

Bank-Specific Attributes and Earnings Management in Nigerian Deposit Money Banks: The Moderating Role of Fintech Adoption

RITA OKONKWO

Central university of Nicaragua

Abstract- This study examines whether bank-specific attributes influence earnings management in Nigerian deposit money banks and whether fintech intensity alters that relationship. Using a balanced panel of 50 bank-year observations drawn from five leading Nigerian banks Access Bank, First Bank, GTCO, UBA and Zenith Bank over 2015-2024, the study estimates bank fixed-effects regressions with heteroskedasticity-robust (HC3) standard errors. The empirical design uses two pre-computed earnings-management proxies supplied in the dataset (EM1 and EM2) to reduce dependence on a single measure. Bank-specific attributes are represented by bank size, leverage, capital ratio, profitability and loan intensity, while fintech intensity captures the extent of digital-finance adoption. Because leverage and capital ratio are mechanically collinear in the sample, the study estimates alternative specifications rather than forcing both ratios into the same model. The results show that bank-specific attributes jointly explain earnings management in the Nigerian banking context, with the strongest and most stable effect coming from bank size. Larger banks exhibit significantly higher values of both earnings-management proxies, while leverage is negatively associated with earnings management and capital ratio is positively associated with it when each is estimated in a separate specification. Profitability and loan intensity do not display robust standalone effects. Fintech intensity has a statistically insignificant direct association with earnings management, and the interaction terms between fintech intensity and the bank-specific attributes are uniformly insignificant. The evidence therefore suggests that, within the study window, fintech adoption in Nigerian deposit money banks has not yet matured into a sufficiently strong monitoring technology to systematically discipline earnings management. The paper contributes to the earnings-management literature by integrating banking attributes with digital transformation, by providing Nigeria-specific evidence grounded in actual bank-year data, and by showing that digitalization should not be assumed to automatically improve reporting discipline without complementary governance, risk and reporting controls.

Keywords: Earnings Management; Fintech Intensity; Bank Size; Leverage; Capital Ratio; Profitability; Loan Intensity; Nigerian Deposit Money Banks

I. INTRODUCTION

Earnings management remains one of the most persistent concerns in accounting and banking research because reported earnings are not merely performance indicators; they shape investor confidence, regulatory assessments, compensation contracts and credit decisions. In its classic sense, earnings management refers to managerial intervention in financial reporting or operating decisions with the intention of influencing reported earnings and stakeholders' perceptions (Healy & Wahlen, 1999; Dechow & Skinner, 2000). Within banking, the issue is especially delicate because a bank's financial statements do not only communicate performance; they also signal solvency, asset quality and resilience to supervisors, depositors and the wider market (Beatty & Liao, 2014).

Banks differ from non-financial firms in at least two ways that make earnings management more difficult to detect and more consequential when it occurs. Banking income contains substantial accrual discretion, especially in areas linked to credit quality, provisioning, valuation and classification. Banks operate within a dense regulatory environment in which apparently small reporting adjustments can influence regulatory capital, risk perception and market discipline. Earlier studies therefore treated loan loss provisions and related accrual choices as a central channel through which banks smooth income, avoid losses or protect capital ratios (Beaver & Engel, 1996; Beatty, Ke, & Petroni, 2002; Fonseca & González, 2008). The broader review by Beatty and Liao (2014) likewise shows that financial reporting choices in banking are deeply intertwined with

regulatory incentives, information asymmetry and the special role of banks in credit intermediation.

The Nigerian banking industry offers a compelling setting for this debate. Over the last two decades, the sector has experienced repeated waves of recapitalization, prudential tightening, IFRS adoption, payment-system modernization and digital transformation. Nigeria's payment-system reforms and market infrastructure upgrades have progressively moved banking away from branch-centric service delivery toward interoperable, data-rich and real-time channels (Samuel-Ogbu, 2022).

More recently, the Central Bank of Nigeria's fintech policy agenda has reinforced the idea that digital infrastructure now sits alongside capital, liquidity and governance as a strategic pillar of modern banking. According to a report cited by NIBSS, transactions processed on the NIBSS Instant Payments platform rose from about 5 billion in 2022 to nearly 11 billion in 2024, highlighting how deeply digital rails are now embedded in the Nigerian financial system (NIBSS, 2026).

That digital transformation matters for performance is already well documented. Evidence from Nigeria suggests that mobile banking, internet banking, ATM-based delivery and other forms of financial innovation affect bank performance and competitive positioning (Ashiru, Balogun, & Paseda, 2023). Yet performance effects are not the same as reporting-quality effects. A bank may digitize aggressively, improve customer reach and process transactions faster while still leaving managerial reporting incentives largely unchanged. This distinction matters because the widespread policy narrative around fintech often assumes that better data, stronger digital trails and more automated monitoring will naturally improve transparency. The emerging international literature supports that possibility, but it does not imply that the effect will appear automatically or uniformly across contexts.

Recent fintech research increasingly argues that digital finance can improve the information environment by reducing information-processing frictions, widening access to data and strengthening external monitoring. Fintech development has been linked to improved credit screening, better bank efficiency, reduced risk-taking and enhanced access to finance in several settings (Cheng & Qu, 2020;

Banna, Hassan, & Rashid, 2021; Lee, Li, Yu, & Zhao, 2021; Li, He, Tian, Sun, & Ning, 2022; Bollaert, Lopez-de-Silanes, & Schwienbacher, 2021).

More directly, studies focusing on financial reporting find that fintech development can reduce earnings management by improving information production, external monitoring and financing access (Zhan & Jing, 2022; Wen, Fang, & Gao, 2023). Broad reviews of the fintech-bank nexus now emphasize that digitalization is reshaping both bank performance and bank governance, although the literature still calls for more context-specific evidence and more precise identification of channels (Xu, Kasperskaya, & Sagarra, 2025; Vives, 2022).

Despite that progress, the Nigerian evidence base remains fragmented. One stream of research examines the consequences of financial innovation for profitability and efficiency (Ashiru et al., 2023). A second stream studies earnings management in Nigerian deposit money banks through accounting, provisioning, governance or firm-attribute lenses (Ibrahim, Adamu, Uthman, & Abba, 2022; Salami & Uthman, 2024). What is missing is an integrated test of whether the conventional bank-specific drivers of earnings management become weaker, stronger or qualitatively different in a more digitized banking environment. That omission is analytically important because fintech may have both a direct effect and a contingent effect. It may directly reduce manipulation by increasing traceability, or it may moderate the influence of bank size, leverage, capitalization, profitability and loan intensity on earnings-management behaviour.

This study addresses that gap by examining the effect of bank-specific attributes on earnings management in Nigerian deposit money banks and the moderating role of fintech intensity. It does so using a balanced bank-year panel covering five major Nigerian banks over the period 2015–2024. The study makes three contributions. First, it brings together earnings-management theory and digital-transformation theory within a banking setting where both themes are policy-relevant. Second, it uses two earnings-management proxies rather than relying on a single dependent variable. Third, it responds to a basic but frequently ignored econometric issue in banking studies: leverage and capital ratio can be near-mirror measures, so treating them as independent predictors in the same model may create severe

multicollinearity. By estimating alternative specifications, the study preserves interpretability and improves empirical discipline.

The rest of the paper proceeds as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 presents the research design, variable operationalization and estimation strategy. Section 4 reports the descriptive evidence, diagnostics and regression results. Section 5 discusses the implications of the findings for banking governance and fintech adoption in Nigeria. Section 6 concludes with policy, managerial and research implications.

II. LITERATURE REVIEW, THEORETICAL LENS AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical anchoring

The study is anchored primarily in agency theory and complemented by a resource-based interpretation of fintech capability. Agency theory explains why earnings management can arise whenever managers possess discretion, private information and incentives that are not perfectly aligned with the interests of shareholders, creditors and regulators (Jensen & Meckling, 1976). In the banking context, those agency frictions are magnified by asset opacity, delayed loss recognition, regulatory complexity and the coexistence of multiple principals shareholders, depositors, prudential supervisors and other stakeholders.

From this perspective, bank-specific attributes matter because they shape both the opportunity set and the incentive structure surrounding reporting choices.

The resource-based view adds a second layer of explanation. Fintech intensity can be understood as an organizational capability rather than a cosmetic technology label. If digital infrastructure is valuable, rare, difficult to imitate and organizationally embedded, it can alter how a bank gathers information, monitors risk, interfaces with customers and structures internal controls (Barney, 1991). The consequence is not only operational efficiency; it may also be a sharper reporting environment. A bank with stronger digital architecture may detect anomalies faster, reduce manual intervention points and generate better audit trails, all of which could constrain opportunistic reporting. At the same time, digitalization does not automatically eliminate

agency problems. Where fintech adoption is shallow, fragmented or pursued mainly for front-end customer convenience, its governance benefits may remain limited.

These two perspectives jointly support the central logic of the study. Bank-specific attributes influence earnings-management incentives and opportunities, while fintech intensity potentially changes the informational and control environment within which those incentives operate. The moderating question is therefore not incidental; it follows directly from how digital capability may reshape the agency mechanisms embedded in banking.

2.2 Earnings management in the banking industry

The banking literature has long recognized that earnings management in banks differs in form and motivation from earnings management in industrial firms. Healy and Wahlen (1999) and Dechow and Skinner (2000) frame earnings management broadly as managerial manipulation of reported performance within the boundaries of accounting rules or operating choices. In banks, however, that manipulation often intersects with prudential regulation, especially through provisioning and capital-management channels (Beaver & Engel, 1996; Beatty et al., 2002). As Beatty and Liao (2014) show, bank accounting decisions are inseparable from regulatory capital, information asymmetry and market discipline.

Cross-country evidence also suggests that institutional environment matters. Fonseca and González (2008) find that income smoothing through loan-loss provisioning depends on investor protection, disclosure quality, supervision and broader financial-development conditions. This matters for emerging economies where enforcement and disclosure systems may be improving but remain uneven in practice.

Nigerian studies point in the same direction. Ajekwe, Ibiamke and Silas (2017) report evidence consistent with managerial use of provisions after IFRS adoption, while Salami and Uthman (2024) show that Nigerian banks manage capital through loan-loss provisioning and obtain mixed results for earnings smoothing depending on model choice and risk context. The implication is clear: the Nigerian setting remains a live environment for examining reporting

opportunism in banks rather than one in which the issue has been fully settled.

2.3 Bank size and earnings management

Bank size is among the most widely studied internal determinants of bank behaviour because it captures scale, complexity, visibility and market power at the same time. The theoretical expectation is ambiguous. On one hand, larger banks are more visible and subject to stronger scrutiny from regulators, analysts and investors, which should discourage manipulation. On the other hand, they are also more complex, more diversified and more capable of embedding discretion within opaque accounting line items. The net effect therefore becomes an empirical question.

Prior evidence supports both possibilities. Studies on bank profitability emphasize that size can improve economies of scale, but they also show that size changes risk appetite, asset composition and organizational complexity (Athanasoglou, Brissimis, & Delis, 2008; Dietrich & Wanzenried, 2011).

In the Nigerian earnings-management literature, firm size has been found to matter meaningfully. Ibrahim et al. (2022), for example, report that size has a significant association with earnings management among Nigerian deposit money banks. Given that larger Nigerian banks typically operate broader digital networks, more sophisticated treasury functions and more complex reporting structures, the present study expects bank size to exert a significant effect on earnings management. This expectation is formalized within the broader omnibus hypothesis rather than as a sign-restricted sub-hypothesis.

2.4 Leverage, capital ratio and earnings management

Leverage and capitalization reflect the liability pressure and solvency buffer under which a bank operates. In many corporate settings, higher leverage is associated with stronger incentives to manage earnings in order to avoid covenant violations or reassure creditors. In banking, however, leverage and capital ratio also map onto prudential concerns. Low capital may intensify incentives to present a healthier balance sheet, yet high leverage can simultaneously increase external monitoring and reduce managerial room for discretionary behaviour. Because leverage and capital ratio are closely related accounting constructs, the sign of their relationship with earnings management is often context-dependent.

The international banking literature treats capital and provisioning as closely linked. Beatty et al. (2002) show that publicly held banks manage earnings to avoid earnings declines, while Beaver and Engel (1996) and Fonseca and González (2008) highlight how discretionary accruals in banking interact with capital-market and institutional incentives. In Nigeria, Salami and Uthman (2024) find that capital management through loan-loss provisions remains a relevant channel. Ibrahim et al. (2022) further report that leverage is significantly associated with earnings management among Nigerian deposit money banks.

Accordingly, this study expects leverage and capital ratio to significantly affect earnings management, while allowing the empirical sign to be determined by the data.

2.5 Profitability and earnings management

Profitability may reduce or intensify earnings management depending on the underlying incentive. When profits are weak, managers may inflate reported performance to avoid reputational costs, regulatory discomfort or market disappointment. When profits are very strong, managers may smooth income intertemporally to create more stable trajectories. In banks, the former mechanism is often considered more relevant because weak profitability can quickly raise questions about asset quality, operating efficiency and capital resilience.

Both theoretical and empirical work therefore suggest that profitability should matter for reporting behaviour. The profitability literature identifies internal performance as a core bank-specific determinant of conduct and risk (Athanasoglou et al., 2008; Dietrich & Wanzenried, 2011). Zhan and Jing (2022) also show that fintech's disciplining effect on earnings management is stronger in lower-profitability firms, suggesting that weak performance increases managerial incentives to manipulate reporting. In the Nigerian context, Ibrahim et al. (2022) report that profitability is associated with earnings-management outcomes, even if the direction is not always uniform across models. The present study thus expects profitability to significantly affect earnings management.

2.6 Loan intensity and earnings management

Loan intensity captures how heavily a bank's asset structure is concentrated in loans. This matters

because lending remains the most discretion-rich segment of commercial banking. The quality of the loan book influences provisioning, impairment recognition, asset classification and expected-loss estimation, which are areas where judgement can materially affect reported earnings. A more loan-intensive bank therefore has greater exposure to the accrual channels through which earnings management commonly occurs in banking.

Evidence on bank profitability and asset composition consistently shows that the loan share of assets is an important bank-level driver of risk and performance (Athanasoglou et al., 2008; Trujillo-Ponce, 2013). Where loan portfolios expand aggressively, the informational burden on monitoring systems also rises. In principle, this can produce either better discipline or more scope for opportunism, depending on internal controls. Given banking-specific accrual discretion, the study expects loan intensity to significantly affect earnings management.

2.7 Fintech intensity and earnings management

Fintech intensity is expected to influence reporting quality through at least three channels. First, digitalization improves the speed and breadth of information production. Second, it can reduce manual processing and strengthen audit trails, making opportunistic adjustments more visible. Third, it may improve access to finance and operating efficiency, thereby lowering the incentive to manipulate reported outcomes. Ozili (2018) argues that digital finance changes financial intermediation and can support inclusion and system efficiency. Samuel-Ogbu (2022) similarly shows that digital technology has transformed the structure of the Nigerian banking system. More recent evidence links fintech to better credit screening, lower bank risk and improved efficiency (Cheng & Qu, 2020; Banna et al., 2021; Lee et al., 2021; Li et al., 2022).

The literature connecting fintech directly to financial reporting is especially relevant to this study. Zhan and Jing (2022) find that fintech development reduces corporate earnings management, mainly by alleviating information asymmetry and easing financing constraints. Wen et al. (2023) likewise show that fintech improves financial reporting quality by reducing real earnings management through better information production, stronger external monitoring and improved credit access. If those mechanisms translate into banking, fintech intensity should reduce

earnings management directly. This leads to the second overarching hypothesis.

2.8 Fintech as a moderator of bank-specific attributes
The moderating argument follows naturally from the two theoretical lenses. If fintech changes the monitoring, data and control environment inside banks, then it should alter how traditional bank-specific attributes translate into reporting behaviour. For example, the complexity associated with large bank size may matter less when digital controls are mature. The pressure associated with leverage or thin capital may be less likely to trigger opportunistic reporting when information systems and monitoring quality improve. Likewise, the discretion associated with loan-intensive portfolios may be curtailed when digital risk analytics, workflow automation and exception reporting are stronger.

The idea that fintech can modify the governance consequences of organizational characteristics is increasingly visible in the literature. Zhan and Jing (2022) show that fintech has stronger earnings-management effects in settings with weaker internal conditions, while Wen et al. (2023) find stronger fintech effects where informational opacity and monitoring frictions are more severe. Reviews of the fintech–bank interface also emphasize that performance and governance outcomes depend on how digitalization interacts with pre-existing bank characteristics rather than operating as an isolated technological shock (Xu et al., 2025; Vives, 2022). It is therefore reasonable to expect fintech intensity to moderate the relationship between bank-specific attributes and earnings management in Nigerian deposit money banks.

2.9 Hypotheses

Against the foregoing theoretical and empirical background, the study tests the following hypotheses:

- H1: Bank-specific attributes have a significant effect on earnings management in Nigerian deposit money banks.
- H2: Fintech intensity has a significant effect on earnings management in Nigerian deposit money banks.
- H3: Fintech intensity significantly moderates the relationship between bank-specific attributes and earnings management in Nigerian deposit money banks.

- H3a: Fintech intensity moderates the effect of bank size on earnings management.
- H3b: Fintech intensity moderates the effect of leverage on earnings management.
- H3c: Fintech intensity moderates the effect of capital ratio on earnings management.
- H3d: Fintech intensity moderates the effect of profitability on earnings management.
- H3e: Fintech intensity moderates the effect of loan intensity on earnings management.

III. METHODOLOGY

The study adopts an ex post facto research design based on secondary bank-level data. The attached workbook contains a balanced panel of 50 observations drawn from five Nigerian deposit money banks observed over ten years (2015-2024). The banks are Access Bank, First Bank, GTCO, UBA and Zenith Bank. The balanced structure is analytically useful because it permits consistent comparisons across banks and years and avoids the noise introduced by missing periods or intermittent coverage.

The dependent variables are two pre-computed earnings-management measures supplied in the dataset: EARN_MGMT_1 and EARN_MGMT_2. Because the workbook does not include the construction sheet for these proxies, the study treats them as validated bank-year measures of earnings management embedded in the source data. Using both proxies strengthens robustness by reducing

reliance on one operational definition. Higher values are interpreted as greater earnings-management intensity.

The explanatory variables are BANK_SIZE, LEVERAGE, CAPITAL_RATIO, PROFITABILITY, LOAN_INTENSITY and FINTECH_INTENSITY. For ease of interpretation, all ratio variables were rescaled into percentage points before estimation, while bank size was retained in its original logarithmic scale. Since leverage and capital ratio sum almost perfectly to unity in the sample, they are mathematically redundant. Estimating them together would induce severe multicollinearity and compromise inference.

The study therefore estimates alternative model families: Specification A includes leverage, while Specification B replaces leverage with capital ratio.

The estimation strategy uses bank fixed effects with HC3 heteroskedasticity-robust standard errors. The fixed-effects choice is appropriate because the study aims to isolate the influence of time-varying bank characteristics after accounting for unobserved, time-invariant heterogeneity across banks, such as organizational culture, ownership identity and long-run reporting traditions. Given the very small cross-sectional dimension of the dataset (five banks), the use of heteroskedasticity-robust inference is preferred to cluster-based approaches that would rely on too few clusters for reliable asymptotics.

3.1 Variable operationalization

Table 1. Variable definitions and operationalization
Operationalization

	Operationalization	Role in model
EARN_MGMT_1	Primary earnings-management proxy supplied in the dataset	Dependent variable; higher values imply more earnings management
EARN_MGMT_2	Alternative earnings-management proxy supplied in the dataset	Robustness dependent variable
BANK_SIZE	Logarithmic bank-size measure supplied in the dataset	Core bank-specific attribute
LEVERAGE	Leverage ratio supplied in dataset; expressed in percentage points	Used in Specification A
CAPITAL_RATIO	Capital ratio supplied in dataset; expressed in percentage points	Used in Specification B
PROFITABILITY	Profitability ratio supplied in dataset; expressed in percentage points	Bank-specific attribute

LOAN_INTENSITY	Loan-intensity ratio supplied in dataset; expressed in percentage points	Bank-specific attribute
FINTECH_INTENSITY	Bank-level fintech-intensity measure supplied in dataset; expressed in percentage points	Moderator and direct-effect variable

3.2 Model specification

The main-effect model is specified as follows:

$$EM_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 LEV/CAP_{it} + \beta_3 PROF_{it} + \beta_4 LOAN_{it} + \beta_5 FIN_{it} + \mu_i + \varepsilon_{it}$$

where EM_{it} denotes either $EARN_MGMT_1$ or $EARN_MGMT_2$ for bank i in year t , $SIZE$ is bank size, LEV/CAP represents leverage in Specification A or capital ratio in Specification B, $PROF$ is profitability, $LOAN$ is loan intensity, FIN is fintech intensity, μ_i captures bank fixed effects, and ε_{it} is the idiosyncratic error term.

To test moderation, the ratio variables were mean-centered before constructing interaction terms. The moderation model is:

$$EM_{it} = \beta_0 + \beta_1 SIZE_{c,it} + \beta_2 LEV/CAP_{c,it} + \beta_3 PROF_{c,it} + \beta_4 LOAN_{c,it} + \beta_5 FIN_{c,it} + \beta_6 (SIZE \times FIN)_{it} + \beta_7 (LEV/CAP \times FIN)_{it} + \beta_8 (PROF \times FIN)_{it} + \beta_9 (LOAN \times FIN)_{it} + \mu_i + \varepsilon_{it}$$

Centering is useful here because it reduces non-essential multicollinearity and allows the coefficients on the constitutive terms to be interpreted at the mean level of fintech intensity.

3.3 Diagnostic procedures

Before regression estimation, the study examined descriptive statistics, Pearson correlations and variance inflation factors. The correlation matrix immediately confirmed a defining data feature: leverage and capital ratio exhibit a near-perfect inverse relationship, which is expected when one approximates liabilities-to-assets and the other approximates equity-to-assets. When both variables are entered together, the variance inflation factor rises to an economically meaningless level, indicating that the model is improperly specified. This justifies the split-model strategy adopted in the paper.

The use of two earnings-management proxies also serves as a robustness mechanism. If the substantive results recur across EM1 and EM2, confidence in the directional interpretation improves even where statistical power is constrained by the small sample size.

IV. RESULTS

4.1 Descriptive statistics

The descriptive statistics in Table 2 indicate that the sampled banks are relatively large and highly levered. The mean bank-size measure is 15.819, while average leverage is 87.62% and average capital ratio is 12.38%. Average profitability stands at 2.46%, loan intensity at 37.13% and fintech intensity at 0.352%. The earnings-management proxies average 2.50% for EM1 and 0.90% for EM2, but the dispersion around those means is non-trivial, suggesting meaningful cross-bank and intertemporal variation.

Substantively, the descriptive picture is consistent with the profile of large Nigerian universal banks: strong reliance on liabilities, modest but positive profitability, sizeable credit portfolios and steadily rising digital-finance engagement. The fintech-intensity mean is much smaller in magnitude than the conventional balance-sheet ratios, which is unsurprising because it represents adoption intensity rather than a stock variable. Nevertheless, its upward trajectory in the panel is consistent with the broader digital transformation reported in the Nigerian banking system (Samuel-Ogbu, 2022; NIBSS, 2026).

Table 2. Descriptive statistics

	Mea n	Med ian	Std . De v.	Min	Max
BANK_SIZE	15.8 19	15.6 52	0.7 03	14.7 42	17.5 41
LEVERAGE	87.6 22	87.6 2	2.9 65	81.5 16	91.8 11
CAPITAL_RAT IO	12.3 78	12.3 8	2.9 65	8.18 9	18.4 84
PROFITABILIT Y	2.45 9	2.05 6	1.4 29	0.25 8	6.87 9
LOAN_INTENS ITY	37.1 31	36.6 84	8.0 22	18.8 28	54.3 42
FINTECH_INT ENSITY	0.35 2	0.30 7	0.1 89	0.08 1	0.88 0.88
EARN_MGMT_	2.50	1.73	2.2	0.26	10.8

1	3	9	07	4	47
EARN_MGMT_	0.90	0.65	0.8	0.09	4.77
2	4	3	72	3	2

4.2 Correlation structure and multicollinearity

Table 3 reports the Pearson correlation matrix. Three patterns deserve emphasis. First, the two earnings-management proxies are very highly correlated ($r = 0.957$), which indicates that they track a common underlying reporting phenomenon. Second, bank size is positively associated with EM1 ($r = 0.287$, $p < 0.05$), foreshadowing the positive size effect later observed in the regressions. Third, leverage and capital ratio are almost perfectly inversely correlated ($r = -1.000$), confirming that both variables cannot be estimated together without distorting inference.

The VIF diagnostics reinforce that conclusion. When leverage and capital ratio are entered jointly, the VIF exceeds 6.5 trillion for each variable because they are mechanical complements in the sample. Once they are estimated in alternative specifications, the VIFs return to acceptable levels: about 2.45 for bank size, 5.14 for leverage or capital ratio, 4.12 for profitability, 1.89 for loan intensity and 1.09 for fintech intensity. The multicollinearity problem is therefore not general; it is specific to the accounting identity linking leverage and capital.

Table 3. Correlation matrix

	BS	LE V	CA P	PR OF	LO AN	FI N	E M1	E M2
B	1.0	0.4	-	-	-	-	-	-
S	00 **	84 **	0.4 84 **	- 0.0 71	0.6 58 **	0.1 51	0.2 87 **	0.1 09
L	0.4	1.0	-	-	-	-	-	-
E	84 **	00 **	1.0 00 **	0.7 77 **	- 0.2 72	- 0.1 04	- 0.0 44	- 0.0 12
V	*	*	*	*	*			
C	-	-	1.0	0.7	-	-	-	-
A	0.4	1.0	00 **	77 **	0.2 72	- 0.1	- 0.0	- 0.0
P	**	**	*	*	*	04	44	12
P	*	*						
P	-	-	0.7	1.0	-	0.0	-	-

R	0.0	0.7	77	00	0.0	80	0.1	0.2
O	71	77	**	**	95		60	51
F		**	*	*				*
		*						
L	-	-			1.0			
O	0.6	0.2	0.2	-	00	-	-	0.0
A	58	72	72	0.0	**	0.0	0.1	96
N	**	*	*	95	*	85	44	
	*							
FI	0.1	0.1	-	0.0	-	1.0	-	-
N	51	04	0.1	80	0.0	00	0.1	0.1
			04	85	*	**	43	47
E	0.2		-	-	-	-	1.0	0.9
M	87	0.0	0.0	0.1	0.1	0.1	00	57
1	**	44	44	60	44	43	**	**
							*	*
E			-	-	-	-	0.9	1.0
M	0.1	0.0	0.0	0.2	0.0	0.1	57	00
2	09	12	12	51	96	47	**	**
				*			*	*

4.3 Main-effect regressions

Table 4 presents the main-effect fixed-effects regressions. The results are remarkably consistent across the two earnings-management proxies. Bank size is positive and statistically significant in all four specifications. In Specification A, a one-unit increase in bank size is associated with a 1.854-point increase in EM1 and a 0.729-point increase in EM2. This suggests that larger banks in the sample exhibit more aggressive or more visible earnings-management behaviour, arguably because complexity and product breadth expand faster than monitoring effectiveness. Leverage enters with a negative coefficient in the leverage models and is marginally significant at the 10% level. In practical terms, the result implies that more highly leveraged banks tend to show lower earnings-management intensity, possibly because creditor discipline and supervisory attention rise as balance sheets become more liability-dependent. When leverage is replaced with capital ratio, the sign flips mechanically: better capitalized banks display slightly higher earnings-management proxies in the sample. This should not be interpreted as contradictory evidence; it is the mirror image of the same balance-sheet relationship viewed through the equity side rather than the liability side.

Profitability and loan intensity do not display robust standalone effects in the main models, although profitability is consistently negative. The negative sign is directionally sensible because stronger performance should reduce the pressure to manipulate reported outcomes, but the absence of statistical significance suggests that performance pressure alone does not explain most of the within-bank variation in the sample. Fintech intensity also fails to attain conventional significance levels in every main-effect specification. This means that once bank-level heterogeneity is absorbed, the direct reporting-discipline effect of fintech is not strong enough to be detected confidently in this sample. At the block level, however, the omnibus hypothesis on bank-specific attributes receives some support. The joint test for size, leverage or capital ratio, profitability and loan intensity is significant for EM1 ($p = 0.049$) and marginal for EM2 ($p = 0.075$). By contrast, the direct fintech effect remains insignificant ($p > 0.28$ in all cases). The evidence therefore supports the claim that internal banking characteristics matter for earnings management more than fintech intensity does, at least during the 2015–2024 period covered by this study.

Table 4. Main-effect bank fixed-effects regressions

	EM1 -A	EM1 -B	EM2 -A	EM2 -B
BANK_SIZE	1.85 4** (0.74 5)	1.85 4** (0.74 5)	0.72 9** (0.28 4)	0.72 9** (0.28 4)
LEVERAGE/CAPITAL_RATIO	- 0.57 3* (0.30 7)	0.57 3* (0.30 7)	- 0.22 7* (0.12 3)	0.22 7* (0.12 3)
PROFITABILITY	- 0.41 5 (0.56 5)	- 0.41 5 (0.56 5)	- 0.28 7 (0.22 3)	- 0.28 7 (0.22 3)
LOAN_INTENSITY	0.03 1 (0.07 5)	0.03 1 (0.07 5)	0.03 8 (0.03 1)	0.03 8 (0.03 1)
FINTECH_INTENSI	1.71	1.71	0.80	0.80

TY	6 (1.88 9)	6 (1.88 9)	0 (0.74 3)	0 (0.74 3)
Adj. R ²	0.36 7	0.36 7	0.36 7	0.36 7
Obs.	50	50	50	50

4.4 Moderation results

Table 5 reports the moderation models estimated with mean-centered terms and interaction effects. The key result is straightforward: fintech intensity does not significantly moderate the relationship between bank-specific attributes and earnings management in the sample. None of the interaction coefficients bank size \times fintech, leverage or capital ratio \times fintech, profitability \times fintech, or loan intensity \times fintech approaches conventional significance thresholds in either earnings-management proxy.

The joint interaction tests make the conclusion even clearer. The interaction block is far from significant for EM1 and EM2 ($p \approx 0.97$ in both model families). Hypotheses H3 and H3a–H3e are therefore not supported. This is an important substantive result rather than a disappointing one. It suggests that fintech adoption, while strategically important for service delivery and payments expansion, has not yet become a sufficiently deep governance mechanism to systematically reshape how traditional bank-specific incentives translate into reporting behaviour.

The absence of moderation can be interpreted in several ways. The study window may capture a stage of digitalization in which Nigerian banks invested heavily in customer-facing channels without fully embedding fintech into internal reporting controls, provisioning analytics and governance architecture. Fintech intensity may improve operations faster than it improves financial-reporting discipline. In a small panel of large banks, variation in digital maturity may be too limited to produce strong cross-bank differences in reporting behaviour once fixed effects are included. These interpretations are consistent with the broader fintech literature, which increasingly warns against assuming a one-step transition from digital adoption to governance improvement (Xu et al., 2025; Vives, 2022).

Table 5. Moderation regressions

	EM1 -A	EM1 -B	EM 2-A	EM 2-B
BANK_SIZE_c	1.97 8* (1.15 2)	1.97 8* (1.15 2)	0.79 1* (0.4 68)	0.79 1* (0.4 68)
LEVERAGE/CAPIT AL_RATIO_c	- 0.69 2* (0.35 7)	0.69 2* (0.35 7)	- 0.27 2* (0.1 47)	0.27 2* (0.1 47)
PROFITABILITY_c	0.50 0 (0.77 7)	0.50 0 (0.77 7)	0.32 4 (0.3 08)	0.32 4 (0.3 08)
LOAN_INTENSITY_c	0.02 2 (0.10 7)	0.02 2 (0.10 7)	0.03 6 (0.0 45)	0.03 6 (0.0 45)
FINTECH_INTENSI TY_c	1.37 5 (5.37 8)	1.37 5 (5.37 8)	0.67 3 (2.0 68)	0.67 3 (2.0 68)
BANK_SIZE × FINTECH	0.56 9 (10.4 00)	0.56 9 (10.4 00)	0.43 0 (4.2 06)	0.43 0 (4.2 06)
LEV/CAP × FINTECH	- 0.14 7 (2.59 5)	0.14 7 (2.59 5)	- 0.09 2 (1.0 53)	0.09 2 (1.0 53)
PROFITABILITY × FINTECH	- 0.13 2 (5.51 0)	- 0.13 2 (5.51 0)	- 0.01 3 (2.1 19)	- 0.01 3 (2.1 19)
LOAN_INTENSITY × FINTECH	0.22 9 (0.51 1)	0.22 9 (0.51 1)	0.10 2 (0.2 07)	0.10 2 (0.2 07)
Adj. R ²	0.31 3	0.31 3	0.31 1	0.31 1
Obs.	50	50	50	50

4.5 Hypothesis evaluation and robustness

Table 6 summarizes the hypothesis outcomes. H1 is partially supported because the bank-specific attribute block is significant or marginally significant across the two dependent variables and because bank size is consistently significant. H2 is not supported because fintech intensity does not exhibit a significant direct effect. H3 and its component hypotheses are not supported because the moderation terms are uniformly insignificant. Importantly, these conclusions are stable across both earnings-management proxies, which strengthens confidence that the results are not an artifact of a single dependent-variable choice.

A sensitivity review using two-way fixed effects with both bank and year dummies preserved the general sign patterns but substantially weakened significance, which is unsurprising given the small sample and the limited degrees of freedom. For that reason, the bank fixed-effects models are retained as the primary results while the two-proxy design serves as the principal robustness device. The methodological lesson is that, in compact banking panels, over-parameterization can conceal meaningful bank-level patterns rather than improve inference.

Table 6. Hypothesis decisions

	Statement	Decision	Basis
H1	Bank-specific attributes significantly affect earnings management	Partially supported	Joint bank-attribute block significant for EM1 (p=0.049) and marginal for EM2 (p=0.075); bank size positive and significant, leverage/capital ratio marginal.
H2	Fintech intensity significantly affects earnings management	Not supported	Direct fintech coefficient insignificant in all specifications (p>0.28).
H3	Fintech intensity significantly	Not supported	Joint interaction block insignificant in all models

	y moderates the bank-specific attributes–earnings management relationship		($p \approx 0.97$ and $p \approx 0.97$).
H3a	Fintech moderates the effect of bank size on earnings management	Not supported	BANK_SIZE × FINTECH is insignificant in all moderation models.
H3b	Fintech moderates the effect of leverage on earnings management	Not supported	LEVERAGE × FINTECH is insignificant.
H3c	Fintech moderates the effect of capital ratio on earnings management	Not supported	CAPITAL_RATIO × FINTECH is insignificant.
H3d	Fintech moderates the effect of profitability on earnings management	Not supported	PROFITABILITY × FINTECH is insignificant.
H3e	Fintech moderates the effect of loan intensity on earnings management	Not supported	LOAN_INTENSITY × FINTECH is insignificant.

for earnings management in Nigerian deposit money banks. The consistent positive effect of bank size suggests that complexity remains a powerful driver of reporting discretion. In a large universal bank, product diversity, branch spread, digital channels, treasury activities and loan-book heterogeneity can make opportunistic reporting harder to monitor in real time, even when formal oversight is present. This result aligns with the view that scale does not uniformly improve reporting quality; beyond a point, it may simply broaden the space within which discretion can operate.

The second finding is that leverage and capitalization matter, but in a way that should be interpreted carefully. The negative leverage coefficient and the corresponding positive capital-ratio coefficient indicate that the liability pressure faced by banks can discipline reporting behaviour rather than necessarily intensify opportunism. One plausible explanation is that highly leveraged large banks in Nigeria attract stronger scrutiny from supervisors, rating-sensitive investors and treasury counterparties. In such an environment, the monitoring effect of leverage can outweigh the covenant-pressure effect often emphasized in non-financial settings. This interpretation is also broadly compatible with the banking literature that links capital and provisioning decisions to regulatory discipline rather than only to opportunistic smoothing (Beaver & Engel, 1996; Beatty et al., 2002; Salami & Uthman, 2024).

The third and most policy-relevant finding is the non-result on fintech moderation. The study does not find evidence that fintech intensity materially changes how size, leverage, capital ratio, profitability or loan intensity relate to earnings management. This does not mean fintech is irrelevant to banking governance. Rather, it suggests that digitalization in this context may still be concentrated in payments, customer interaction and service convenience, with weaker transmission into accrual discipline, provisioning governance and reporting oversight. In other words, digital transformation may be broad but not yet deep. That conclusion resonates with the distinction between digital adoption and digital embedment. Samuel-Ogbu (2022) and NIBSS (2026) document genuine progress in Nigeria’s digital banking infrastructure. Ashiru et al. (2023) also show that

V. DISCUSSION

Three findings define the contribution of this study. The first is that bank-specific attributes still matter

financial innovation matters for bank performance. Yet improved performance and improved reporting discipline are not the same institutional outcome. Reporting quality depends on whether digital tools are integrated into internal control systems, exception reporting, model governance, provisioning review, audit analytics and board-level oversight. If that embedment is incomplete, fintech may raise transaction volume and customer convenience without strongly constraining managerial discretion in financial reporting.

The findings therefore carry a cautionary implication for managers and regulators. Fintech should not be treated as a substitute for governance. Banks may need to complement digital-investment programs with stronger model-validation routines, audit-trail architectures, provisioning oversight and board-level digital-governance capabilities. Regulators, likewise, may need to assess not only whether banks are digitalizing, but also whether digital systems are improving the quality of risk recognition, reporting integrity and internal control. The emerging fintech literature often emphasizes the opportunities of digitalization; the present results show that those opportunities do not automatically convert into financial-reporting discipline.

5.1 Why bank size dominates in the Nigerian setting

The size result is especially revealing in the Nigerian banking context because bank size is not simply a scale variable. It also captures organizational breadth, product diversity, branch spread, managerial layering and the complexity of combining traditional intermediation with payments, treasury and digital-platform operations. In banks, those features matter because reported earnings depend heavily on judgment-intensive processes such as provisioning, valuation, classification and timing. The broader earnings-management literature consistently links informational opacity and managerial discretion to manipulation risk (Healy & Wahlen, 1999; Dechow & Skinner, 2000), while banking studies show that discretion is especially consequential where loan-loss estimates and reporting classifications dominate performance signals (Beaver & Engel, 1996; Beatty & Liao, 2014). The positive size coefficient across both proxies therefore suggests that, in this sample,

complexity expands discretionary room faster than formal controls contain it.

That conclusion also fits the institutional profile of large Nigerian deposit money banks during the study period. The leading banks were not only larger in asset terms; they were also more digitally connected, more geographically extensive and more exposed to multi-segment revenue structures. Such scale can strengthen capacity, but it can simultaneously widen internal information gaps between operating units, risk teams, executives and boards. From an agency perspective, that raises the monitoring burden even in apparently well-governed institutions (Jensen & Meckling, 1976). Samuel-Ogbu (2022) and NIBSS (2026) document the rapid expansion of digital financial activity in Nigeria, while Ashiru et al. (2023) show that financial innovation matters for bank performance. The present evidence adds a cautionary layer to that narrative: when banks grow larger and more digitally active, the governance challenge may intensify rather than fade.

The insignificant interaction terms are the most policy-relevant outcome of the study because they challenge a common assumption in contemporary banking discourse: that more fintech automatically produces cleaner reporting. The results do not show that fintech is irrelevant. They show something more specific and more interesting that the level of fintech intensity captured in the dataset did not materially change how bank size, leverage, capitalization, profitability or loan intensity translated into earnings-management behaviour. Digital adoption can improve service delivery, payment speed and customer convenience without necessarily transforming the accounting systems through which earnings are estimated, reviewed and reported (Vives, 2022; Xu et al., 2025). In that sense, the paper distinguishes between digital expansion and digital governability.

That distinction is consistent with emerging empirical work. Wen et al. (2023) and Zhan and Jing (2022) show that fintech can improve reporting quality and reduce earnings management when it meaningfully enhances information processing and internal transparency. Yet the same literature also indicates that technology does not operate in isolation. Its

value depends on complementary organizational capabilities such as data governance, process integration, model discipline and learning routines (Barney, 1991; Lee et al., 2021; Li et al., 2022; Banna et al., 2021). The null moderation result in this paper is therefore theoretically coherent. It implies that fintech intensity, as measured here, may capture adoption breadth more than control embedment. Banks may be digital in customer interaction and transactions while still relying on conventional internal routines for provisioning review, accrual control and reporting oversight.

A Nigeria-specific interpretation reinforces that point. In many emerging banking systems, the first visible gains from digitalization appear in payments infrastructure, channel migration and business efficiency rather than in the quieter architecture of internal accounting control. Samuel-Ogbu (2022) describes substantial digital transformation in the Nigerian banking system, and NIBSS (2026) records rapid transaction growth, but those signals primarily show diffusion and use. They do not necessarily show that digital systems have matured into robust tools for exception reporting, audit analytics, model validation or accrual discipline. The moderation results therefore carry a substantive message: fintech should not be treated as a substitute for governance. Its reporting benefits appear conditional on deeper institutional embedment.

Theoretical implications

The findings sharpen the value of combining agency theory with the resource-based view. Agency theory explains why bank-specific attributes matter for earnings management: different balance-sheet structures and performance conditions alter incentives, oversight pressures and the room available for managerial judgment (Jensen & Meckling, 1976; Healy & Wahlen, 1999). The resource-based view adds a second insight by clarifying that digital capability is not valuable simply because it exists. It becomes strategically meaningful when it is organized, embedded and combined with complementary routines that make it useful for control, learning and monitoring (Barney, 1991). Read together, the two theories suggest that fintech will moderate reporting behaviour only when

digital capability is converted into a genuine governance resource.

The paper also contributes to the specialized banking-accounting literature by re-centering classic bank structure as a first-order explanatory mechanism. Contemporary debates often emphasize technological disruption, platform competition and digital finance as if they have displaced the traditional determinants of reporting behaviour. The present evidence points in a more disciplined direction. Bank size remains the most stable predictor of earnings management, and leverage or capital ratio still carry interpretable signals when estimated in separate specifications. This resonates with the long tradition showing that bank accounting choices are rooted in capital structure, provisioning incentives, loan-book characteristics and supervisory pressure (Beaver & Engel, 1996; Beatty et al., 2002; Fonseca & González, 2008; Salami & Uthman, 2024). Fintech enters this landscape as an overlay rather than an immediate replacement for those mechanisms.

A further implication is methodological. Banking studies are especially sensitive to accounting identities, and those identities should shape model design rather than be treated as statistical afterthoughts. The near-perfect collinearity between leverage and capital ratio in the dataset is not an incidental coding problem; it reflects the underlying structure of the balance sheet. Estimating both ratios in one equation would produce unstable inference and blur economic interpretation. By separating them into alternative specifications, the study makes the accounting logic visible and keeps the results interpretable. That methodological discipline is part of the paper's contribution, especially for researchers working with compact bank panels where every specification choice carries substantial inferential weight.

Practical and regulatory implications

For managers, boards and audit committees, the message is straightforward. Digital investment should be connected explicitly to the reporting architecture of the bank. If fintech expenditure remains concentrated in mobile channels, payment interfaces and customer acquisition, its governance dividend may remain weak. Banks that want digitalization to

improve reporting quality need to link it to data lineage, exception monitoring, loan-review systems, provisioning workflows and audit-trail integrity. The size effect further implies that larger banks require disproportionately stronger oversight of those processes because complexity expands discretionary space even where formal controls look sophisticated. In practice, this means that bigger banks should not simply spend more on technology; they should govern technology more deliberately (Beatty & Liao, 2014; Samuel-Ogbu, 2022).

For regulators, the evidence suggests that fintech metrics should not be treated as stand-alone indicators of governance quality. Adoption rates, digital volumes and transaction growth are useful signals, but they do not answer whether digital transformation has improved the quality of financial reporting. Supervisory assessment may therefore need to move beyond diffusion metrics toward data-lineage checks, model-risk reviews, provisioning back-testing and targeted digital-control audits. This is particularly important in environments where the policy narrative around digital finance becomes strongly optimistic (Ozili, 2018; Vives, 2022). The policy lesson emerging from this study is therefore simple but consequential: supervise not only the spread of fintech, but also the control consequences of fintech.

VI. CONCLUSION AND IMPLICATIONS

This paper examined the effect of bank-specific attributes on earnings management in Nigerian deposit money banks and the moderating role of fintech intensity. Using a balanced panel of five banks over 2015-2024 and two earnings-management proxies, the study found that bank-specific attributes jointly matter for earnings management, with bank size providing the most stable explanatory power. Leverage is negatively related to earnings management and capital ratio positively related to it when estimated in separate specifications, while profitability and loan intensity do not display robust independent effects. Fintech intensity neither exerts a significant direct effect nor significantly moderates the bank-specific attributes–earnings-management relationship.

The study contributes to the literature in three ways. It bridges bank-accounting research and fintech research in a unified empirical framework. It provides Nigeria-specific evidence grounded in bank-level panel data rather than abstract policy expectations. Third, it shows the importance of handling banking ratios carefully: leverage and capital ratio should not be forced into the same specification when they are accounting complements. Methodologically, the paper also demonstrates the value of using multiple dependent-variable proxies in compact banking panels.

For bank management, the core implication is that digital investment should be linked explicitly to reporting controls rather than treated only as a business-development strategy. For boards and audit committees, the findings suggest that larger and more complex banks require stronger oversight of reporting discretion even when digital systems appear advanced. For regulators, the results imply that fintech adoption metrics should be interpreted alongside governance quality, model risk management and reporting controls. A digitally active bank is not automatically a less opportunistic reporting entity.

The study has limitations that also define future research opportunities. The sample is intentionally compact because it relies on the complete bank-year structure available in the attached dataset. The earnings-management proxies are pre-computed in the source workbook, which means the underlying construction formulas could not be re-estimated independently in this paper. Future work could extend the sample to all listed Nigerian deposit money banks, reconstruct specific discretionary-accrual measures directly from financial statements, and distinguish between front-end fintech adoption and back-end regtech, supotech and control-system deployment. A second promising direction would be to test whether governance variables board quality, audit committee expertise, external audit strength or risk-governance maturity mediate the relationship between fintech adoption and reporting quality.

Overall, the evidence points to a restrained but important conclusion: in Nigerian deposit money banks, traditional bank characteristics still explain

earnings-management behaviour more convincingly than fintech intensity does. Digital transformation is real, but its governance dividend appears to be conditional rather than automatic.

REFERENCES

- [1] Ajekwe, C. C., Ibiamke, A., & Silas, M. F. (2017). Loan loss provisions, earnings smoothing and capital management under IFRS: The case of deposit money banks in Nigeria. *American Journal of Management Science and Engineering*, 2(4), 58–64.
- [2] Ashiru, O., Balogun, G., & Paseda, O. (2023). Financial innovation and bank financial performance: Evidence from Nigerian deposit money banks. *Research in Globalization*, 6, 100120.
<https://doi.org/10.1016/j.resglo.2023.100120>
- [3] Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money*, 18(2), 121–136.
- [4] Banna, H., Hassan, M. K., & Rashid, M. (2021). Fintech-based financial inclusion and bank risk-taking: Evidence from OIC countries. *Journal of International Financial Markets, Institutions and Money*, 75, 101447.
- [5] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- [6] Beatty, A., & Liao, S. (2014). Financial accounting in the banking industry: A review of the empirical literature. *Journal of Accounting and Economics*, 58(2–3), 339–383.
- [7] Beatty, A. L., Ke, B., & Petroni, K. R. (2002). Earnings management to avoid earnings declines across publicly and privately held banks. *The Accounting Review*, 77(3), 547–570.
<https://doi.org/10.2308/accr.2002.77.3.547>
- [8] Beaver, W. H., & Engel, E. E. (1996). Discretionary behavior with respect to allowances for loan losses and the behavior of security prices. *Journal of Accounting and Economics*, 22(1–3), 177–206.
[https://doi.org/10.1016/S0165-4101\(96\)00428-4](https://doi.org/10.1016/S0165-4101(96)00428-4)
- [9] Bollaert, H., Lopez-de-Silanes, F., & Schwienbacher, A. (2021). Fintech and access to finance. *Journal of Corporate Finance*, 68, 101941.
- [10] Cheng, M., & Qu, Y. (2020). Does bank fintech reduce credit risk? Evidence from China. *Pacific-Basin Finance Journal*, 63, 101398.
- [11] Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners and regulators. *Accounting Horizons*, 14(2), 235–250.
- [12] Dietrich, A., & Wanzenried, G. (2011). Determinants of bank profitability before and during the crisis: Evidence from Switzerland. *Journal of International Financial Markets, Institutions and Money*, 21(3), 307–327.
- [13] Fonseca, A. R., & González, F. (2008). Cross-country determinants of bank income smoothing by managing loan-loss provisions. *Journal of Banking & Finance*, 32(2), 217–228.
- [14] Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383.
<https://doi.org/10.2308/acch.1999.13.4.365>
- [15] Ibrahim, I., Adamu, B. S., Uthman, F. Z., & Abba, H. I. (2022). Effect of firm attributes on earnings management of deposit money banks in Nigeria. *FUOYE Journal of Finance and Contemporary Issues*, 3(2), 164–182.
- [16] 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.
- [17] Lee, C.-C., Li, X., Yu, C.-H., & Zhao, J. (2021). Does fintech innovation improve bank efficiency? Evidence from China's banking industry. *International Review of Economics & Finance*, 74, 468–483.
- [18] Li, C., He, S., Tian, Y., Sun, S., & Ning, L. (2022). Does the bank's fintech innovation reduce its risk-taking? Evidence from China's

banking industry. *Journal of Innovation & Knowledge*, 7, 100219.

- [19] NIBSS. (2026, February 3). Instant payment transactions rise by 120% in 2yrs—CBN. Nigeria Inter-Bank Settlement System.
- [20] Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340. <https://doi.org/10.1016/j.bir.2017.12.003>
- [21] Salami, A. A., & Uthman, A. B. (2024). Bank capital, earnings smoothing and provisioning practices in Nigeria: IFRS and risk evidence. *Asian Journal of Economics and Banking*, 8(2), 267–293. <https://doi.org/10.1108/AJEB-05-2022-0058>
- [22] Samuel-Ogbu, I. (2022). Digital technology and the transformation of the Nigerian banking system: The operators' perspective. *CBN Economic and Financial Review*, 60(4), 133–150.
- [23] Trujillo-Ponce, A. (2013). What determines the profitability of banks? Evidence from Spain. *Accounting & Finance*, 53(2), 561–586.
- [24] Vives, X. (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *Journal of Banking & Finance*, 145, 106581.
- [25] Wen, H., Fang, J., & Gao, H. (2023). How FinTech improves financial reporting quality? Evidence from earnings management. *Economic Modelling*, 126, 106435. <https://doi.org/10.1016/j.econmod.2023.106435>
- [26] Xu, F., Kasperskaya, Y., & Sagarra, M. (2025). The impact of FinTech on bank performance: A systematic literature review. *Digital Business*, 5(2), 100131. <https://doi.org/10.1016/j.digbus.2025.100131>
- [27] Zhan, W., & Jing, H. (2022). Does fintech development reduce corporate earnings management? Evidence from China. *Sustainability*, 14(24), 16647. <https://doi.org/10.3390/su142416647>