landscape, regulatory environment, and institutional dynamics, providing context-specific insights grounded in agency and signalling theoretical perspectives.

In doing so, the study makes both theoretical and practical contributions. Theoretically, it extends the literature by examining the joint influence of corporate information environments and ownership structures on REM, providing a more holistic understanding of earnings management in emerging markets. Practically, the findings will offer insights for regulators, investors, and corporate boards on the conditions under which REM is most likely to occur and how it can be mitigated. This is especially relevant for Nigeria and similar economies, where governance frameworks are still evolving and where understanding the drivers of earnings quality is essential for market development and investor protection.

**2. 0 LITERATURE REVIEW**

This section presents a review of relevant literature on real earnings management (REM), focusing on its conceptual basis, empirical determinants, and theoretical foundations. The review is organised to examine the key constructs investigated in this study, namely information asymmetry, institutional ownership, and related party transactions, and how they relate to the practice of REM.

2.1 Conceptual Review

Real earnings management (REM) refers to actions by corporate managers that deviate from normal operational practices with the objective of achieving specific financial reporting outcomes. Unlike accrual-based earnings management, which manipulates accounting entries, REM involves actual changes in business activities, such as overproduction, reduction in discretionary expenses, or manipulation of sales through discounts and lenient credit terms. These strategies are designed to influence reported earnings in the short term, often at the cost of long-term value creation and sustainability.

REM is typically driven by managerial incentives to meet performance benchmarks, influence stock prices, or achieve contractual outcomes tied to reported earnings. Since these activities involve real transactions, they are harder to detect and regulate than purely accounting-based manipulations. Roychowdhury (2006) proposed a widely adopted methodology to identify REM by estimating expected levels of cash flow from operations, production costs, and discretionary expenses. Deviations from these expectations serve as indicators of REM. REM is considered more insidious due to its subtlety and its potential to undermine long-term firm performance.

2.2 Empirical Review

2.2.1 Information Asymmetry and REM

Information asymmetry occurs when corporate insiders possess superior knowledge about a firm’s economic condition compared to external stakeholders. In such contexts, managers are more likely to manipulate earnings through real activities, especially when the likelihood of detection is low. Theoretical and empirical research suggests that higher information asymmetry increases the risk of earnings manipulation, as the external stakeholders rely more heavily on financial statements due to limited access to timely and accurate internal information.

Fan and Wong (2002) found that information asymmetry impairs corporate governance and increases the scope for earnings manipulation. Trisnawati et al. (2016) and Nuanpradit (2018) provided evidence from Indonesia and Thailand, respectively, that firms with higher bid-ask spreads or other proxies for asymmetry tend to engage more in REM. In contrast, studies like Jasman and Amin (2017) reported a negative relationship, suggesting that extremely opaque firms may face higher cost of capital, which deters earnings manipulation. The mixed findings indicate a need for context-specific studies.

In Nigeria, where corporate transparency remains limited, information asymmetry is prevalent due to delayed financial disclosures, low analyst coverage, and high insider ownership. These factors create an environment conducive to REM.

Hypothesis 1 (H1): Information asymmetry has a positive effect on real earnings management.

2.2.2 Related Party Transactions and REM

Related party transactions (RPTs) involve transactions between a firm and its affiliates, such as subsidiaries, major shareholders, directors, or family members. RPTs can be used for legitimate business purposes but also represent a channel for earnings manipulation. Managers may engage in RPTs to inflate revenues, transfer losses, or create artificial profits by transacting with related entities on non-arm’s-length terms.

Jian and Wong (2010) highlighted how firms in China used RPTs to prop up earnings during downturns. Similarly, Limanto and Herusetya (2017) observed that Indonesian firms with higher RPT intensity exhibited greater REM. These findings suggest that RPTs are not merely passive transactions but can be actively used to manage earnings. However, other studies such as El-Helaly et al. (2018) suggest a substitution effect, where firms heavily engaged in RPTs rely less on other forms of earnings management.

In Nigeria, the risk of RPT misuse is heightened due to family-owned business groups, weak regulatory oversight, and limited board independence. Nigerian corporate history includes multiple governance failures linked to opaque RPTs.

Hypothesis 2 (H2): Related party transactions have a positive effect on real earnings management.

2.2.3 Institutional Ownership and REM

Institutional ownership refers to the stake held by entities like pension funds, insurance companies, and mutual funds. These investors are generally regarded as sophisticated monitors capable of reducing agency problems by enhancing oversight and demanding greater transparency. Agency theory suggests that institutional ownership aligns managerial actions with shareholder interests, thus reducing the incidence of earnings manipulation.

Empirical evidence is mixed. Bushee (1998) and Cornett et al. (2008) found that institutional investors discourage earnings manipulation. However, other studies report that not all institutions are effective monitors. Some, particularly those with short-term orientations, may even encourage REM to maintain stock prices. Oyedokun et al. (2019) found that domestic institutional ownership in Nigeria was positively associated with earnings management, implying a lack of effective monitoring.

Given the evolving nature of institutional investment in Nigeria and the variation in institutional investor behaviour, the effect of institutional ownership on REM is ambiguous.

Hypothesis 3 (H3): Institutional ownership has a negative effect on real earnings management.

2.3 Theoretical Framework

This study is grounded in agency theory and signalling theory. Agency theory posits that conflicts of interest between principals (shareholders) and agents (managers) arise from divergent goals and asymmetric information. Managers may act in self-interest, pursuing actions such as REM to secure bonuses or job security. Institutional ownership and governance mechanisms are expected to mitigate such behaviours. However, the efficacy of these mechanisms depends on context and implementation.

RPTs are interpreted within agency theory as manifestations of conflicts between controlling and minority shareholders. Tunneling and propping are two agency-based behaviours enabled by RPTs, both of which may involve REM. The theory predicts that without strong oversight, managers will exploit RPTs to manage earnings opportunistically.

Signalling theory complements agency theory by considering how managers use financial reporting to send signals about firm quality. In the presence of information asymmetry, earnings figures serve as key signals to investors. Managers may use REM to present a favourable image of performance, particularly when actual results are weak. Institutional ownership can function both as a signal of strong governance and as a source of pressure to sustain earnings, potentially inducing REM. Similarly, the presence of RPTs may send ambiguous signals, either of efficiency or of manipulation, depending on their nature and the governance environment.

In summary, agency theory suggests that high information asymmetry and high RPTs will lead to more REM due to reduced oversight and increased managerial discretion. Institutional ownership is expected to reduce REM, although this effect may vary depending on the nature and activism of the institutional investors. Signalling theory supports these expectations by highlighting the incentives managers face to manipulate earnings in response to investor perceptions. Together, these theories guide the development of this study’s hypotheses and empirical analysis.

**3.0 METHODOLOGY**

This study adopts an ex-post facto research design, which is appropriate for investigating existing conditions or relationships where the researcher does not manipulate independent variables. The choice of this design is grounded in the fact that the data used are historical and already documented in the audited financial reports of manufacturing firms listed on the Nigerian Exchange.

The study is based exclusively on secondary data extracted from the published audited annual reports and financial statements of Nigerian manufacturing companies. These reports contain relevant information on real earnings management and the selected explanatory variables. The data spans a five-year period from 2018 to 2022, chosen to ensure recent coverage while allowing for sufficient observations in the panel dataset.

A purposive sampling technique was employed to select firms that met specific inclusion criteria. Only companies with consistent, complete, and accessible financial data for the entire period were included in the final sample. A total of ten (10) manufacturing firms were selected based on the availability and completeness of their financial statements over the review period and in alignment with the CBN Code of Corporate Governance.

**Table 1**. Sampled Manufacturing Companies Listed on the Nigerian Exchange (as of 2022)

|  |  |
| --- | --- |
| **S/N** | **Company Name** |
| 1 | Dangote Cement Plc |
| 2 | Lafarge Cement Plc |
| 3 | Johnhold Plc |
| 4 | A.G. Leventis Plc |
| 5 | Cement Company of Northern Nigeria Plc |
| 6 | Meyer Plc |
| 7 | First Aluminium Nigeria Plc |
| 8 | Cutix Plc |
| 9 | Portland Paints and Products Nigeria Plc |
| 10 | Premier Paints Plc |

*Source: Nigerian Stock Exchange Factbook (2022)*

**3.1 Variable Measurement and Operationalisation**

The measurement of each variable is summarised in Table 2 below. Proxies were adopted from existing literature to ensure empirical comparability and consistency.

**Table 2. Measurement of Variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Abbreviation** | **Proxy** | **Source** |
| Real Earnings Management | REM | Abnormal Cash Flow from Operations | Md Nasir, Ali, Razzaque, & Ahmed (2018) |
| Information Asymmetry | IA | Profitability Ratio | Brush & Artz (1999) |
| Institutional Ownership | IO | Percentage of Shares Held by Institutional Investors | Hong & Linh (2023) |
| Related Party Transactions | RPT | RPT to Total Assets Ratio | Chen, Chen, & Chen (2009) |

Source: authors’ compilations

**3.2 Estimation Technique and Model Specification**

The study uses panel data regression analysis to account for both cross-sectional (firm-level) and time-series (yearly) variations in the dataset. Three different model specifications were estimated: Pooled OLS, Fixed Effects (FE), and Random Effects (RE). To determine the most appropriate model for interpretation, both the Hausman specification test and the Lagrange Multiplier (Breusch-Pagan) test were conducted.

The functional form of the model is adapted from Maimako, et al. (2021) and is specified as follows:

*REMit=β0+β1IAit+β2IOit+β3RPTit+εit*

Where:

REMit= Real Earnings Management for firm *i* at time *t*

IAit= Information Asymmetry

IOit​ = Institutional Ownership

RPTit = Related Party Transactions

β0 = Constant term

β1,β2,β3​ = Coefficients of the explanatory variables

εit​ = Stochastic error term

This model seeks to examine the impact of information asymmetry, institutional ownership, and related party transactions on the level of real earnings management among listed manufacturing firms in Nigeria over the selected period.

**4. RESULT AND DISCUSSION**

4.1 Diagnostic Test

Prior to estimating the regression models, the study conducted a multicollinearity test to ascertain the degree of linear relationship among the independent variables. High multicollinearity inflates the standard errors of the coefficients, leading to unreliable estimates. The Variance Inflation Factor (VIF) was employed for this purpose, following the general guideline that a VIF exceeding 10 indicates problematic multicollinearity (Stevens, 2002). As presented in Table 3, the VIF values for all variables fall well below the threshold, with a mean VIF of 1.12. This indicates the absence of multicollinearity and confirms the reliability of the regression estimates.

**Table 3: Multicollinearity Test (VIF)**

|  |  |  |
| --- | --- | --- |
| **Variable** | **VIF** | **1/VIF** |
| IA | 1.181 | 0.847 |
| RPT | 1.116 | 0.896 |
| IO | 1.062 | 0.941 |
| **Mean VIF** | **1.12** |  |

**Source:** Authors computation via Stata 15

**4.2 Descriptive Statistics**

Descriptive statistics summarise the central tendencies and dispersion of the variables under study. Table 4 shows the means, standard deviations, minimum, and maximum values of REM, IA, IO, and RPT. The mean values range from 0.338 (IO) to 26.483 (IA), while standard deviations are generally small relative to their respective means, indicating a relatively tight distribution around the mean. This suggests that the variables are normally distributed and suitable for regression analysis (Field, 2013).

**Table 4: Descriptive Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | Mean | Std. Dev. | Min | Max |
| REM | 50 | 1.117 | 0.881 | -2.631 | 3.344 |
| IA | 50 | 26.483 | 2.577 | 22.815 | 29.771 |
| IO | 50 | 0.338 | 1.306 | -1.386 | 2.763 |
| RPT | 50 | 4.261 | 0.067 | 4.151 | 4.456 |

**Source:** Authors computation via Stata 15

**4.3 Correlation Analysis**

The correlation matrix in Table 5 illustrates the bivariate relationships among the study variables. IA shows a weak positive correlation with REM (r = 0.203), while IO has a slightly stronger positive correlation with REM (r = 0.307, p < 0.05). RPT shows a very weak and insignificant correlation with REM (r = 0.028). These values indicate that while some of the independent variables exhibit linear associations with REM, the strength of these relationships is relatively weak.

**Table 5: Correlation Matrix**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variables | REM | IA | IO | RPT |
| REM | 1.000 |  |  |  |
| IA | 0.203 | 1.000 |  |  |
| IO | 0.307 | -0.212 | 1.000 |  |
| RPT | 0.028 | 0.286 | -0.036 | 1.000 |

**Source:** Authors’ computation via Stata 15

**4.4 Regression Estimates**

Table 6 presents the regression estimates generated from pooled OLS, fixed effects, and random effects models. The Hausman specification test was applied to determine the appropriate model for inference. The resulting Chi-square statistic of 3.484 with a p-value of 0.323 suggests that the null hypothesis of no systematic difference between the fixed and random effects models cannot be rejected. Therefore, the random effects model is considered more efficient and consistent for hypothesis testing in this context. Additionally, the Breusch-Pagan Lagrangian Multiplier test favoured the use of a panel estimator over pooled OLS, confirming the presence of significant panel effects.

**Table 6: Regression Estimates**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | Pooled Coef. | P-value | Fixed Coef. | P-value | Random Coef. | P-value |
| IA | 0.107 | 0.039\*\* | -0.047 | 0.323 | 0.094 | 0.008\*\* |
| IO | 0.255 | 0.009\*\* | 0.239 | 0.002\*\* | 0.239 | 0.014\*\* |
| RPT | -0.083 | 0.661 | -1.408 | 0.729 | -0.671 | 0.741 |
| Constant | 1.726 | 0.823 | 8.291 | 0.065 | 1.384 | 0.868 |
|  | 0.178 |  | 0.177 |  | 0.30 |  |
| N | 50 |  | 50 |  | 50 |  |
| F-stat | 3.240 | 0.031\*\* | 3.34 | 0.0065\* | 7.620 | 0.055\*\* |

Source: *Note: \*\* and \* denote significance at 5% and 10% respectively. Source: STATA 15.0*

Accordingly, the random effects model was adopted for interpretation. This model achieved an R-squared value of 0.30, indicating that approximately 30% of the variation in real earnings management (REM) across firms and over time is jointly explained by information asymmetry (IA), institutional ownership (IO), and related party transactions (RPT). While moderate, this explanatory power suggests that the model captures meaningful relationships, although additional omitted variables may also be at play.

The coefficient for information asymmetry (IA) is positive and statistically significant at the 1% level (β = 0.094, *p* = 0.008), implying that higher levels of information asymmetry are associated with increased real earnings management. This result aligns with Hypothesis 1 and supports the assertion that opaque informational environments provide managerial discretion to engage in earnings-altering operational activities. The finding reinforces concerns that in emerging markets like Nigeria, where disclosure standards are often suboptimal, managers may exploit asymmetries between insiders and external stakeholders to manipulate reported performance through legitimate operational means.

The coefficient for institutional ownership (IO) is also positive and statistically significant (β = 0.239, *p* = 0.014), lending support to Hypothesis 2. However, this result runs counter to the traditional expectation derived from agency theory, which posits that institutional investors act as effective monitors that reduce managerial opportunism. Instead, the positive association suggests that institutional ownership in Nigeria may not fulfil its disciplinary function and could be characterised by passivity, short-term performance orientation, or alignment with insider interests. This finding highlights the need to consider the heterogeneous nature of institutional investors in developing markets, where governance roles may be limited by weak regulatory enforcement and relationship-based ownership networks.

In contrast, related party transactions (RPT) display a negative but statistically insignificant coefficient (β = –0.671, *p* = 0.741), providing no empirical support for Hypothesis 3. This result indicates that, within the sample period and scope, RPTs did not significantly influence the level of real earnings management among the sampled firms. While this finding may appear to contradict extant literature that associates RPTs with opportunistic earnings behaviour, several contextual explanations may apply. For instance, RPTs could be immaterial or well-disclosed among the sampled firms, limiting their utility as a manipulation channel. Alternatively, firms may substitute other forms of manipulation—such as discretionary expenses or sales management—for related party transactions due to increased scrutiny or regulatory compliance during the review period.

Overall, the regression results suggest that both information asymmetry and institutional ownership are significant drivers of real earnings management in Nigeria’s manufacturing sector. However, the direction of the effect of institutional ownership challenges the prevailing narrative of institutional investors as governance enforcers, underlining the importance of investor typology and market structure in interpreting such relationships. The insignificant role of related party transactions further suggests that their use as an earnings management tool may be conditional on firm-specific and sectoral characteristics or on broader enforcement trends in the Nigerian corporate landscape.

**5. CONCLUSION AND RECOMMENDATIONS**

This study advances the literature on real earnings management (REM) by empirically analysing how information asymmetry, institutional ownership, and related party transactions affect REM practices in listed manufacturing companies in Nigeria. Drawing from agency theory and signalling theory, the findings provide evidence that information asymmetry is a significant enabler of REM, reaffirming the view that when external stakeholders lack timely, comprehensive, and credible information, managerial discretion is more likely to be used opportunistically. In a regulatory context like Nigeria, where disclosure quality and enforcement mechanisms remain suboptimal, this underscores the urgent need for stronger transparency initiatives to mitigate the risk of earnings manipulation.

Moreover, the study finds that institutional ownership is positively and significantly associated with REM, a result that challenges the conventional wisdom that institutional investors inherently serve as governance watchdogs. In the Nigerian setting, this may reflect the dominance of passive or affiliated institutional investors who lack either the incentives or capacity to restrain managerial opportunism. The implication is that institutional ownership, in and of itself, is not a sufficient deterrent to REM. Its effectiveness as a governance mechanism depends on the type, motivation, and level of engagement of institutional investors.

Interestingly, the analysis finds no statistically significant relationship between related party transactions (RPTs) and REM. This non-result, while counterintuitive given the theoretical potential of RPTs as tools for earnings manipulation, may suggest that such transactions were either immaterial, transparent, or subject to adequate internal controls during the study period. However, it would be premature to interpret this as evidence of effective RPT governance across the board, especially considering the broader literature documenting abuse of RPTs in emerging markets. The potential for RPT-based manipulation remains salient in contexts characterised by lax enforcement, concentrated ownership, and weak board independence.

In sum, the study contributes context-specific insights into how informational and governance structures influence earnings management through real activities. It highlights the critical importance of strengthening financial transparency, enhancing the quality of institutional oversight, and maintaining vigilance over related party transactions. These measures are crucial not only for improving earnings quality but also for fostering investor confidence and deepening financial market integrity in Nigeria's manufacturing sector and similar emerging markets.

Based on the empirical findings and theoretical underpinnings of the study, the following actionable recommendations are proposed:

1. Enhance Financial Reporting Transparency: Nigerian manufacturing firms must prioritise timely, consistent, and comprehensive financial disclosures. Reducing information asymmetry requires not only compliance with disclosure regulations but also proactive investor communication to foster trust and accountability.
2. Strengthen Corporate Governance Frameworks: Firms should institutionalise robust governance structures by appointing independent non-executive directors, establishing effective audit committees, and promoting board diversity. These mechanisms are essential for monitoring managerial decisions that affect earnings quality.
3. Promote Active and Independent Institutional Shareholding: Policymakers and regulators should design incentives to attract long-term, independent institutional investors with a commitment to active stewardship. This may involve investor education, differentiated voting rights, and mandatory disclosure of ownership engagement strategies.
4. Sustain Vigilance over Related Party Transactions: Despite the statistical insignificance of RPTs in this study, regulatory bodies and corporate boards must continue to enforce strong disclosure and approval protocols. Independent board oversight and regular audit reviews are critical for detecting and preventing RPT misuse.
5. Encourage Broader Empirical Research: Future studies should explore additional determinants of REM, including managerial compensation structures, audit quality, external governance mechanisms, and macroeconomic uncertainty. Employing larger samples, multi-sectoral analysis, and longitudinal designs would improve generalisability and reveal evolving trends.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

**REFERENCES**

Abad, D., Cutillas-Gomariz, M. F., Sánchez-Ballesta, J. P., & Yagüe, J. (2018). Real earnings management and information asymmetry in the equity market. *European Accounting Review, 27*(2), 209–235.

Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. *Quarterly Journal of Economics, 84*(3), 488–500.

Alhadab, M., Abdullatif, M., & Mansour, I. (2020). Related party transactions and earnings management in Jordan: The role of ownership structure. *Journal of Financial Reporting and Accounting, 18*(3), 505–531.

Alsultan, A. S. (2023). Determinants of the relationship between related party transactions and firm value: Evidence from Saudi Arabia. *Journal of Financial Reporting and Accounting.*

Beatty, A., & Harris, D. G. (1999). The effects of taxes, agency costs and information asymmetry on earnings management: A comparison of public and private firms. *Review of Accounting Studies, 4*, 299–326.

Brush, T. H., & Artz, K. W. (1999). Toward a contingent resource-based theory: The impact of information asymmetry on the value of capabilities in veterinary medicine. *Strategic Management Journal, 20*(3), 223–250.

Bushee, B. J. (1998). The influence of institutional investors on myopic R&D investment behavior. *Accounting Review, 73*(3), 305–333.

Bushman, R. M., Lerman, A., & Zhang, X. F. (2016). The changing landscape of accrual accounting. *Journal of Accounting Research, 54*(1), 41–78.

Cai, J., Liu, Y., Qian, Y., & Yu, M. (2015). Information asymmetry and corporate governance. *Quarterly Journal of Finance*, *05*(03), 1550014. https://doi.org/10.1142/s2010139215500147

Chen, K. Y., Chen, S., & Chen, Y. (2009). The effects of related-party transactions on the operating performance of listed companies in China. *Pacific-Basin Finance Journal, 17*(5), 571–586. <https://doi.org/10.1016/j.pacfin.2008.10.001>

Chowdhury, A., Mollah, S., & Farooque, O. A. (2017). Insider-trading, discretionary accruals and information asymmetry. *The British Accounting Review*, *50*(4), 341–363. https://doi.org/10.1016/j.bar.2017.08.005

Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. Journal of Accounting and Economics, *50* (1), 2-19. https://doi.org/10.1016/j.jacceco.2010.01.002

Cornett, M. M., Marcus, A. J., & Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics, 87*(2), 357–373. https://doi.org/10.1016/j.jfineco.2007.03.003

Dadbeh, F., & Mogharebi, N. (2013). A study on the effect of information asymmetry on earnings management: Evidence from Tehran Stock Exchange. *Management Science Letters, 3*(7), 2165–2172.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review, 77*(s-1), 35–59.

Edmans, A., Gosling, T., & Jenter, D. (2023). CEO compensation: Evidence from the field. *Journal of Financial Economics*, *150*(3), 103718. https://doi.org/10.1016/j.jfineco.2023.103718

El-Helaly, M., Georgiou, I., & Lowe, A. D. (2018). The interplay between related party transactions and earnings management: The role of audit quality. *Journal of International Accounting, Auditing and Taxation, 32*, 47–60.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage Publications.

Gunny, K. A. (2010). The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemporary Accounting Research, 27*(3), 855–888.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1–3), 405–440. https://doi.org/10.1016/s0165-4101(01)00018-0

Hong, N. T. H., & Linh, T. K. (2023). Institutional investors, corporate governance and firm performance in an emerging market: Evidence from Vietnam. *Cogent Economics & Finance, 11*(1). <https://doi.org/10.1080/23322039.2023.2191785>

Jasman, J., & Amin, M. N. (2017). Internal audit role on information asymmetry and real earnings management. *Jurnal Akuntansi & Auditing Indonesia*, *12*(2), 95–104. <https://doi.org/10.20885/jaai.vol21.iss2.art2>

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.

Jian, M., & Wong, T. J. (2010). Propping through related party transactions. *Review of Accounting Studies, 15*(1), 70–105.

Kim, J.-B., & Sohn, B. C. (2013). Real earnings management and cost of capital. *Journal of Accounting and Public Policy, 32*(6), 518–543.

Li, X., Than, E. T., Ahmed, R., Ishaque, M., & Huynh, T. L. D. (2023). Gender diversity of boards and executives on real earnings management in the bull or bear period: Empirical evidence from China. *International Journal of Finance & Economics, 28*(3), 2753–2771.

Limanto, G. K., & Herusetya, A. (2017). The Association between Related Party Transactions and Real Earnings Management: Internal Governance Mechanism as Moderating Variables. *SHS Web of Conferences*, *34*, 04008. <https://doi.org/10.1051/shsconf/20173404008>

Liu, S., Wang, T., Yao, Y., & Zhang, Y. (2021). Managerial overconfidence and real earnings management: Evidence from China. *Journal of Accounting and Public Policy, 40*(3), 106801. <https://doi.org/10.1016/j.jaccpubpol.2021.106801>

Maimako, L. N., Latiff, A. R. A., & Yusoff, W. F. W. (2021). Ownership structure and financial sustainability: Evidence from commercial banks in Nigeria with international authorization. *International Business and Accounting Research Journal, 5*(2), 106–117.

Marchini, P. L., Mazza, T., & Medioli, A. (2018). The impact of related party transactions on earnings management: Some insights from the Italian context. *Journal of Management and Governance, 22*, 981–1014.

Md-Nasir, N. A. B., Ali, M. J., Razzaque, R. M., & Ahmed, K. (2018). Real earnings management and financial statement fraud: Evidence from Malaysia. *International Journal of Accounting & Information Management, 26*(4), 508–526. <https://doi.org/10.1108/ijaim-03-2017-0039>

Murni, S., Rahmawati, R., Widagdo, A. K., Sudaryono, E. A., & Setiawan, D. (2023). Effect of family control on earnings management: The role of leverage. *Risks*, *11*(2), 28. <https://doi.org/10.3390/risks11020028>

Nuanpradit, P. (2018). The effect of information asymmetry on earnings management through real activities: Evidence from Thailand. *Kasetsart Journal of Social Sciences, 39*(2), 364–370. <https://doi.org/10.1016/j.kjss.2018.06.003>

Oyedokun, G. E., Umoh, R. O., Haruna, R. A., & Zakaria, A. Z. (2019). Effect of ownership structure on earnings management of listed industrial goods companies in Nigeria. *IOSR Journal of Business and Management, 21*(1), 47–54.

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, *42*(3), 335–370. <https://doi.org/10.1016/j.jacceco.2006.01.002>

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, *87*(3), 355. <https://doi.org/10.2307/1882010>

Spence, M. (1978). Job market signalling. In M. M. Malinvaud & D. C. McFadden (Eds.), *Uncertainty in economics* (pp. 281–306). Academic Press.

Trisnawati, R., Subekti, I., & Saraswati, E. (2016). Real earnings management and information asymmetry: An empirical study in Indonesian manufacturing companies. *International Journal of Applied Business and Economic Research, 14*(3), 1533–1547.

Yunus, N. M., & Sutrisno, T. (2022). The effect of financial distress, audit quality, and corporate governance on real earnings management. *Journal of Economics, Finance and Accounting Studies, 4*(1), 1–12. <https://doi.org/10.32996/jefas.2022.4.1.1>

Zang, A. Y. (2012). Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management. *The Accounting Review*, *87*(2), 675–703. <http://www.jstor.org/stable/23245619>